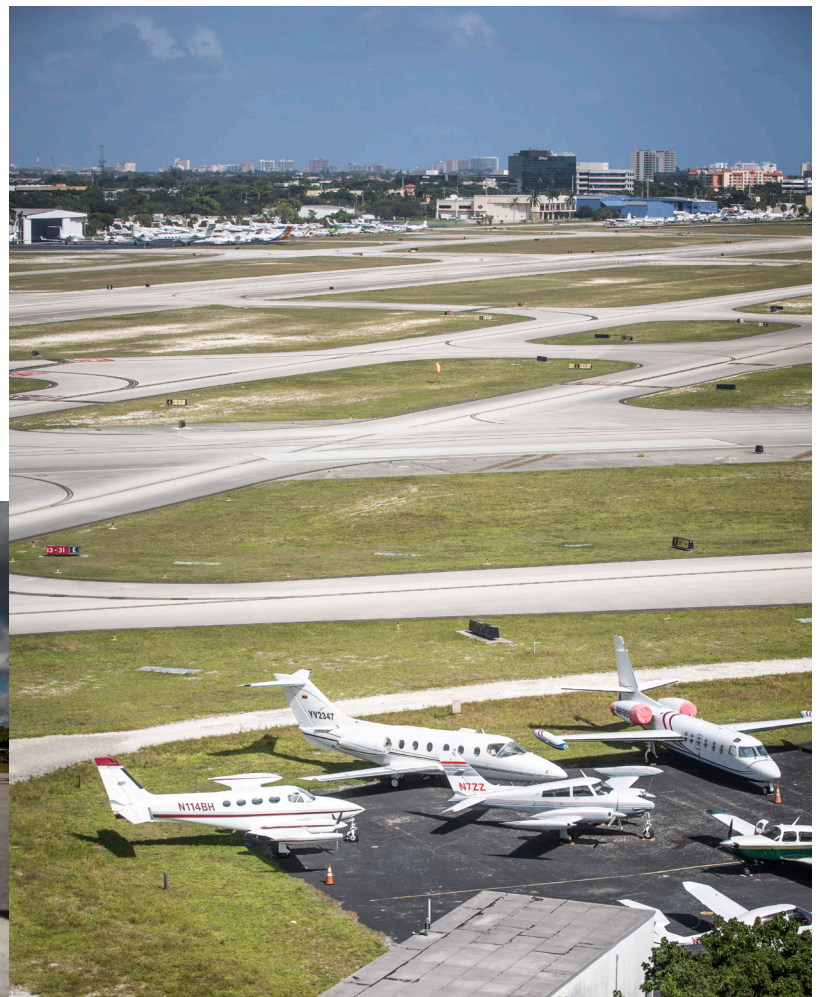


April  
**2018**



**Statement of Qualifications**  
**General Engineering Aviation**  
**Consultant Continuing Services**  
**Contract**

RFQ #12120-986

City of Fort Lauderdale





April 2, 2018  
City of Fort Lauderdale, Procurement Services Division  
100 N. Andrews Avenue #619  
Fort Lauderdale, FL 33301

RE: 12120-986 General Engineering Aviation Consultant

Dear Selection Committee,

Fort Lauderdale Executive Airport (FXE) is consistently ranked one of the busiest and fastest growing general aviation airports in the country. To maintain the superior level of service that you strive to provide your users and tenants, the City of Fort Lauderdale must continually update, improve, and expand airport amenities. For more than a century, HDR Engineering, Inc., has partnered with clients like you to shape communities and challenge the boundaries of what's possible. Our expertise spans nearly 10,000 employees, in more than 200 locations around the world and counting—including a South Florida network of 4 offices, 100+ employees, and an Aviation Center of Excellence right here in Fort Lauderdale. We are one of the pre-eminent aviation consulting firms in the U.S.—and we will provide you reliable and responsive best practices using a sound and ethical approach.

We have studied your proposed CIP in great detail, stemming from our involvement in FXE's current Master Plan Update, and have partnered with local, hand-picked subconsultants—all of whom we've teamed successfully with at FXE and other Florida airports over the past several years—to bring you a large and diverse **local** Aviation team tailored to meet the needs of this Program, a team that truly understands your needs, goals, and objectives. We pledge to support the ongoing growth and development of your facilities and serve you as a local partner and extension of your staff. Together, we will make decisions that will continue to successfully shape FXE's future.

Our team brings you:

- **A responsive, local team you know.** We have had the pride, privilege and pleasure of serving as your General Engineering Aviation Consultant since 2014. HDR and our subconsultants have partnered together again, including select enhancements, to bring you the best resources that the local aviation design community has to offer. Our locally-based professionals have successfully delivered aviation design and construction projects in Florida for decades. All production and management of this Program will be based in HDR's Fort Lauderdale office, located at 3250 West Commercial Drive, just a few short minutes from FXE.
- **Relevant GEC and airport experience.** During the past five years alone, HDR has proudly worked under Aviation GEC contracts serving the City of Fort Lauderdale, Broward County Aviation Department (BCAD), Miami Dade Aviation Department (MDAD), Greater Orlando Aviation Authority (GOAA), City of Phoenix, and Port Authority of New York and New Jersey (PANYNJ). We are proud to bring to you a seasoned and accomplished team led by our Program Manager, Joe Sawmiller, PE--recognized throughout the aviation industry as some of the best technical resources available.
- **Innovative approach to high quality and best-value solutions.** Our team will bring the latest in technology that will result in design and construction of high quality and best-value projects. A good example of this is our state-of-the-art visualization programming, which allows our team to work directly with Airport Operations and stakeholders to model and simulate impacts of projects to operations and develop detailed Construction Safety and Phasing Plans that not only 'check the box', but serve as an effective tool for enhanced safety, efficiency, and coordination between design, construction and operations. We will bring you solutions utilizing Navisworks, Infracore, AutoDesk 360 Glue and Bluebeam Revu in addition to performing all design in the latest version of AutoCAD Civil 3D.

Focused on the successful delivery of this program, the HDR Team meets and exceeds the Evaluation Criteria outlined in the RFQ, as is demonstrated by our qualifications and our committed desire to be re-selected. Thank you for your consideration of our qualifications for the ongoing development of FXE. The City of Fort Lauderdale is a very important client for us and we are grateful for this opportunity to continue to be of service. Our entire team is committed to this program and we look forward to helping set a new standard for project delivery and technical excellence.

Sincerely,  
HDR Engineering, Inc.

Timothy J. Fish, PE  
Associate Vice President and Program Principal

hdrinc.com

3250 W. Commercial Blvd, Suite 100, Fort Lauderdale, FL 33309  
T 954.535.1876 F 954.233.4953

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### **HDR at a glance:**

- Founded in 1917
- Nearly 10,000 employees in 200 offices
- Our Fort Lauderdale office is HDR's Aviation Design Center of Excellence
- No. 8 - ENR Top 500 Design Firm



### **HDR Corporate Office Location:**

8404 Indian Hills Drive  
Omaha, NE 68114

### **This contract will be managed and executed at our local Fort Lauderdale office:**

3250 West Commercial Blvd  
Suite 100  
Fort Lauderdale, FL 33309

## Executive Summary

HDR (a Corporation) provides a full-service team of engineering and architecture professionals who recognize and understand the key issues influencing the aviation industry. **For over 100 years**, we have provided a broad range of aviation and transportation-related services for nearly every project type, from the earliest site selection and planning stages through design and construction management. Our airside experience includes: stormwater management; runway and taxiway rehabilitations and extensions; lighting and navigational system upgrades; and apron development. We also provide landside expertise in aviation architecture, passenger access, circulation, curb side modeling, and parking.

Locally, our Fort Lauderdale office operates as our firm's Aviation Center of Technical Excellence. This provides you with local, full-time, dedicated aviation professionals who stay current in the industry and are capable of providing any service needed. In partnering with HDR, we bring you:

**Nationally-Recognized Aviation Expertise.** With expertise and experience in airside runways, taxiways, aprons, utilities and landside parking, maintenance of traffic, and utilities, FXE can be assured of a team that can accept and execute any projects anticipated at any of your facilities.

**Relevant Experience in Aviation GEC Contracts.** During the past decade, HDR has partnered with some of the largest commercial and executive aviation airports around the Country. HDR has held GEC, Runway, Taxiway, Terminal Facilities and Program Management contracts with all types of aviation facilities.

**Committed Leadership.** Joe Sawmiller, our Program Manager, has successfully managed more than a dozen GEC contracts over his 27 year career. He will bring best practices, exceed your expectations, and provide services you expect under this contract.

## Program Team

Our team's organization provides clear roles, responsibilities and lines of authority. This, combined with our depth and breadth of technical experts to deliver any project assignment, makes our team the ideal partner for FXE.

Our Program Manager, **Joe Sawmiller, PE**, will lead our locally based team. Joe brings over 27 years of comprehensive aviation industry experience. His technical expertise encompasses pavement management systems (airside and landside), airside/landside civil and environmental engineering. He is a nationally recognized leader in pavement management and design for surface and air transportation facilities (airports; ports; highways/roads; parking lots).

Supporting Joe is our Deputy Program Manager, **Cody Parham, PE**. Cody's 11 years of Aviation experience includes aviation site layout and design, pavement design, layout and design of utilities, and construction administration. Cody will assist Joe in leading the technical and administrative elements as well as execute and monitor all project activities from our local office.

Our Program Principal, **Tim Fish, PE**, has 15 years of combined experience in aviation and civil engineering design and construction management for public and privately held projects. As Program Principal, he will provide overall corporate support and oversight to the team. Tim will ensure that you are provided the right staff and technology resources for your success.

Joe, Cody, and Tim, together with our other aviation design staff and strategic teaming partners highlighted in the Organizational Profile and Project Team section of our Statement of Qualifications (SOQ), will provide the City with full-time dedicated professionals who are leaders in the industry and capable of completing any assignment required.



## Key Team Member Involvement and Office Location

TEAM MEMBER	FIRM	ROLE	OFFICE LOCATION
Joe Sawmiller, PE	HDR	Program Manager	Tampa and FTL, FL
Cody Parham, PE	HDR	Deputy Program Manager/Airside Task Mgr.	Ft. Lauderdale, FL
Tim Fish, PE	HDR	Project Principal	Ft. Lauderdale, FL
Joe Grubbs, PE	HDR	Quality Manager	Pittsburgh, PA
Daniel Suarez, PE	HDR	Landside Task Manager	Ft. Lauderdale, FL
Alan Temple, AIA	HDR	Architecture Services Task Manager	Tampa, FL
Sherri Swanson, PWS	HDR	Environmental Task Manager	Sarasota, FL
John Neff, PE	HDR	Construction Task Manager	Ft. Lauderdale, FL
Posh Supupramai, PE	HDR	Airside Pavement & Markings	Ft. Lauderdale, FL
Amy Champagne-Baker, PE	Hillers	NAVAIDS/Airside Lighting & Signage	Boca Raton, FL
Ron Geiger, PE	HDR	Stormwater Management	Charlotte, NC
James Kriss, PE	Avcon	Airfield Operations	Orlando, FL
Dan Ford, PE	HDR	Roadway	Ft. Lauderdale, FL
Dan Checchia	Keith & Assoc.	Utilities and Infrastructure and Survey	Ft. Lauderdale, FL
Jason McClair, PE	Chen Moore	Stormwater Management	Ft. Lauderdale, FL
Ian Denholm, PE	HDR	Electrical Engineering	Newark, NJ
Sunshine Bullock, RLA	HDR	Landscape Architecture	Jacksonville, FL
Zach Sachsenmaier, PE	HDR	MEP/Fire Protection	Omaha, NE
Eric Martin, PE	HDR	Structural	Charlotte, NC
John Danielsen, PE	HDR	Structures Evaluation	Ft. Lauderdale, FL
Tom Rieger, PE	HDR	Facilities Inspection	Houston, TX
Stephen Culberson	Ricondo	Environmental Assessment	Chicago, IL
Paula Session, PG	Cherokee	Environmental Assessment	Miami Lakes, FL
Brenda Clark, PE	HDR	Remediation	Ft. Lauderdale, FL
Jennifer Smith, PE	Cherokee	Permitting	Miami Lakes, FL
Raheel Dossani, EI	HDR	Construction Administration	Ft. Lauderdale
Tony Sabbag, CVG	HDR	CEI and RPR	Miami, FL
Michael Schmedt, GISP	HDR	GIS	Orlando, FL
Francois Thomas, PE	Tierra SF	Geotechnical	West Palm, FL
Mike Digregorio, PE	HDR	Cost Estimating/Scheduling	Salt Lake City, UT
John Fallon, RCDD, OSP	HDR	Communications	Orlando, FL
Bob Bosco	HDR	Security	Orlando, FL
Tim Ward, PE	HDR	TERPs	Pittsburgh, PA
Sebastien Carreau	Ricondo	Land-Use/Zoning Review	Orlando, FL
Maurene Balmaseda	HDR	Public Involvement	Ft. Lauderdale, FL

Our response has been prepared in accordance with the sequence and content prescribed in the RFQ. A brief description of each section follows.

## Strategic Teaming Partners

Our team, comprised of firms with historical working relationships, brings a distinct advantage in effective project coordination and collaboration. We can provide inherent efficiencies due to our successful history of working together in South Florida, including a variety of contracts and projects for the City of Fort Lauderdale.

TEAM MEMBER	HDR	AVC	CMA	TSF	CEI	RAI	KAI	HEE
HDR								
Avcon (AVC)								
Chen Moore (CMA)								
Tierra South Florida (TSF)								
Cherokee (CEI)								
Ricondo & Assoc. (RAI)								
Keith & Assoc. (KAI)								
Hilliers Electrical (HEE)								

## Firm Qualifications and Experience

To illustrate our credentials, we have included a selection of related projects and three client references. The projects featured have particular relevance to the scope of work, with an emphasis on general engineering consultant services, utility and electrical upgrades, and airside

PROJECTS	AIRSIDE DESIGN	LANDSIDE DESIGN	ENVIRONMENTAL	STRUCTURAL DESIGN & EVALUATION	MECHANICAL & ELECTRICAL	ARCHITECTURAL	COST ESTIMATING & SCHEDULING	SITE PLAN REVIEW AND ANALYSIS	LAND-USE/ZONING REVIEW	TERMINAL APPROACH PROCEDURE	FAR PART 77 EVALUATION	BIDDING	GRANT & SMALL BUSINESS SUPPORT
FXE General Engineering Aviation Consultant													
BCAD General Engineering Aviation Consultant													
FXE Master Plan													
GOAA Civil Engineering Services													
Boca Airport General Aviation Consultant													
PBI Airfield Design Improvements													
FLL Terminal 4 Apron Civil Works													
FLL Southwest Airlines Terminal 1													
Blue Grass Runway 4-22													
Andrews AFB Taxiway S and W													

pavement design for small to large aviation facilities.

## Approach to Scope of Work

The HDR Team has an excellent understanding of the City's needs, goals and objectives as they relate to projects anticipated to be undertaken at FXE under this contract, based on our nearly thirty years of recent and relevant experience in very similar work elsewhere across Florida and beyond—including the last four years, in which we have had the honor and pleasure of serving the City as General Engineering Aviation Consultant at FXE. In this section, we demonstrate our approach to the specific projects included in the RFQ, other potential CIP projects that may also materialize over the next 2 to 4 years, and also our proven project management and technical approach to design and construction phases of projects under GEC contracts.

## Project Management Approach



Our project management approach is reinforced through proven accountability measures, which includes co-location and design task forces to meet commitments and emphasizes shared goals. Everything we do will be a coordinated effort on behalf of you to achieve our shared objectives.

Simply put, project management is about providing efficiency through people, processes and tools. We begin with a project management plan (PMP) that describes in detail how we will execute your projects in accordance with the scope of work, requirements, guidelines and contractual commitments.

The PMP defines roles and responsibilities, communication protocols, cost estimating procedures, QA/QC requirements, budget, schedule, document tracking, record keeping, document sharing, identifying and managing risk, resource allocation, safety, deliverables, software compatibility, project close out, etc.

The PMP becomes a governing document that is used by all team members to execute each project.

## Technical Approach

Our technical approach addresses our:

- » Understanding of the City's needs, goals and objectives as they relate to the projects anticipated under this contract
- » Overall approach to accomplishing these projects
- » Overview of our proposed vision, ideas and methodology
- » Scheduling methodology for effectively managing and executing the work in optimal time
- » Current workload and how these projects will fit into our workload
- » Available facilities, technological capabilities and other available resources we offer for these projects

**Our Approach to Scope of Work is discussed in more detail in section 4 of this SOQ.**





## Firm Qualifications and Experience

We're proud to bring you a team that is recognized as having the best technical capabilities in the aviation industry. To maintain position within the industry and keep pace with demand, FXE must continually improve, update, and expand airport facilities. To accomplish this, you need an intuitive partner that has the depth of resources and experience to provide general consultant of record services at your airports. We provide a broad range of aviation-related services for nearly every project type, from the earliest site selection and planning stages through design and construction.

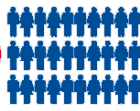
### HDR Engineering, Inc. (Corporation)

3250 West Commercial Blvd, Suite 100  
Ft. Lauderdale, FL 33309  
(t) 954.535.1876  
(f) 954.233.4953  
www.hdrinc.com

### Contact:

Tim Fish, PE  
Program Principal  
954.531.7848  
timothy.fish@hdrinc.com

NEARLY  
**10,000**  
EMPLOYEES



IN OVER **200** LOCATIONS  
AROUND THE



**100+ PROFESSIONALS**  
LOCATED IN FOUR SOUTH  
FLORIDA OFFICES



HDR HAS WORKED ON  
**12/15**  
TOP RANKED  
AIRPORTS

SERVING  
**160+**  
AIRPORT CLIENTS  
GLOBALLY



**150+**  
DEDICATED AVIATION  
PROFESSIONALS  
FIRM-WIDE



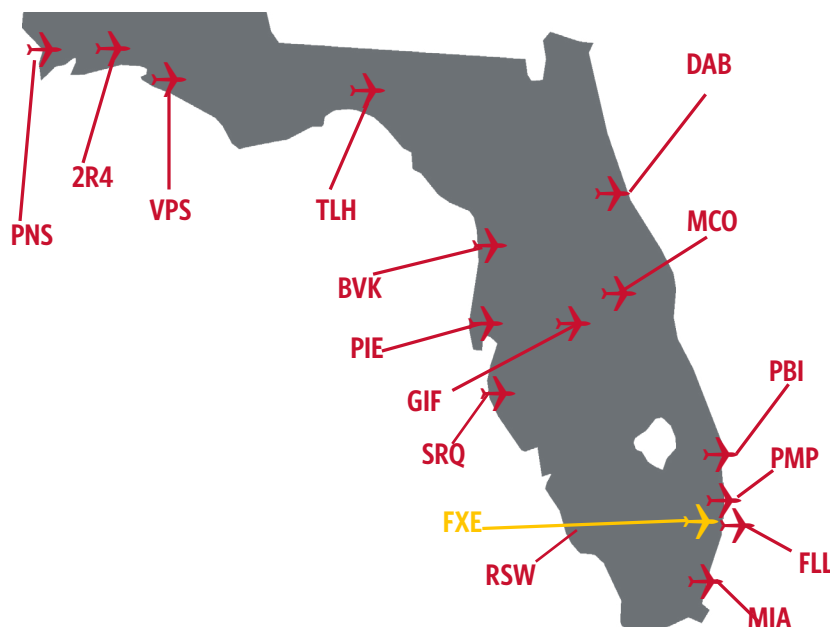
OUR  
**SOUTHEAST AVIATION  
CENTER OF EXCELLENCE**  
HAS SERVED MORE THAN  
**20 AIRPORTS**



**With nearly 10,000 strong**, our team offers the depth of resources necessary to accomplish any task that may arise. Our team has a proven history in delivering general consultant contracts for aviation and airport facilities around the country. From airside improvements to runways and taxiways, to landside facilities design of parking structures and terminal roadways, to performing studies that determine development needs; we have a complete understanding in what encompasses this contract at your airport and we know how to successfully deliver while maintaining a safe and operational aviation facility. During the past decade, HDR has partnered with some of the largest airports around the Country. HDR has successfully led GEC, runway, taxiway, terminal facilities and program management contracts with aviation facilities, such as Ft. Lauderdale-Hollywood International, Phoenix Sky Harbor, NY/NJ area airports, Orlando International, and Charlotte Douglas airports.

Our aviation practice has taken flight in recent years, and has grown to offer full life-cycle solutions to the problems your airports face. **Locally, our Fort Lauderdale office operates as our firm's Aviation Center of Technical Excellence.** This provides you with full-time, dedicated aviation professionals who stay current in the industry and are capable of providing any service needed.

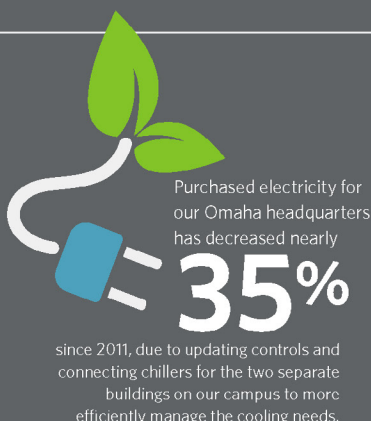
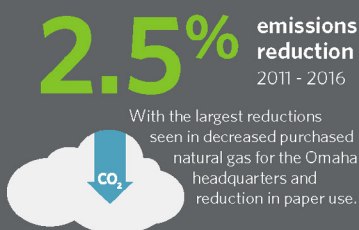
### HDR's and Our Program Manager's Florida General Engineering Aviation Experience



## Sustainable Business Practices

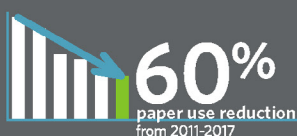
We put a strong emphasis on sustainability at all levels of the company. We believe it's our professional responsibility to our employees, clients, the industry and the environment to challenge conventional thinking as we create places that are good for our clients, our communities and our planet. Our Sustainability Vision guides our decisions related to sustainability. As part of our company's strategic planning process, the vision is updated regularly to ensure that we are at the forefront of sustainable business practices. We began the process of addressing our organization's environmental impacts over 10 years ago. We have focused on understanding our most significant impacts as a service organization, and are aggressively working to reduce our carbon footprint by improving operational efficiencies, engaging staff participation to green our offices, and developing sustainable solutions in the areas where we have the most significant impacts.

# Sustainable Business Practices



### Our 2017 Printing Reduction Challenge yielded results!

\*January-October, 2016 vs. 2017





# ARCHITECT - ENGINEER QUALIFICATIONS

PART I - CONTRACT SPECIFIC QUALIFICATIONS

## A. CONTRACT INFORMATION

1. TITLE AND LOCATION (CITY AND STATE)

General Engineering Aviation Consultant Services, Fort Lauderdale, Florida

2. PUBLIC NOTICE DATE

3/9/2018

3. SOLICITATION OR PROJECT NUMBER

12120-986

## B. ARCHITECT - ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Timothy J. Fish, PE, Associate Vice President

5. NAME OF FIRM

HDR Engineering, Inc.

6. TELEPHONE NUMBER

(954) 531-7848

7. FAX NUMBER

(954) 233-4953

8. E-MAIL ADDRESS

timothy.fish@hdrinc.com

## C. PROPOSED TEAM

(COMPLETE THIS SECTION FOR THE PRIME CONTRACTOR AND ALL KEY SUBCONTRACTORS.)

	(Check)			9. FIRM NAME  <input type="checkbox"/> CHECK IF BRANCH OFFICE	10. ADDRESS	11. ROLE IN THIS CONTRACT
	PRIME	J-V PARTNER	SUB-CONTRACTOR			
a.	X			HDR Engineering, Inc.  <input checked="" type="checkbox"/> CHECK IF BRANCH OFFICE	3250 W. Commercial Blvd, Suite 100 Fort Lauderdale, FL 33309	Project management, airside / landside civil, pavements, architecture, MEP, construction administration / management., structural, cost estimating, scheduling, grant / JACIP / DBE support
b.			X	Chen Moore and Associates, Inc.  <input type="checkbox"/> CHECK IF BRANCH OFFICE	500 W Cypress Creek Rd #630 Fort Lauderdale, FL 33309	Civil engineering, surface water management, regulatory permitting, landscape architecture, GIS and construction observation services
c.			X	Keith & Associates, Inc.  <input type="checkbox"/> CHECK IF BRANCH OFFICE	301 E Atlantic Blvd Pompano Beach, FL 33060	Survey, subsurface utility exploration, utility design / coordination, and construction administration / management services
d.			X	Ricondo & Associates, Inc.  <input checked="" type="checkbox"/> CHECK IF BRANCH OFFICE	1000 NW 57th Court, Suite 920 Miami, Florida 33126	Environmental, land use / zoning, TERPs, facilities / operational / financial consulting, obstruction analysis, CIP development
e.			X	Avcon, Inc.  <input type="checkbox"/> CHECK IF BRANCH OFFICE	5555 E Michigan St., Ste. 200 Orlando, FL 32822	Civil / pavement support
f.			X	Cherokee Enterprises, Inc.  <input checked="" type="checkbox"/> CHECK IF BRANCH OFFICE	1931 N.W. 150th Ave #104 Pembroke Pines, FL 33028	Environmental
g.			X	Hillers Electrical Engineering  <input type="checkbox"/> CHECK IF BRANCH OFFICE	23257 SR 7 Boca Raton, FL 33428	Airfield lighting, signage, electrical
h.			X	Tierra South Florida, Inc.  <input type="checkbox"/> CHECK IF BRANCH OFFICE	2765 Vista Pkwy West Palm Beach, FL 33411	Geotechnical and construction material testing, threshold/special inspection, and roofing inspection services
i.				  <input type="checkbox"/> CHECK IF BRANCH OFFICE		

## D. ORGANIZATIONAL CHART OF PROPOSED TEAM

☒ (ATTACHED)



## FIRM

HDR Engineering, Inc. (HDR)
Chen Moore & Associates, Inc. (CMA)
Keith & Associates, Inc. (KAI)
Ricondo & Associates, Inc. (RAI)
Avcon, Inc. (AVC)+
Cherokee Enterprises, Inc. (CEI)+
Hillers Electrical Engineering, Inc. (HEE)+
Tierra South Florida, Inc. (TSF)+

**PROGRAM PRINCIPAL**  
Tim Fish, PE (HDR)

**PROGRAM MANAGER**  
Joe Sawmiller, PE (HDR)

**QUALITY MANAGER**  
Joe Grubbs, PE (HDR)

**DEPUTY PROGRAM MANAGER**  
Cody Parham, PE (HDR)

## ENGINEERING DESIGN

**Airside**  
Cody Parham, PE (HDR)  
Task Leader

**Airside Pavement & Markings**  
Posh Supramalai, PE (HDR)  
Russell Holliday, PE (AVC)  
Brandon Hiers, PE (AVC)

**NAVAIDS / Airside Lighting & Signage**  
James Kappes, PE (HEE)  
Amy Champagne-Baker, PE (HEE)

**Stormwater Management**  
Ron Geiger, PE+ (HDR)

**Airfield Operations**  
Cody Parham, PE (HDR)  
James Kriss, PE (AVC)

**Landside**  
Daniel Suarez, PE (HDR)  
Task Leader

**Roadway**  
Dan Ford, PE (HDR)

**Utilities and Infrastructure**  
Daniel Checchia (KAI)

**Landside Pavement**  
Joe Sawmiller, PE (HDR)

**Stormwater Management**  
Jason McClair, PE (CMA)

**Electrical**  
Ian Denholm, PE (HDR)

**Landscape Architecture**  
Sunshine Bullock, RLA (HDR)

**ARCHITECTURE SERVICES**  
Alan Temple, AIA (HDR)  
Task Leader

**Architecture**  
Brian McCabe, AIA (HDR)

**MEP / Fire Protection**  
Zach Sachsmaier, PE (HDR)

**Electrical**  
Amy Champagne-Baker, PE (HEE)

**Structural**  
Eric Martin, PE (HDR)

**Structures Evaluation**  
John Daniels, PE (HDR)

**Facilities Inspection**  
Tom Rieger, PE (HDR)

**ENVIRONMENTAL**  
Sherri Swanson, PWS (HDR)  
Task Leader

**Environmental Assessment**  
Stephen Culberson (RAI)  
Paula Sessions, PG (CEI)

**Remediation**  
Brenda Clark, PE (HDR)

**Environmental Impact Statement**  
Stephen Culberson (RAI)  
Virginia Jackson, AAE (RAI)  
Danielle Goveia (CEI)

**Permitting**  
Jennifer Smith, PE (CMA)

**CONSTRUCTION**  
John Neff, PE (HDR)  
Task Leader

**Construction Management and Construction Administration**  
John Neff, PE (HDR)  
Raheel Dossani, EI (HDR)

**CEI and Resident Project Representative**  
Tony Sabbag, CGC (HDR)  
Ryan Beckman, EI (HDR)  
Raheel Dossani, EI (HDR)  
Morris Smith, Jr. (KAI)

## SHARED RESOURCES

**Construction Safety & Phasing**  
Cody Parham, PE (HDR)

**Site Plan Review & Analysis**  
Cody Parham, PE (HDR)  
James Kriss, PE (AVC)

**GIS**  
Michael Schmedt, GISP (HDR)

**BIM / Visualization**  
Ryan Hanson, PE (HDR)

**Geotechnical and Threshold Inspections**  
Francois Thomas, PE (TSF)

**Survey & Mapping / SUE**  
Lee Powers, PSM (KAI)  
Daniel Checchia (KAI)

**Cost Estimating / Scheduling**  
Mike Digregorio, PE+ (HDR)

**Financial Analysis**  
Matthew Ruffra (RAI)

**Grant / JACIP and DBE Support**  
Aubyn Bell, AICP (HDR)

**Communications**  
John Fallon, RCDD, OSP (HDR)

**Security**  
Bob Bosco (HDR)

**FAA Coordination**  
Cody Parham, PE (HDR)

**TERP's**  
Tim Ward, PE+ (HDR)

**FAR Part 77 Evaluation**  
Mark Johnson (RAI)

**Land-Use / Zoning Review**  
Sebastien Carreau (RAI)

**Public Involvement**  
Maurene Balmaseda (HDR)

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Joe Sawmiller, PE</b>	<b>Program Manager</b>	<b>27 years</b>	<b>1 year</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Tampa, FL / Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

M.B.A., Business Administration, University of Florida, 2003

B.S., Civil and Environmental Engineering, Clarkson University, 1991

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 58431

Professional Engineer, New York, No. 078618

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Joe's technical expertise encompasses pavement management systems (airside and landside), airside/landside civil and environmental engineering, flexible/rigid pavement design, construction phasing (including time-sensitive construction), forensic engineering, and facility assessments. He's a nationally recognized leader in pavement management and design for surface and air transportation facilities, and has authored several articles and white papers and is a frequent presenter/speaker at industry conferences and seminars.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Interim Project Manager, Technical Advisor and Quality Assurance Leader		
b.	<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   Palm Beach County, FL	<b>6/2018 (Anticipated)</b>	<b>6/2019 (Anticipated)</b>
	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDS. Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. For this project, we've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. <b>Role:</b> Technical Advisor and Quality Assurance Leader		
c.	<b>TLH Tallahassee International Airport, South Apron Rehabilitation and Reconstruction</b>   Tallahassee, FL	<b>4/2017</b>	<b>9/2018 (Anticipated)</b>
	<input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Project Manager for the design phase to rehabilitate and reconstruct aircraft parking apron facilities (including helipads) on the South Apron. The design also includes provisions for aircraft parking positions and tie downs for aircraft through ADG IV, access to a self-fueling facility on the east side of the apron, secure access control to the airside, parking area improvements for fuel trucks, and repair of an infield area damaged by erosion accelerated by adjacent helipads. <b>Role:</b> Project Manager		
d.	<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Deputy Project Manager		
e.	<b>Los Angeles World Airports, Airport Pavement Management &amp; Pavement Design Program</b>   Los Angeles, CA	<b>8/2015</b>	<b>N/A</b>
	<input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Comprehensive multi-year program encompassing pavement management systems, pavement design services, and pavement project implementation. Also includes design and construction administration services on several individual pavement design projects at LAWA's three airports (LAX, ONT, and VNY). These projects included complex construction sequencing and phasing plans on active airfields to minimize disruption to airside operations. <b>Role:</b> Program Manager		



# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Cody Parham, PE</b>	<b>Deputy Program Manager</b>	<b>11 years</b>	<b>1.5 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., West Palm Beach, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, Georgia Institute of Technology, 2007

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 73904

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Cody's technical expertise includes aviation site layout and design; stormwater management design; hydraulic design and hydrologic modeling; site grading; erosion and sedimentation control; layout and design of utilities, entitlement acquisition and construction administration. He is active in industry technical and leadership organizations and is an advocate for innovation in the design and management of aviation infrastructure. He has recently spearheaded initiatives for the implementation of Building Information Modeling (BIM), and the FAA's 40-year pavement design life initiative.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   Palm Beach County, FL		PROFESSIONAL SERVICES <b>6/2018 (Anticipated)</b>	CONSTRUCTION (IF APPLICABLE) <b>6/2019 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
a. Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDS. Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. For this project, we've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. <b>Role:</b> Project Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>8/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>8/2018</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
b. Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Engineer and Project Manager			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FXE Airport Administration Building Addition and Renovations</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>02/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
c. Renovation and addition to the FXE Administration building, which is being designed with the intent of achieving a LEED-EBOM certified level or better. Design includes converting existing conference room into offices, new 1,900 sqft conference/multi-purpose room, new patio area, existing parking adjustments, installation of covered parking structures, and entrance driveway modifications. This project also includes landscape architecture in the surroundings of the Administration building as well as new site lighting. We also evaluated the existing lighting, mechanical, and plumbing systems and proposed upgrades as necessary to the systems. Major disciplines include civil, structural, geotechnical, landscape, irrigation, architectural, mechanical, electrical, plumbing, and fire protection services. <b>Role:</b> Project Manager			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Republic Airport Owners Representative Support Services</b>   Suffolk County, NY		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
d. HDR conducts A-E support services for Republic Airport Constructability Reviews, which include technical and quality assurance review of all provided project drawings, technical specifications, and documents as they relate to Tenant Alteration Application (TAA) projects. Reviews focus upon constructability, adherence to applicable FAA Advisory Circulars and guidance documents, conformance with Republic Airport design standards and conformance with applicable local code standards. Typical site developments submitted for review consist of Design-Bid-Build documents. During construction, HDR provides construction phase support as needed to assist NYSDOT with necessary approvals. <b>Role:</b> Project Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>City of West Palm Beach General Engineering Consultant</b>   West Palm Beach, FL		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
e. Scope tasks include pre-design analysis & studies, preliminary & final design, construction documents, cost estimates, permitting, bidding assistance, and construction administration. Specific tasks assigned under this contract have included the Fern Street Feasibility Study, CCTV Feasibility Study, Cordova & Sunset Road Water Service Rerouting (S. Olive to S. Flagler), Stormwater Condition Assessment, NW Cultural Trail, and Pump Stations 4 and 153 Improvements. <b>Role:</b> Project Engineer and Project Manager			

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON.)

12. NAME <b>Timothy Fish, PE</b>	13. ROLE IN THIS CONTRACT <b>Program Principal</b>	14. YEARS EXPERIENCE A. TOTAL <b>15 years</b>	B. WITH CURRENT FIRM <b>7 years</b>
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15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, West Palm Beach, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, University of Missouri, Columbia, 2004

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, License No. 70617

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Tim has experience in airfield design and planning, land development, environmental remediation, and geotechnical engineering design, for both public and privately held projects. In these roles, he has been responsible for contract management, sub-consultant/contractor oversight, project scheduling, regulatory compliance and permitting, surface water modeling, and design-build-operation management.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   Palm Beach County, FL	PROFESSIONAL SERVICES <b>6/2018 (Anticipated)</b>	CONSTRUCTION (IF APPLICABLE) <b>6/2019 (Anticipated)</b>
a. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. Also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDs. Scope includes program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. We've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. <b>Role:</b> Project Manager	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	PROFESSIONAL SERVICES <b>8/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>8/2018</b>
b. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Engineering and design services to support FXE's current development programs via a four year on call contract. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Engineer	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	PROFESSIONAL SERVICES <b>03/2017</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
c. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Open-ended engineering consulting services contract in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Engineer and Project Manager	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>Republic Airport Owners Representative Support Services</b>   Suffolk County, NY	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
d. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR conducts A-E support services for Republic Airport Constructability Reviews, which include technical and quality assurance review of all provided project drawings, technical specifications, and documents as they relate to Tenant Alteration Application (TAA) projects. R Typical site developments submitted for review consist of Design-Bid-Build documents. During construction, HDR provides construction phase support as needed to assist NYSDOT with necessary approvals. <b>Role:</b> Project Engineer	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	PROFESSIONAL SERVICES <b>10/2016</b>	CONSTRUCTION (IF APPLICABLE) <b>10/2017</b>
e. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Project Manager	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Joseph Grubbs, PE</b>	<b>Quality Manager</b>	<b>29 years</b>	<b>Less than a year</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Philadelphia, PA**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Youngstown State University, 1990

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 65837; Pennsylvania, No. PE049231E

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Joe has a broad range of civil engineering design, including pavement evaluation, concrete and bituminous pavement design and rehabilitation, drainage design and deicing collection system design. He also has extensive experience in construction, construction management and program management of airfield aprons and taxiways pavements, roadway pavements, drainage systems and airfield electrical lighting systems.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   Palm Beach County, FL	<b>6/2018 (Anticipated)</b>	<b>6/2019 (Anticipated)</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDS. Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. For this project, we've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. <b>Role:</b> QA / QC Manager</p>		
b.	<b>PBCDOA Airport General Consultant Services</b>   Palm Beach County, FL	<b>1/2018</b>	<b>Various</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Joe provided senior technical leadership and quality management for the design and construction management task order projects for the Palm Beach County Department of Airports. As Quality Manager, he provided the local staff with senior technical expertise of aviation related design and construction, performed quality program and task specific reviews. <b>Role:</b> Quality Manager</p>		
c.	<b>PBI Runway 10L-28R Rehabilitation</b>   Palm Beach County, FL	<b>1/2012</b>	<b>12/2012</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Provided senior technical leadership and quality management for the construction inspection of the project. Primary focus was championing aviation safety awareness of the field staff during the on airport activity. He also provides the local staff with senior technical expertise of aviation related construction quality assurance testing. <b>Role:</b> Quality Manager</p>		
d.	<b>Airfield Pavement Rehabilitation Program, Washington Reagan National Airport</b>   Arlington, VA	<b>1/2018</b>	<b>N/A</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Responsible for managing the on-call engineering services, which includes updating the Airfield Pavement Management System (APMS) for the DCA airfield and the subsequent pavement improvement projects identified in the APMS. Improvement projects include the Taxiway B Hold Apron Rehabilitation and Reconfiguration into a four (4) position aircraft deicing pad. The project includes the design of pavements, drainage and deicing collection features, spent deicing fluid storage and recovery systems and equipment storage locations. Taxiway B Hold Apron Rehabilitation and Reconfiguration project is estimated to cost approximately \$20 million. <b>Role:</b> Senior Project Manager</p>		
e.	<b>Program Management Office, Philadelphia International Airport</b>   Philadelphia, PA	<b>1/2018</b>	<b>Various</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>As Airfield Program Manager, Joe was responsible for preparing the conceptual design of the initial three airfield projects of the Capacity Enhancement Program. Conceptual design included geometric, drainage, lighting, signage and marking layout, environmental permitting, Construction Safety Phasing Planning, preparation and coordination of the Safety Management Systems Safety (SMS) Safety Risk Management (SRM) panel and document preparation. Projects included the relocation existing taxiways, the establishment of new taxiways, extending Runway 27L and installing the replacement localizer for Runway 9R CAT III system. Also responsible for overseeing the final design preparation and construction management. As Acting Airfield Planner, Joe was responsible for identifying, planning and implementing airfield projects with respect to improving airfield efficiency. Implemented an airfield working group comprised of FAA ADO, ATC, NATCA, Airlines and other airport Stakeholders. Projects are planned, evaluated and implemented to improve aircraft queuing capacity, increase aircraft taxiing efficiency and provide safe, efficient taxi/traffic flows to runways in the variable operating conditions. <b>Role:</b> Airfield Program Manager and Acting Airfield Planner</p>		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Daniel Suarez, PE</b>	<b>Landside Task Leader</b>	<b>13 years</b>	<b>1.5 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, University of Illinois at Chicago, 2004

Bachelor of Science, Commerce, DePaul University, 2000

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 69096

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Daniel possesses 13 years of public and private sector experience in a wide array of areas, including program management, master planning, capital improvement planning, design, and construction oversight of water, wastewater, and storm sewer facilities and infrastructure. He is a polished manager, able to coordinate the delivery of projects with multiple stakeholders including project owners, regulatory agencies, designers, and contractors. Daniel is also experienced in overseeing design and construction staff and in executing quality assurance and quality control (QA/QC) measures for his projects.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Engineer		
b.	<b>FXE Parcel 21B Parking Lot Design Services</b>   Fort Lauderdale, FL	<b>03/2018</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Develop plans and contract specifications to construct an approximately 300 space parking lot on an approximately 6.0 acre Airport owned vacant lot (Parcel 21B) at FXE. HDR is responsible for conducting FXE staff review meetings, preparing the construction plans and phasing schedule, geotechnical testing, electrical design, cost estimating, preparation of bid specifications, permitting review, and providing assistance during the bidding process. Scope includes geotechnical investigations, parking pavement and roadway design, lighting, fire protection, drainage, structural security wall, striping, canopy design and foundations, signage, CCTV capability and a security gate. Tasks include pre-design, schematic design, design development, contract document preparation, permitting, materials testing, and bidding phase services. <b>Role:</b> Project Engineer		
c.	<b>Pump Stations 4 and 153 Improvements</b>   West Palm Beach, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM As part of its capital improvements program, the city has identified two (2) wastewater pump stations requiring rehabilitation—Pump Station No. 4 and Pump Station No. 153. HDR is developing the engineering plans and specifications for the construction of the pump station improvements. We're also providing permitting assistance for construction and bid phase services. These improvements will include new submersible pumps, and may include improvements to the wet well structures, piping, and other mechanical and electrical upgrades. <b>Role:</b> Project Manager		
d.	<b>Cordova &amp; Sunset Road Water Service Rerouting (S. Olive to S. Flagler)</b>   West Palm Beach, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM As part of our General Engineering contract with the City of West Palm Beach, we are providing engineering services in order to reroute water services from the older water mains in the rear utility easements to the newer water mains within the rights-of-way. We're also providing design for the water main extensions. The purpose of this project is to provide these properties new water services from newer water mains and to decommission the older water mains. This project will modernize the City's drinking water infrastructure and provide better access to the City's O&M staff for reading meters and making repairs to the system. Responsibilities during pre-design, preliminary design and final design phases include data collection, public involvement, site visits, drawings, specifications, and construction documents. Additional responsibilities include permitting, bidding assistance and construction phase services. <b>Role:</b> Project Manager		
e.	<b>Stormwater Condition Assessment</b>   West Palm Beach, FL	<b>03/2018</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Development of technical specifications and criteria for the condition assessment and rehabilitation of storm sewer system. Scope tasks include assessment of O&M policies & procedures, condition assessment technical criteria development, rehabilitation methodology technical criteria development, and bid phase assistance for 5,000 LF of priority stormwater rehabilitation projects. <b>Role:</b> Project Manager		



# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Alan Temple, AIA</b>	<b>Architecture Task Leader</b>	<b>37 years</b>	<b>15 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Tampa, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Arts, Architecture, University of Florida (UF), 1980  
Bachelor of Arts, Architecture, University of Florida (UF), 1978

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Registered Architect, Florida, No. 0011663

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Alan has overseen, managed and directed projects ranging to over \$600 million including master planning, airports, municipal administration facilities, office buildings, courthouses and detention facilities, convention centers, science and technology research & laboratory buildings, hospitals and medical office buildings, and themed entertainment venues such as theaters, aquariums and theme parks.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>a. Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airspace infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Architecture</p>		
<b>FLL Curbside Canopy and Soffit Replacement</b>   Fort Lauderdale, FL	<b>10/2011</b>	<b>10/2011</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>b. Developed design documents for two separate projects procured under a single bid for repair and improvements at the passenger terminals at FLL. The soffits at Terminals 2 3 and 4 had all been damaged by recent hurricanes and were funded for repair from a FEMA grant. BCAD also needed to extend the canopy at Terminal 4 to provide passenger cover at the departure level. Under a fast-track schedule HDR developed Construction Documents (plans and specifications) including full architectural structural mechanical and civil site plans. A key component of the project included a comprehensive Maintenance of Traffic (MOT) Plan to manage pedestrian and vehicle access and flow during nighttime construction activities. HDR's scope included procurement assistance, construction contract administration, and resident project representation on the owner's behalf. The lowest responsive bid was well within the engineer's estimate and the project finished on time and within budget. <b>Role:</b> Architect</p>		
<b>FLL Pedestrian Bridge Rehabilitation</b>   Fort Lauderdale, FL	<b>03/2018</b>	<b>03/2018</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>c. HDR developed design documents for the rehabilitation of four existing pedestrian bridges at FLL which link Terminals 2, 3 and 4 with the central parking garages. The first phase was the Demolition and Cleaning of the bridge structure to remove rust damage and lead-based paint. The second phase was to Repair and Redesign of the bridges. Structural damage to the steel truss frame was repaired and the bridges architectural treatment redesigned in accord with BCAD's Public Arts program. HDR is working with BCAD's Artist to implement their design intent and serve as Design Professional of Record. Services includes Construction Contract Administration and onsite Resident Project Representation services. <b>Role:</b> Architect</p>		
<b>James A. Haley Veterans Affairs Medical Center Polytrauma and Rehabilitation Center</b>   Tampa, FL	<b>3/2014</b>	<b>3/2014</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>d. HDR was contracted by the Veteran's Administration as Architect-of-Record to develop design and provide services during construction for a new 1500-unit visitor and employee parking garage two-story Polytrauma Center and indoor hydro-therapy pool facility over the existing main hospital while maintaining normal healthcare operations. <b>Role:</b> Architect</p>		
<b>South County Advanced Wastewater Treatment Plant Expansion</b>   Hillsborough, FL	<b>On-going</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>e. Expanded the permitted treatment capacity from 4.5 to 12 mgd. Activities included detailed evaluation of different process configurations, a process-validation phase, and extensive retrofitting of the existing biological nutrient removal treatment system. Other services included architectural, civil, electrical, instrumentation and control (I&amp;C), mechanical, process, HVAC, structural, security, landscape architecture, permitting, and construction administration/management. <b>Role:</b> Architect</p>		

# 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	
<b>Sherri Swanson, PWS, GTA, ENV SP</b>	<b>Environmental Task Leader</b>	A. TOTAL <b>19 years</b>	B. WITH CURRENT FIRM <b>11 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Sarasota, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Arts, Sustainable Development, University of South Florida, 2014  
Bachelor of Science, Other Physical Sciences, University of Arkansas, 2000  
Associate of Arts, Science, Santa Fe Community College, 1994

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Authorized Gopher Tortoise Agent, Florida, No. GTA-09-00207  
ISI Envision Sustainability Professional, US National Registration  
Professional Wetland Scientist, US National Registration, No. 2049

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Sherri has spent her career providing studies and environmental solutions to public and private infrastructure projects including airports, highways, pipelines, transmission lines, substations, reservoirs, power plants, shoreline protection, public amenities, and stormwater facilities. Her experiences include wetland mitigation and restoration design, wetlands and wildlife permitting, sustainability, and climate science.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   West Palm Beach, FL		PROFESSIONAL SERVICES <b>6/2018 (Anticipated)</b>	CONSTRUCTION (IF APPLICABLE) <b>6/2019 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
a. Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. Also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDS. Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. We incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. <b>Role:</b> Environmental			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>8/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>8/2018</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
b. Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Environmental			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL		PROFESSIONAL SERVICES <b>03/2017</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
c. Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Environmental Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FLL Terminal 4 Apron Civil Works</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>9/2013</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
d. Replacement and expansion of the existing FLL airport terminal 4 civil works and underground utility infrastructure, including apron and airside infrastructure and impacted landside utilities, and relocate security fencing and a guardhouse needed to enable the Terminal 4 Gate Replacement Project. All proposed work was completed while maintaining operations to the existing Terminal and Concourse. Provided preliminary engineering, final design services, and construction bid documents. Also provided planning and design services for environmental restoration of contaminated sites in Project construction footprint. <b>Role:</b> Environmental			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FXE Airport Master Plan Update</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
e. The update will outline a plan for the provision of future facilities to accommodate the projected demand. This plan will insure that short-term actions and recommendations do not preclude long-range planning options and provide a financially sound implementation plan for short, intermediate, and long-term improvements. HDR is responsible for providing an inventory of existing conditions, demand/capacity and facility requirements, alternative analysis and recommended development concepts and developing an implementation plan. <b>Role:</b> Environmental			

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON)

12. NAME  <b>John Neff, PE</b>	13. ROLE IN THIS CONTRACT  <b>Construction Task Leader</b>	14. YEARS EXPERIENCE A. TOTAL <b>40 years</b>	B. WITH CURRENT FIRM <b>9 years</b>
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15. FIRM NAME AND LOCATION (CITY AND STATE)  
**HDR Engineering, Inc., Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)  
Bachelor of Science, Civil Engineering, Florida Atlantic University, 2008

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)  
Professional Engineer, Florida, No. 70633  
FDEP Sediment & Erosion Control Inspector, Florida

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

He has served in a key role for more than \$20 billion in construction projects, much of that for aviation facilities. His working knowledge of the aviation industry, as well as specifications and contract compliance, enables him to consistently produce well-managed projects.

### 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>FXE Design Services for West Perimeter Loop Road</b>   Fort Lauderdale, FL	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p>a. Develop plans and contract specifications to construct an approximately 4,300 linear foot loop perimeter road on the western property of FXE. Currently, vehicles on the north and south side of FXE cross the western approach end of the runway in order to relocate equipment as well as provide fuel for aircraft. These crossings affect aircraft operations and airfield traffic, in addition to increasing the possibility of unauthorized incursions and traffic delays. The loop perimeter road will eliminate these crossings, minimize the potential for runway incursions, and enhance airfield operations. Key elements include civil/site, survey, and geotechnical investigation and design. Tasks include schematic design, design development, construction documents, field survey &amp; mapping, geotechnical &amp; materials testing, species survey, and bidding phase services. <b>Role:</b> Senior Project Engineer</p>	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	PROFESSIONAL SERVICES <b>8/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>8/2018</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p>b. Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Senior Project Engineer</p>	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	PROFESSIONAL SERVICES <b>03/2017</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p>c. Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Engineer and Construction Project Manager</p>	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>Republic Airport Owners Representative Support Services</b>   Suffolk County, NY	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p>d. HDR conducts A-E support services for Republic Airport Constructability Reviews, which include technical and quality assurance review of all provided project drawings, technical specifications, and documents as they relate to Tenant Alteration Application (TAA) projects. Reviews focus upon constructability, adherence to applicable FAA Advisory Circulars and guidance documents, conformance with Republic Airport design standards and conformance with applicable local code standards. Typical site developments submitted for review consist of Design-Bid-Build documents. During construction, HDR provides construction phase support as needed to assist NYSDOT with necessary approvals. <b>Role:</b> Project Engineer</p>	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	PROFESSIONAL SERVICES <b>10/2016</b>	CONSTRUCTION (IF APPLICABLE) <b>10/2017</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p>e. Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Construction Project Manager</p>	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	



# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Posh Supramai, PE</b>	<b>Airside Pavement &amp; Markings</b>	<b>5 years</b>	<b>5 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)  
**HDR Engineering, Inc., West Palm Beach, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)  
 Bachelor of Science, Civil Engineering, Florida Atlantic University, 2013

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)  
 Professional Engineer, Florida, No. 84255

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Posh's airfield design experience includes gate layouts, construction phasing, aircraft maneuver analysis, pavement, lighting, signing and pavement markings and utility coordination. His landside experience includes maintenance of traffic, pedestrian bridge, roadway design and landscape design. His technical background aids him in his extensive BIM experience, including the management and coordination in design and plan production.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   West Palm Beach, FL	<b>6/2018 (Anticipated)</b>	<b>6/2019 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDS. Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. For this project, we've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. Posh's responsibilities includes managing the team to perform the design and plan production. <b>Role:</b> Project Engineer		
b.	<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. Posh has been responsible with providing the design management and assistance to the team. He also aided the City's Engineers with the airfield construction phasing by providing aircraft movement exhibits in regards to the proposed construction limits. <b>Role:</b> Project Designer; BIM Designer		
c.	<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Open-ended engineering consulting services contract in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. Posh was responsible for providing project documentation assistance and design coordination for various projects under the GEC. <b>Role:</b> Project Designer; BIM Designer		
d.	<b>Republic Airport Owners Representative Support Services</b>   Suffolk County, NY	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR conducts A-E support services for Republic Airport Constructability Reviews, which include technical and quality assurance review of all provided project drawings, technical specifications, and documents as they relate to Tenant Alteration Application (TAA) projects. Reviews focus upon constructability, adherence to applicable FAA Advisory Circulars and guidance documents, conformance with Republic Airport design standards and conformance with applicable local code standards. Typical site developments submitted for review consist of Design-Bid-Build documents. During construction, HDR provides construction phase support as needed to assist NYSDOT with necessary approvals. <b>Role:</b> Project Engineer		
e.	<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	<b>10/2016</b>	<b>10/2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Civil Designer and BIM Manager		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Russell Holliday, PE</b>	<b>Airside Pavement &amp; Markings</b>	<b>24 years</b>	<b>9 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**AVCON, Inc., Orlando, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

M.S. Civil Engineering, Structures and Foundations, 1998

B.S. Civil Engineering, 1992

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 56825

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Russ's work experience consists of engineering and project management for airport projects, including all phases of a project from topographical survey reduction, geometry, utility coordination, potable water and sanitary sewer design, drainage design, and pavement design to project cost estimation, bidding, DBE coordination services, construction administration, resident project representative, and project close out. He has extensive experience working with State Water Management Districts, the Florida Department of Transportation and the Federal Aviation Administration personnel.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>FXE Rehabilitate Taxiway S   Fort Lauderdale, FL</b>	<b>2016</b>	<b>2016</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>a. The project included engineering design for Taxiway S and connector Taxiways S-1, S-2, and S-3 which were approximately 1,400 feet long and primarily 50 feet wide, located north of Runway 27. The design consisted of pavement rehabilitation along Taxiway S and its corresponding connectors, including rehabilitation of the existing taxiway pavement and regrading and sodding within the taxiway shoulders; pavement structure design in accordance with FAA guidelines based on the forecast fleet-mix and departures; preparation of pavement marking plans in accordance with FAA guidelines; and preparation of quantity takeoffs, phasing provisions and probable construction costs. <b>Role:</b> Senior Project Engineer</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Rehabilitate, Mark and Light RW 18-36, Wauchula Municipal Airport   Wachula, FL</b>	<b>On-going</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>b. This project includes pavement, vertical, and horizontal geometry analysis and design for the Rehabilitation of Runway 18-36 (currently 4000' x 75') including a minimum of 50' tie-ins at crossing taxiways for grade compliance; design provision for standard Blast Pads on both ends, with associated drainage; Medium Intensity Runway Light (MIRL) rehabilitation, REIL units, Airfield Lighting Vault study and necessary modifications, and Navigational Aids (PAPI-4) analysis and design to consider LED technology; design and coordination with the local power company to mark and light existing power poles and power lines; temporary and permanent runway marking design; storm-water and environmental review design and permit application; obstruction clearing in both approaches; comprehensive project and cost administration services; FAA Grant Application services; and DBE Goal and Methodology Update services. <b>Role:</b> Project Manager</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Rehabilitate Electrical Vault &amp; Airfield Signage, Martin County Airport   Stuart, FL</b>	<b>2013</b>	<b>2013</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>c. This project consisted of the removal and replacement of Mandatory Hold Signs, Taxiway Guidance Signs, and Electrical Vault Equipment on the entire Airport (all Runways and Taxiways). Both non-illuminated and illuminated signage was replaced due either to weathering over time or inconsistency with the latest FAA Advisory Circular AC 150/5340. The signs installed were of the same manufacturer and type in order to reduce the burden on the airport to carry replacement parts and panels for different models of signs. Nonessential equipment was removed from the Airfield Lighting Vault, and its new Constant Current Regulators (CCRs) were integrated with the existing Airfield Lighting Control System (ALCS). <b>Role:</b> role</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Rehabilitate Runway 12-30 MIRL System, Martin County Airport   Stuart, FL</b>	<b>2016</b>	<b>2016</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>d. This project consisted of the rehabilitation of Runway 12-30 Medium Intensity Runway Lighting (MIRL) System and entailed the preparation of the construction plans, bidding, project administration, and grant development support required to apply for construction funding. The project also included a study of the Electrical Vault and an assessment report of the regulators and other equipment. New Runway End Identifier Light units were also included in the design. <b>Role:</b> Project Manager</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Rehabilitate Runway 7-25 MIRL System, Martin County Airport   Stuart, FL</b>	<b>2016</b>	<b>2016</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>e. The major component of the project involved rehabilitating a complete FAA Medium Intensity Runway Lighting (MIRL) system using Light Emitting Diode (LED) technology, new supplemental lighted wind cones, and new constant current regulators with associated vault work. The project also included a bid alternate for marking the runway. <b>Role:</b> Project Manager</p>		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Brandon Hiers, PE</b>	<b>Airside Pavement &amp; Markings</b>	<b>9 years</b>	<b>8 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**AVCON, Inc., Orlando, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

M.S. Civil Engineering, Construction, 2010

B.S. Civil Engineering, Construction Management, 2009

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 78617

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Brandon has completed pavement evaluation, design, and repairs; gate and airfield planning studies; grading and drainage design; utility adjustments; and hangar facility design projects. His relevant skills include Microsoft Office, AutoCAD Civil 3D, AviPLAN Modeling Software, and FAA Pavement Design Software. Additionally, Brandon is Site Work Estimating Certified with the Construction Estimating Institute and FDOT Plans Reading Certified.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
	<b>FXE Rehabilitate Taxiway S</b>   Fort Lauderdale, FL	<b>2016</b>	<b>2016</b>
a.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>The project included engineering design for Taxiway S and connector Taxiways S-1, S-2, and S-3 which were approximately 1,400 feet long and primarily 50 feet wide, located north of Runway 27. The design consisted of pavement rehabilitation along Taxiway S and its corresponding connectors, including rehabilitation of the existing taxiway pavement and regrading and sodding within the taxiway shoulders; pavement structure design in accordance with FAA guidelines based on the forecast fleet-mix and departures; preparation of pavement marking plans in accordance with FAA guidelines; and preparation of quantity takeoffs, phasing provisions and probable construction costs. <b>Role:</b> Project Engineer</p>		
	<b>Development of Pavement Maintenance Management Program, Mercedita Airport</b>   Ponce, PR	<b>2017</b>	<b>N/A</b>
b.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>This project included an airfield pavement distress assessment, conducted for approximately 4 million square feet of asphalt and concrete pavements. Multiple types of advanced, specialized software were utilized for pavement evaluation, including MicroPAVER, FAARFIELD, and COMFAA. <b>Role:</b> Project Engineer and Pavement Inspector</p>		
	<b>Rehabilitation of Taxiways - Phase 1, Orlando Executive Airport</b>   Orlando, FL	<b>2015</b>	<b>2015</b>
c.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>The objective of the project was to extend the useful life of the airfield pavements, enhance deficient pavement geometry and preserve the safety of air operations at the Airport. The airfield lighting, marking and signage was replaced or upgraded as needed. The scope included improving existing pavement section and geometry for various runway-taxiway intersections to comply with current FAA standards, including rehabilitating the existing asphalt pavement and failed pavement along Taxiway B - West End at the North Ramp; rehabilitating, milling and overlaying Taxiway E from Runway 7-25 to Taxiway E6; and rehabilitating Taxiway E6, north of Runway 13. The scope also included evaluating and upgrading existing drainage and improving existing taxiway lighting, marking and signage systems to comply with current FAA standards. <b>Role:</b> Project Engineer</p>		
	<b>Rehabilitate Runway 7-25 MIRL System, Martin County Airport</b>   Stuart, FL	<b>2016</b>	<b>2016</b>
d.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>The major component of the project involved rehabilitating a complete FAA Medium Intensity Runway Lighting (MIRL) system using Light Emitting Diode (LED) technology, new supplemental lighted wind cones, and new constant current regulators with associated vault work. The project also included a bid alternate for marking the runway. <b>Role:</b> Project Engineer</p>		
	<b>Rehabilitate Electrical Vault &amp; Airfield Signage, Martin County Airport</b>   Stuart, FL	<b>2013</b>	<b>2013</b>
e.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>This project consisted of the removal and replacement of Mandatory Hold Signs, Taxiway Guidance Signs, and Electrical Vault Equipment on the entire Airport (all Runways and Taxiways). Both non-illuminated and illuminated signage was replaced due either to weathering over time or inconsistency with the latest FAA Advisory Circular AC 150/5340. The signs installed were of the same manufacturer and type in order to reduce the burden on the airport to carry replacement parts and panels for different models of signs. Nonessential equipment was removed from the Airfield Lighting Vault, and its new Constant Current Regulators (CCRs) were integrated with the existing Airfield Lighting Control System (ALCS). <b>Role:</b> Project Engineer</p>		



# 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	
<b>James Kappes, PE</b>	<b>NAVAIDS / Airside Lighting &amp; Signage</b>	A. TOTAL <b>13 years</b>	B. WITH CURRENT FIRM <b>13 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Hillers Electrical Engineering, Inc., Boca Raton, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Electrical Engineering, Florida Atlantic University, 2005

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 71499

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

James has over 13 years of electrical design and project management experience on major air carrier aviation airport runways, taxiways and apron edge lighting systems, instrumentation landing systems, airfield electrical vaults, water and wastewater facilities, water management pumping stations, lift stations, state-of-the-art distributed control systems, DOT expressways, interchanges, value engineering, energy audits, cost estimates, testing, startups, lighting systems, security systems, fire alarm system, low and medium voltage distribution systems, normal and stand-by generation, short circuit calculations, fault current calculations, protective device coordination, arc flash analysis, and power, control, instrumentation for facilities in the U.S. and internationally.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Palm Beach County Glades Airport Airfield Electrical Improvement, Palm Beach International Airport</b>   Palm Beach County, FL	<b>2012</b>	<b>2014</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Designed 4,100 Ft. runway and parallel taxiway edge lighting system, guidance signage, (2) REIL Systems, (2) two-box PAPI systems, airport lighted beacon and tower, apron lighting system, airfield electrical vault building, and airfield vault electrical distribution systems. Provided construction services. Electrical construction cost: \$1.5M. Project completed 2014. <b>Role:</b> Electrical Engineer		
b.	<b>PBI Golfview Infrastructure Phase 1</b>   Palm Beach County, FL	<b>2013</b>	<b>On-going</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Designed electrical communication infrastructure for new PBI Golfview Development, FP&L/AT&T/Comcast/FiberNet coordination, roadway lighting systems, ductbank and manhole systems, relocation of apron lighting systems, lift station power and control per PBC standards, FAA coordination, and FDOT design and coordination. Projected electrical construction cost: \$2.16M. Construction ongoing. <b>Role:</b> Electrical Engineer		
c.	<b>PBIA Runway 10L-28R Pavement Rehabilitation</b>   Palm Beach County, FL	<b>2012</b>	<b>2013</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Designed for Runway 10L-28R (10,000 ft.), (22) taxiway connectors electrical & lighting systems, (300) in pavement lighting fixtures, guidance signage, FAA MALSR system, airfield lighting vault electrical and airfield lighting computer control monitoring system modifications, (8) runway guard lighting bar systems and (3) LAHSO systems. Provided construction administrative services. Electrical construction cost: \$3M. Project completed 2013. <b>Role:</b> Electrical Engineer		
d.	<b>Palm Beach County Department of Airports - 5000 ft. Parallel Taxiway "L" East Lighting &amp; Signage</b>   Palm Beach County, FL	<b>2010</b>	<b>2013</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Designed new taxiway edge lighting system, (7) new runway guard lighting systems, new mandatory & guidance signage, (5) new electrical circuits conductors & conduit systems, new FAA ILS Glide Slope, new FAA NAVAIDS distribution fiber optic duct bank system and airfield lighting vault modifications, and (1) new ALCMS airfield lighting computer control system in existing and new FAA ATC towers. Provided construction administrative services. Electrical construction cost: \$2M. Project completed 2013. <b>Role:</b> Electrical Engineer		
e.	<b>PBIA Short Circuit, Device Coordination and Arc flash Analysis for Terminal, Revenue Control and Building 846</b>   Palm Beach County, FL	<b>2016</b>	<b>2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Design - Performed a Short Circuit, Device Coordination & Arc Flash Analysis on WTP3's electrical power distribution systems for compliance. Included field visit for documentation of the existing electrical system, created model in SKM Power Systems to calculate the available short circuit fault currents; identified equipment below that of the associated available fault current; and performed arc flash evaluation. Implemented recommendations for protective device settings and installed Arc flash labels Electrical construction cost: \$150K. Project completed 2017. <b>Role:</b> Electrical Engineer		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Amy Champagne-Baker, PE</b>	<b>NAVAIDS / Airside Lighting &amp; Signage   Electrical</b>	<b>21 years</b>	<b>21 years</b>

## 15. FIRM NAME AND LOCATION (CITY AND STATE)

**Hillers Electrical Engineering, Inc., Boca Raton, FL**

## 16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Electrical Engineering, Clarkson University, 1997

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

Professional Engineer, Florida, No. 73735

Professional Engineer, Connecticut, No. 27854

## 18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Amy brings over 21 years of electrical design and project management experience on major air carrier aviation airport runways, taxiways and apron edge lighting systems, instrumentation landing systems, airfield electrical vaults, airfield lighting control systems, water and wastewater facilities, water management pumping stations, lift stations, state-of-the-art distributed control systems, DOT express-ways, interchanges, toll plazas, toll collection, bridges, design build projects, value engineering, energy audits, cost estimates, testing, startups, lighting systems, fire alarm systems, security systems, low and medium voltage distribution systems, normal and stand-by generation for facilities in the U.S.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>PBIA Third Level Ticketing Interior Improvements Phase 2   Palm Beach County, FL</b>	<b>2017</b>	<b>On-going</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Design & Construction Services; for replacement of Lighting for the Third Level ticketing including fire alarm, relocation of . Included new conduit and wiring systems, fire alarm panel replacements, and programming of existing computer reporting system. Provided construction administrative services. Electrical construction cost: \$1.5M <b>Role:</b> Electrical Engineer		
b.	<b>PBCDOA Generator System Replacement   Palm Beach County, FL</b>	<b>2015</b>	<b>2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Design & Construction Services; included the replacement of three (3) existing 1 Megawatt 4160V Generators with two (2) new 2 Megawatt Generators and replacement of associated 4160V Generator Paralleling Switchgear. Included on-site verifications, testing and calculations, designed all power, control and lighting systems, fire alarm system, 4160V emergency power, temporary generator systems, and integration with existing Facility Management and Building Automation Systems. Electrical construction cost: \$3M. <b>Role:</b> Electrical Engineer		
c.	<b>PBIA Short Circuit, Device Coordination and Arc Flash Analysis for Terminal, Revenue Control and Building 846   Palm Beach County, FL</b>	<b>2016</b>	<b>2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Design - Performed a Short Circuit, Device Coordination & Arc Flash Analysis on WTP3's electrical power distribution systems for compliance. Included field visit for documentation of the existing electrical system, created model in SKM Power Systems to calculate the available short circuit fault currents; identified equipment below that of the associated available fault current; and performed arc flash evaluation. Implemented recommendations for protective device settings and installed Arc flash labels Electrical construction cost: \$150K <b>Role:</b> Electrical Engineer		
d.	<b>PBIA Restroom Revisions   Palm Beach County, FL</b>	<b>2013</b>	<b>2015</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Design & Construction Services: included on-site verifications, testing and calculations, designed new power for renovation, interior, fire alarm relocation. Construction Services included shop drawing submittal reviews and approvals, RFI responses, testing and final acceptance inspections. Electrical construction cost: \$500K. <b>Role:</b> Electrical Engineer		
e.	<b>PBIA Security Enhancements Phase 1   Palm Beach County, FL</b>	<b>2012</b>	<b>2013</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Designed for replacement of existing main terminal and concourses lighting control system, new lighting control panels and occupancy sensors, created lighting control schedules, on site verifications, testing and calculations, power and communication distribution systems. Provided construction services. Electrical construction cost: \$1M. <b>Role:</b> Electrical Engineer		

# 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	
<b>Ronald Geiger, PE</b>	<b>Airside Stormwater Management</b>	A. TOTAL <b>35 years</b>	B. WITH CURRENT FIRM <b>13 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Charlotte, NC**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, Ohio State University, 1982

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, North Carolina, No. 14613

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Ron has served as a Project Manager/Engineer for over 50 municipal and state projects involving master planning, NPDES permit compliance, preliminary design, development of construction documents, and construction administration services. Project types included MS4 Program Compliance, TMDL Implementation, stream restoration, stormwater master plans, stormwater planning studies, FEMA studies, channel improvement projects, storm drainage pipe system analysis and design projects, stormwater modeling, neighborhood improvement projects, and dam construction. He understands how to schedule and forecast resource needs and the interdependency of work tasks in successfully completing fast-track assignments and long-term schedules.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL		PROFESSIONAL SERVICES <b>03/2017</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
a. Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Stormwater Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FLL Terminal 4 Apron Civil Works</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>9/2013</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
b. Replacement and expansion of FLL Terminal 4 Apron, which modified the existing airport terminal civil works and underground utility infrastructure, including apron and airside infrastructure and impacted landside utilities, and relocate security fencing and a guardhouse needed to enable the Terminal 4 Gate Replacement Project. All proposed work was completed while maintaining operations to the existing Terminal and Concourse. HDR provided preliminary engineering, final design services, and construction bid documents for the project. Also provided planning and design services for environmental restoration of contaminated sites in Project construction footprint. Services included existing infrastructure evaluations, design, construction cost estimating, construction phasing and sequencing, permitting services, and design coordination. <b>Role:</b> Stormwater Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>CLT Airport-Wide Stormwater Master Plan</b>   Charlotte, NC		PROFESSIONAL SERVICES <b>7/2012</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
c. HDR managed and developed a five-year and long-term stormwater master plan for the growing airport. The plan was focused on addressing stormwater management needs, both quantity and water quality, for the Airport's five-year capital improvement plan. This plan included storage credit banking, comprehensive control location, and BMP selection feasibility. <b>Role:</b> Project Manager			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Stormwater Condition Assessment</b>   West Palm Beach, FL		PROFESSIONAL SERVICES <b>3/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
d. Development of technical specifications and criteria for the condition assessment and rehabilitation of storm sewer system. Scope tasks include assessment of O&M policies & procedures, condition assessment technical criteria development, rehabilitation methodology technical criteria development, and bid phase assistance for 5,000 LF of priority stormwater rehabilitation projects. <b>Role: ?????</b>			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>City of Fort Lauderdale Stormwater Program</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
e. Part of a multi-firm team involved in city-wide watershed modeling using surface/groundwater modeling, and design of multi-faceted infrastructure improvements aimed to address sea level rise, extreme storms, and high tides. Initial design scope has targeted seven neighborhoods with an investment of over \$144M in capital improvements. Tasks include data collection of stormwater infrastructure attributes; the development and implementation of a hydraulic/hydrologic stormwater model of the entire City; and the subsequent design, permitting, and construction services for neighborhood stormwater capital improvement projects (CIPs) resulting from the revised stormwater master plan. <b>Role:</b> Project Manager			

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>James Kriss, PE</b>	<b>Airfield Operations   Site Plan Review &amp; Analysis</b>	<b>43 years</b>	<b>30 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**AVCON, Inc., Orlando, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

MBA, 1990  
B.S. Civil Engineering, 1974

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 36579

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Jim is a senior principal of AVCON, INC. and he is responsible for marketing, client management and technical design issues associated with airport and aviation related projects; transportation and civil engineering design and planning support; construction applications and management services; and all supporting service areas for the entire array of AVCON's service sectors. His experience includes all facets of aviation, pavements, utilities, construction, cost estimating, and project management.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FXE Airfield Lighting Rehabilitation</b>   Fort Lauderdale, FL	<b>2017</b>	<b>2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM This project required professional engineering services for the design of the airfield lighting and guidance signage rehabilitation along selected taxiways at the Airport and their corresponding connectors as well as the evaluation of the airfield electrical vault. The project included a visual review of the existing airfield lighting and signs, and performance of an operational and code assessment of the airfield lighting vault followed by final design of a comprehensive program to upgrade and refurbish the existing lighting systems serving the airport. <b>Role:</b> AVCON Principal-in-Charge		
b.	<b>FXE Rehabilitate Taxiway S</b>   Fort Lauderdale, FL	<b>2016</b>	<b>2016</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM The project included engineering design for Taxiway S and connector Taxiways S-1, S-2, and S-3 which were approximately 1,400 feet long and primarily 50 feet wide, located north of Runway 27. The design consisted of pavement rehabilitation along Taxiway S and its corresponding connectors, including rehabilitation of the existing taxiway pavement and regrading and sodding within the taxiway shoulders; pavement structure design in accordance with FAA guidelines based on the forecast fleet-mix and departures; preparation of pavement marking plans in accordance with FAA guidelines; and preparation of quantity takeoffs, phasing provisions and probable construction costs. <b>Role:</b> AVCON Principal-in-Charge and Senior Project Manager		
c.	<b>Rehabilitation of Taxiways - Phase 1, Orlando Executive Airport</b>   Orlando, FL	<b>2015</b>	<b>2015</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM The objective of the project was to extend the useful life of the airfield pavements, enhance deficient pavement geometry and preserve the safety of air operations at the Airport. The airfield lighting, marking and signage was replaced or upgraded as needed. The scope included improving existing pavement section and geometry for various runway-taxiway intersections to comply with current FAA standards, including rehabilitating the existing asphalt pavement and failed pavement along Taxiway B - West End at the North Ramp; rehabilitating, milling and overlaying Taxiway E from Runway 7-25 to Taxiway E6; and rehabilitating Taxiway E6, north of Runway 13. The scope also included evaluating and upgrading existing drainage and improving existing taxiway lighting, marking and signage systems to comply with current FAA standards. <b>Role:</b> Principal-in-Charge		
d.	<b>Rehabilitate Electrical Vault &amp; Airfield Signage, Martin County Airport</b>   Stuart, FL	<b>2013</b>	<b>2013</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM This project consisted of the removal and replacement of Mandatory Hold Signs, Taxiway Guidance Signs, and Electrical Vault Equipment on the entire Airport (all Runways and Taxiways). Both non-illuminated and illuminated signage was replaced due either to weathering over time or inconsistency with the latest FAA Advisory Circular AC 150/5340. The signs installed were of the same manufacturer and type in order to reduce the burden on the airport to carry replacement parts and panels for different models of signs. Nonessential equipment was removed from the Airfield Lighting Vault, and its new Constant Current Regulators (CCRs) were integrated with the existing Airfield Lighting Control System (ALCS). <b>Role:</b> QA / QC Manager		
e.	<b>Rehabilitation of Taxiways A and C, Okeechobee County Airport</b>   Okeechobee, FL	<b>2011</b>	<b>2011</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Project consisted of Rehabilitation of Taxiway A and C, the primary taxiways for OBE. The design work incorporated new pavement design (mill and overlay and new construction); new geometric upgrades; complete replacement of airfield lighting and signage; complete specifications and document preparation; bidding and construction phase services. <b>Role:</b> Principal-in-Charge		



## 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Dan Ford, PE</b>	<b>Roadway</b>	<b>24 years</b>	<b>10 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, 1993

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No.67079

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Dan has 24 years of major roadway design and project management experience. He's an experienced Senior Project Manager, in charge of personnel and task management for regional transportation projects, managing all phases from proposal, scoping, schematic, final design, and construction services.

### 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
	<b>FXE General Engineering Aviation Consultant   Fort Lauderdale, FL</b>	<b>8/2018</b>	<b>8/2018</b>
a.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Roadway &amp; MOT</p>		
	<b>Broward County Aviation Dept. General Engineering Consultant   Broward County, FL</b>	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
b.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Roadway &amp; MOT Engineer</p>		
	<b>FLL Terminal 4 Apron Civil Works   Fort Lauderdale, FL</b>	<b>9/2013</b>	<b>12/2018 (Anticipated)</b>
c.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Replacement and expansion of FLL Terminal 4 Apron, which modified the existing airport terminal civil works and underground utility infrastructure, including apron and airside infrastructure and impacted landside utilities, and relocate security fencing and a guardhouse needed to enable the Terminal 4 Gate Replacement Project. All proposed work was completed while maintaining operations to the existing Terminal and Concourse. HDR provided preliminary engineering, final design services, and construction bid documents for the project. Also provided planning and design services for environmental restoration of contaminated sites in Project construction footprint. Services included existing infrastructure evaluations, design, construction cost estimating, construction phasing and sequencing, permitting services, and design coordination. <b>Role:</b> Roadway Engineer</p>		
	<b>FLL Curbside Canopy and Soffit Replacement   Fort Lauderdale, FL</b>	<b>10/2011</b>	<b>10/2011</b>
d.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Developed design documents for two separate projects procured under a single bid for repair and improvements at the passenger terminals at FLL. The soffits at Terminals 2 3 and 4 had all been damaged by recent hurricanes and were funded for repair from a FEMA grant. Under a fast-track schedule HDR developed Construction Documents (plans and specifications) including full architectural structural mechanical and civil site plans. A key component of the project included a comprehensive Maintenance of Traffic (MOT) Plan to manage pedestrian and vehicle access and flow during nighttime construction activities. HDR's scope included procurement assistance, construction contract administration, and resident project representation on the owner's behalf. The lowest responsive bid was well within the engineer's estimate and the project finished on time and within budget. <b>Role:</b> Roadway &amp; MOT</p>		
	<b>FLL Pedestrian Bridge Rehabilitation   Fort Lauderdale, FL</b>	<b>03/2018</b>	<b>03/2018</b>
e.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>HDR developed design documents for the rehabilitation of four existing pedestrian bridges at FLL which link Terminals 2, 3 and 4 with the central parking garages. The first phase was the Demolition and Cleaning of the bridge structure to remove rust damage and lead-based paint. The second phase was to Repair and Redesign of the bridges. Structural damage to the steel truss frame was repaired and the bridges architectural treatment redesigned in accord with BCAD's Public Arts program. HDR is working with BCAD's Artist to implement their design intent and serve as Design Professional of Record. Services includes Construction Contract Administration and onsite Resident Project Representation services. <b>Role:</b> Project Engineer</p>		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Daniel Checchia</b>	<b>Utilities and Infrastructure   Survey &amp; Mapping</b>	<b>20 years</b>	<b>6 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Keith and Associates, Inc., Pompano Beach, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

AS, Construction Technology, Suffolk Community College, 2008

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

FDOT Maintenance of Traffic

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Ft. Lauderdale-Hollywood International Airport Phase 1 &amp; 2 Utility Atlas Update for South Runway Expansion of 10R/28L</b>   Fort Lauderdale, FL	<b>2013</b>	<b>2014</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Dan, as Senior Project Manager, was tasked with providing the providing ASCE Standard Quality Level B (Designating) and Quality Level A (Locating) Subsurface Utility Engineering services as a subconsultant on many projects for the airport. Under the General Engineering contract of RS&H, all work and deliverables were performed in accordance with Airport Circulars 150/5300-18B General Guidance and Specifications for Aeronautical Surveys. <b>Role:</b> Senior Project Manager		
b.	<b>Ft. Lauderdale-Hollywood International Airport Phase Westside Development Utility Certification Project</b>   Fort Lauderdale, FL	<b>2013</b>	<b>2014</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Dan, as Senior Project Manager, was tasked with providing the providing ASCE Standard Quality Level B (Designating) and Quality Level A (Locating) Subsurface Utility Engineering services as a subconsultant on many projects for the airport. Dan directed multiple crews in order to identify existing utilities though designation and location to certify utilities. All this information was mapped and incorporated into the plans. <b>Role:</b> Senior Project Manager		
c.	<b>Ft. Lauderdale-Hollywood International Airport 10R/28L Runway Expansion Lead Design Team</b>   Fort Lauderdale, FL	<b>2013</b>	<b>2014</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Dan, as Senior Project Manager, was tasked with providing the ASCE Standard Quality Level B (Designating) and Quality Level A (Locating) Subsurface Utility Engineering services as a sub-consultant on many projects for the airport. Dan was responsible for designating and locating of existing utilities for the design of south runway. Multiple crews performed tasks associated with the identification, verification and delineation of utilities. <b>Role:</b> Senior Project Manager		
d.	<b>Palm Beach International Airport GPR for Utility Clearance</b>   Palm Beach County, FL	<b>2015</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Keith and Associates provided Quality Level "B" utility designation identifying eleven locations in the Northwest portion of the airport. K&A designated toneable and non-toneable underground utilities to facilitate their removal and allow for drilling by PSI for execution of their scope. Dan was responsible for project oversight, as well as ensuring deliverables were provided to the client. <b>Role:</b> Project Oversight		
e.	<b>I-95 Express Phase 3 Corridor Design Consultant, FDOT District 4</b>   Broward & Palm Beach Counties, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Implementation of an HOV to HOT conversion for I-95 in southeast Florida from southern Broward County (Stirling Road) to southern Palm Beach County (Linton Blvd). The primary responsibility of the HDR team is to serve as an extension of Florida Department of Transportation staff to prepare final project definition, NEPA reevaluations, Roadway and Structural Design, Traffic Analysis, Cost Estimates, Project Schedules, Risk Analysis, traffic analysis, ITS, Ramp Metering, Utility Coordination, Environmental Permitting, Stormwater Management Analysis, and Public Involvement for the 30+ mile corridor. The scope consists of reconstruction, widening and resurfacing/overbuild of the I-95 roadway and modification to the associated ramps at the service interchange, conversion from a single lane HOV to dual lane Express Lanes, maintaining the same number of General Purpose lanes throughout. Another scope element is the evaluation of direct connect ramps between the I-95 managed lanes and the I-595 General Purpose lanes, at this important system to system interchange. Keith & Associates managed all preliminary design survey and mapping. <b>Role:</b> Survey and Mapping		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Jason McClair, PE, CFM, LEED AP</b>	<b>Landside Stormwater Management</b>	<b>21 years</b>	<b>16 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)
<b>Chen Moore and Associates, Inc., West Palm Beach, FL</b>

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
Bachelor of Science, Civil Engineering, University of Florida	Professional Engineer, Florida, No. 56962

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Jason has over 21 years of experience in utility infrastructure design, regulatory permitting, geotechnical engineering, and computer aided flow modeling for stormwater collection, water distribution, and sanitary transmission systems. He was the project manager for the Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update and the Pompano Beach Stormwater Master Plan.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Phase 1</b>   Fort Lauderdale, FL	<b>2011</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
a. Under Phase 1 of this project, Broward County Aviation Department (BCAD) retained Chen Moore and Associates (CMA) to update the FLL Stormwater Master Plan (SWMP), which was completed by a previous consultant in 2001. CMA reviewed the data and analysis from all prior reports, converted the existing stormwater model from SWMM to ICPR, and updated the ICPR model with any new system data and new projects provided by BCAD. Cost: \$ 350,950 (fee) <b>Role:</b> Project Manager		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Phase 2</b>   Fort Lauderdale, FL	<b>8/2012</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
b. The purpose of Phase 2 was to provide routine updates to the stormwater model(s) based on progress design drawings of the South Runway Expansion Project and the associated future development, including but not limited to, terminal and gate area improvements. The existing stormwater model created during Phase 1 included design assumptions based on preliminary planning documents for the South Runway Expansion Project. \$435,100 (fee) <b>Role:</b> Project Manager		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>FLL North Runway Pavement Rehabilitation</b>   Fort Lauderdale, FL	<b>2018</b>	<b>2018</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
c. CMA was responsible for all planning, design, and permitting of all stormwater improvements required for the North Airfield Pavements Rehabilitation Project at Fort Lauderdale-Hollywood International Airport (FLL). The pavement improvements within the associated Runway and Taxiway Safety and Object Free Areas impacted on other facilities within the FLL North Airfield, including the existing stormwater management system. CMA was responsible for determining the additional drain-age improvements that were necessary to handle the additional stormwater runoff from any new impervious pavement areas. Cost: \$ 87,978.05 (fee) <b>Role:</b> Project Manager		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>CWR-W Palm Beach Stormwater Master Plan</b>   West Palm Beach, FL	<b>2015</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
d. CMA as a subconsultant to Collective Water Resources, is part of the team assembled for the West Palm Beach Stormwater Master Plan. As well as traditional duties such stormwater quantity and quality modeling, field investigation, conceptual design, permitting and cost estimating, CMA is performing unique tasks such as a sea level rise analysis with Florida Atlantic University, CIP planning, evaluation of standards and operating procedures, preparation of items for Community Rating System (CRS) audit and public outreach. Cost: \$ 111,200 <b>Role:</b> Project Engineer		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Ridgeview, Cherry &amp; W Indies Drainage Improvements</b>   Palm Beach	<b>2015</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
e. Chen Moore and Associates was contracted by the Town of Palm Beach to perform the design and permitting services for the drainage improvements of three streets. The scope of work consists of field investigation to determine causes of flooding, design including landscape mitigation, roadway design and coordination with permit agencies. Cost: \$71,030 (fee) <b>Role:</b> Project Engineer		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Ian Denholm, PE</b>	<b>Landside Electrical</b>	<b>12 years</b>	<b>10 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Cambridge, MD**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Engineering, Systems Engineering, Stevens Institute of Technology, 2007;  
Bachelor of Engineering, Electrical Engineering, Stevens Institute of Technology, 2006

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 76229

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Ian's experience includes power studies loading studies lighting design and photo metrics cabling conduit layouts and schedules control panels panel boards and Motor Control Center design airport lighting for runways and approaches and taxiways PLC programming (Programmable Logic Controllers) and CAD schematics flow diagrams. Computer usage and programming include DOS Qbasic Visual Basic AutoCAD Microstation Microsoft Office PLC programming with custom graphic interfaces and various other engineering programs.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Electrical		
b.	<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Electrical		
c.	<b>Republic Airport Owners Representative Support Services</b>   Suffolk County, NY	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM HDR conducts A-E support services for Republic Airport Constructability Reviews, which include technical and quality assurance review of all provided project drawings, technical specifications, and documents as they relate to Tenant Alteration Application (TAA) projects. Reviews focus upon constructability, adherence to applicable FAA Advisory Circulars and guidance documents, conformance with Republic Airport design standards and conformance with applicable local code standards. Typical site developments submitted for review consist of Design-Bid-Build documents. During construction, HDR provides construction phase support as needed to assist NYSDOT with necessary approvals. <b>Role:</b> Electrical		
d.	<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	<b>10/2016</b>	<b>10/2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Electrical		
e.	<b>FLL Terminal 4 Apron Civil Works</b>   Fort Lauderdale, FL	<b>9/2013</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Replacement and expansion of FLL Terminal 4 Apron, which modified the existing airport terminal civil works and underground utility infrastructure, including apron and airside infrastructure and impacted landside utilities, and relocate security fencing and a guardhouse needed to enable the Terminal 4 Gate Replacement Project. All proposed work was completed while maintaining operations. HDR provided preliminary engineering, final design services, and construction bid documents for the project. Also provided planning and design services for environmental restoration of contaminated sites in Project construction footprint. <b>Role:</b> Electrical Engineer		



## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON.)

12. NAME  <b>Sunshine Bullock, RLA</b>	13. ROLE IN THIS CONTRACT  <b>Landscape Architect</b>	14. YEARS EXPERIENCE	
		A. TOTAL <b>19 years</b>	B. WITH CURRENT FIRM <b>11 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Jacksonville, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Landscape Architecture, University of Florida, 1998

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Registered Landscape Architect, Florida, No. 6666817

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Sunshine is experienced in recreation planning, campus master planning, residential master planning, military planning and landscape architecture. She is a registered professional Landscape Architect with the State of Florida and certified as an FDOT Landscape plan reviewer. Ms. Bullock is also a member of the Society of American Military Engineers and the Jacksonville Chapter of the Urban Land Institute.

### 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	PROFESSIONAL SERVICES <b>03/2017</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
a. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Open-ended engineering consulting services contract in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Landscape Architect	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>FLL Terminal 4 Apron Civil Works</b>   Fort Lauderdale, FL	PROFESSIONAL SERVICES <b>9/2013</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
b. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Replacement and expansion of FLL Terminal 4 Apron, which modified the existing airport terminal civil works and underground utility infrastructure, including apron and airside infrastructure and impacted landside utilities, and relocate security fencing and a guardhouse needed to enable the Terminal 4 Gate Replacement Project. All proposed work was completed while maintaining operations. HDR provided preliminary engineering, final design services, and construction bid documents for the project. Also provided planning and design services for environmental restoration of contaminated sites in Project construction footprint. <b>Role:</b> Landscape Architect	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Wave Streetcar Program Management Consultant (PMC)</b>   Fort Lauderdale, FL	PROFESSIONAL SERVICES <b>2/2021 (Anticipated)</b>	CONSTRUCTION (IF APPLICABLE) <b>2/2021 (Anticipated)</b>
c. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR is leading the project management team that is overseeing the design, construction and implementation of the Wave Streetcar. The PMC responsibilities includes full-service project management, public involvement, preliminary engineering, procurement support, and plan reviews. Additionally duties include supporting FTA coordination, Wave partner communications, public outreach, FTA project reporting, and vehicle procurement. We lead the program management effort with the goal of commencing streetcar revenue service in February 2021. <b>Role:</b> Landscape Architect	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>FDOT District 6, CEI Landscape Group</b>   Districtwide, FL	PROFESSIONAL SERVICES <b>5/2013</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
d. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR was retained by the FDOT District 6 to perform Construction Engineering and Inspection (CEI) services which are required for contract administration, inspection, and materials sampling and testing for multiple construction projects. Sunshine performed landscape inspections of newly planted landscape material and the overall site conditions to ensure the contractors were performing best practices of installation and maintenance for the duration of the plant establishment period. <b>Role:</b> Landscape Architect	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>FDOT District 6, GEC Landscape Plans Review</b>   City, State	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
e. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Sunshine performs Landscape plan and permit review for all projects that have a potential impact on existing landscape and to review proposed landscape meets current FDOT design standards and MRP. <b>Role:</b> Landscape Architect	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Brian McCabe, RLA, LEED AP BD+C</b>	<b>Architecture</b>	<b>9 years</b>	<b>4 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., New York, NY**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Architecture, Architecture, New York Institute of Technology, 2008

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Registered Architect, New Jersey, No. 21A101983000; New York, No. 034992; Virginia, No. 0401017352  
LEED AP Building Design + Construction, US, No. 10412356  
National Council of Architectural Registration Board, US, No. 78723

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Brian specializes in transportation and infrastructure projects with a focus on municipal and commercial facilities. He understands the important role that facility design plays in how a project is perceived in a community. As Project Architect, Brian has led several project coordination efforts between a wide range of disciplines including: Structural, Civil, Mechanical, Electrical, Fire Protection, Plumbing, Landscape Architecture, Audio/Visual, and Baggage Handling Systems. Brian also brings to this project his experience with PANYNJ design, documentation, and BIM standards.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>PANYNJ, LGA Pedestrian Walkway</b>   Queens, NY	<b>11/2015</b>	<b>11/2015</b>
<div> (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <div> <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM </div> </div>		
a. New 200' long bridge spanning between a proposed parking lot and Terminal C. A stair tower and two machine-room-less elevators were designed to take passengers from the bridge to the terminal levels. Brian was responsible for the design and coordination of the new pedestrian bridge. He worked to meet the client's goals of providing a sharp, safe, and functional bridge and circulation tower that complements the airport's master plan. He also assisted with providing cost effective design alterations during the Value Engineering process. Designed completely in Revit 2014. Coordination with each discipline was critical to producing a quality construction documents package. <b>Role:</b> Project Architect		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>EWR United Airlines Global Services Lobby Facility</b>   Newark, NJ	<b>10/2013</b>	<b>10/2013</b>
<div> (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <div> <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM </div> </div>		
b. Designed and developed a complete set of construction documents for this high-end check-in facility for UA Global Services customers. As part of the design services, Brian worked with the client to select quality materials and finishes for this exclusive facility at Newark Airport. He also designed the 4000 SF conversion of existing office space into a TSA checkpoint. Security was a primary concern for this support space that consists of four new passenger screening lines. <b>Role:</b> Architect		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>BDL Avis Rental Car Facility</b>   Windsor Locks, CT	<b>6/2013</b>	<b>6/2013</b>
<div> (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <div> <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM </div> </div>		
c. This project involved the addition of 5 canopies and various site improvements to the Avis facility at Bradley International Airport. Brian's design effort included balancing the client's signage visibility goals with the Connecticut Department of Transportation's requirements both during construction and upon completion. Brian worked closely with the contractor to ensure construction could be completed during a very limited non-peak car rental season. <b>Role:</b> Project Architect		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Royal Caribbean Cruise Lines Debark Waiting Facility</b>   Bayonne, NJ	<b>On-going</b>	<b>On-going</b>
<div> (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <div> <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM </div> </div>		
d. HDR was selected by Royal Caribbean to design the Debark Waiting Facility at Cape Liberty Cruise Port in Bayonne New Jersey. Brian worked with the client to address concerns regarding the passenger experience as they leave the terminal. The 2000 sq. ft. facility was designed with a keen understanding of the client's aesthetic, goals, budget, and schedule. The project aims to meet the client's unique operating schedule while understanding the importance of the client's passenger's experience both before, during, and after construction. <b>Role:</b> Architect		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>New Jersey Turnpike Authority, Facility Improvement Program</b>   NJ	<b>12/2019 (Anticipated)</b>	<b>12/2019 (Anticipated)</b>
<div> (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <div> <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM </div> </div>		
e. Design of various renovations, additions, and improvements to existing NJTA facilities along the north New Jersey Turnpike. Program includes vehicle maintenance garage bays, trades shops, administrative areas, bunk rooms, locker rooms, and restrooms. HDR's architectural scope of work includes five buildings and over 75,000 SF of rehabilitation work. At the onset of the project, Brian worked with the client to develop the scope of work and program for each facility. As existing facilities with on-going operations, construction staging design and coordination was a key to the project's development and implementation. Brian led the design effort through every phase of the project. He is also responsible for the coordination of the construction submittals and RFI responses with the various disciplines. <b>Role:</b> Project Architect		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Zach Sachsenmaier, PE, LEED AP BD+C</b>	<b>MEP / Fire Protection</b>	<b>15 years</b>	<b>13 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Omaha, NE**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Mechanical Engineering, University of Iowa, 2002

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 77134; NM; PA; CA; NC; NE; ND; IA; WA; VA; TX; MD; KY; NJ; NY; AZ  
LEED AP Building Design + Construction, US, No. 10229218

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Zach is a registered Mechanical and Fire Protection Engineer with over 15 years of experience in the field. His experience as a mechanical engineer includes a strong foundation in the renovation and design of heating, ventilation, air conditioning (HVAC) systems. His responsibilities include cost estimating, specification writing, and advance modeling using the building load analysis system thermodynamics computer program. Zach also has a strong foundation in life safety systems, building rated construction systems, automatic sprinkler systems, alternative automatic fire-extinguishing system, fire alarm and detection systems, and mass notification systems. His role includes building code analysis, life safety code analysis, design of automatic detection and suppression systems, water supply analysis, and a multi-discipline review of the entire project, which verifies the entire design is code compliant and in return reduces construction delays and change orders during the construction phase.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
	<b>Republic Airport Owners Representative Support Services</b>   Suffolk County, NY	<b>On-going</b>	<b>N/A</b>
a.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>HDR conducts A-E support services for Republic Airport Constructability Reviews, which include technical and quality assurance review of all provided project drawings, technical specifications, and documents as they relate to Tenant Alteration Application (TAA) projects. Reviews focus upon constructability, adherence to applicable FAA Advisory Circulars and guidance documents, conformance with Republic Airport design standards and conformance with applicable local code standards. Typical site developments submitted for review consist of Design-Bid-Build documents. During construction, HDR provides construction phase support as needed to assist NYSDOT with necessary approvals. <b>Role:</b> Mechanical / Fire Protection Engineer</p>		
	<b>C-44 Reservoir and Appurtenant Features</b>   Indiantown, FL	<b>1/2018</b>	<b>N/A</b>
b.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>HDR designed a 1,100 cfs stormwater reservoir pumping station, stormwater reservoir with 36,500 acre-feet of storage and an associated stormwater treatment area of approximately 4,000 acres. The project goal is to capture stormwater runoff from the C-44 canal to better control damaging freshwater discharges and improve water quality for the St. Lucie Estuary. <b>Role:</b> Fire Protection Engineer</p>		
	<b>Andrews Air Force Base Taxiways Sierra &amp; Whiskey</b> ,   Joint Base Andrews, FL	<b>On-going</b>	<b>2020 (Anticipated)</b>
c.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>HDR was selected to provide a design-bid-build for the Air Force Civil Engineering Support Agency's (AFCEA) Design for Replacement of Taxiways Sierra and Whiskey at Joint Base Andrews, MD. HDR provided the design and developed separate contract documents for both Taxiway Sierra and Whiskey in accordance with Air Force requirements for airfield pavement and lighting in addition to State of Maryland Department of Environment (MDE) drainage, erosion control and wetland permitting requirements. Completed a topographical survey, geotechnical investigation, utility investigations and produced design drawings in Autocad and BIM. <b>Role:</b> Project Engineer</p>		
	<b>Iowa Air National Guard ADAL Communications Facility</b>   Des Moines, IA	<b>6/2007</b>	<b>N/A</b>
d.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>HDR provided architectural, structural, mechanical, civil, interior, communications, security, and electrical design services for a new 13,500 sqft communications facility for the Iowa National Guard. The facility is fully sprinklered has a complete energy management control system (EMCS) and conforms to all current building codes and Accessibility Guidelines. The facility design meets all DoD antiterrorism and force protection criteria and includes sustainable design features equivalent to a Gold LEED Rating. <b>Role:</b> Mechanical Engineer</p>		
	<b>South County Advanced Wastewater Treatment Plant Expansion</b>   Hillsborough, FL	<b>On-going</b>	<b>On-going</b>
e.	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Expanded the permitted treatment capacity from 4.5 to 12 mgd. Activities included detailed evaluation of different process configurations, a process-validation phase, and extensive retrofitting of the existing biological nutrient removal treatment system. Other services included architectural, civil, electrical, instrumentation and control (I&amp;C), mechanical, process, HVAC, structural, security, landscape architecture, permitting, and construction administration/management. <b>Role:</b> Mechanical Engineer</p>		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Eric Martin, PE</b>	<b>Structural</b>	<b>10 years</b>	<b>8 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Charlotte, NC**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Science, Civil Engineering, University of North Carolina, 2009  
Bachelor of Science, Civil Engineering, North Carolina State University, 2007

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 78675  
Professional Engineer, NC; IL; MD; KY; NJ

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Eric has developed a diverse experience in civil/structural engineering analysis and design in his early career. Most of his experience has been concentrated in municipal and industrial facilities, as well as various support buildings for airports. He has special design skills including finite element analysis concrete, steel, and masonry design, specification writing and construction administration services

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Structural		
b.	<b>FXE Airport Administration Building Addition and Renovations</b>   Fort Lauderdale, FL	<b>02/2018</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Renovation and addition to the FXE Administration building, which is being designed with the intent of achieving a LEED-EBOM certified level or better. Design includes converting existing conference room into offices, new 1,900 sqft conference/multi-purpose room, new patio area, existing parking adjustments, installation of covered parking structures, and entrance driveway modifications. This project also includes landscape architecture in the surroundings of the Administration building as well as new site lighting. We also evaluated the existing lighting, mechanical, and plumbing systems and proposed upgrades as necessary to the systems. Major disciplines include civil, structural, geotechnical, landscape, irrigation, architectural, mechanical, electrical, plumbing, and fire protection services. <b>Role:</b> Structural		
c.	<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	<b>10/2016</b>	<b>10/2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Structural		
d.	<b>FXE Parcel 21B Parking Lot Design Services</b>   Fort Lauderdale, FL	<b>03/2018</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Develop plans and contract specifications to construct an approximately 300 space parking lot on an approximately 6.0 acre Airport owned vacant lot (Parcel 21B) at the Fort Lauderdale Executive Airport (FXE). HDR is responsible for conducting FXE staff review meetings, preparing the construction plans and phasing schedule, geotechnical testing, electrical design, cost estimating, preparation of bid specifications, permitting review, and providing assistance during the bidding process. Scope includes geotechnical investigations, parking pavement and roadway design, lighting, fire protection, drainage, structural security wall, striping, canopy design and foundations, signage, CCTV capability and a security gate. Tasks include pre-design, schematic design, design development, contract document preparation, permitting, materials testing, and bidding phase services. <b>Role:</b> Structural		
e.	<b>FXE Airfield Electrical Vault Improvements</b>   Fort Lauderdale, FL	<b>5/2018 (Anticipated)</b>	<b>1/2019 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Renovation and improvements to the 800 sqft Airfield Electrical Vault, which houses the Airport's lighting and airfield electrical systems as well as an emergency generator. Renovations include replacement of the existing constant current regulator (CCR) units, new asphalt parking area, an approximately 500 sqft addition, separate high voltage and low voltage cabling into separate raceways, Arc-Flash Hazard assessment, and installation of lightning protection system. Services include site/civil, structural, electrical and geotechnical engineering. Scope includes schematic design & site plan, design development, construction documents, contract document preparation, permitting and bidding assistance. <b>Role:</b> Structural		



# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON)

12. NAME <b>John Danielsen, PE</b>	13. ROLE IN THIS CONTRACT <b>Structures Evaluation</b>	14. YEARS EXPERIENCE A. TOTAL <b>35 years</b>	B. WITH CURRENT FIRM <b>2 years</b>
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15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Civil Engineering, Civil Engineering, University of Florida, 1984

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 41875

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

John is experienced in bridge inspections; rating and rehabilitations of existing fixed and movable bridges; the design of new bridges; asset maintenance; maintenance rating programs; emergency management; fleet operations; and overall infrastructure maintenance programs and practices. John has over 33 years of experience with the Department of Transportation working in roles of the District Structures Engineer, the District Structures Maintenance Engineer and the District Maintenance Engineer. He has been a Team Leader, Designer, Project Manager or Quality Control Manager on numerous bridge inspections, load ratings, rehabilitation and designs, many of which involved a large number and variety of structures, including complex and movable bridges.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>	
a. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Structures Engineer	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
b. (1) TITLE AND LOCATION (CITY AND STATE) <b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	(2) YEAR COMPLETED <b>03/2017</b>	PROFESSIONAL SERVICES <b>03/2017</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Structures Engineer and Threshold Inspector	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
c. (1) TITLE AND LOCATION (CITY AND STATE) <b>FLL Pedestrian Bridge Rehabilitation</b>   Fort Lauderdale, FL	(2) YEAR COMPLETED <b>03/2018</b>	PROFESSIONAL SERVICES <b>03/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>03/2018</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR developed design documents for the rehabilitation of four existing pedestrian bridges at FLL which link Terminals 2, 3 and 4 with the central parking garages. The first phase was the Demolition and Cleaning of the bridge structure to remove rust damage and lead-based paint. The second phase was to Repair and Redesign of the bridges. Structural damage to the steel truss frame was repaired and the bridges architectural treatment redesigned in accord with BCAD's Public Arts program. HDR is working with BCAD's Artist to implement their design intent and serve as Design Professional of Record. Services include Construction Contract Administration and onsite Resident Project Representation services. <b>Role:</b> Structures	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
d. (1) TITLE AND LOCATION (CITY AND STATE) <b>FXE Airfield Electrical Vault Improvements</b>   Fort Lauderdale, FL	(2) YEAR COMPLETED <b>5/2018 (Anticipated)</b>	PROFESSIONAL SERVICES <b>5/2018 (Anticipated)</b>	CONSTRUCTION (IF APPLICABLE) <b>1/2019 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Renovation and improvements to the 800 sqft Airfield Electrical Vault, which houses the Airport's lighting and airfield electrical systems as well as an emergency generator. Renovations include replacement of the existing constant current regulator (CCR) units, new asphalt parking area, an approximately 500 sqft addition, separate high voltage and low voltage cabling into separate raceways, Arc-Flash Hazard assessment, and installation of lightning protection system. Services include site/civil, structural, electrical and geotechnical engineering. Scope includes schematic design & site plan, design development, construction documents, contract document preparation, permitting and bidding assistance. <b>Role:</b> Structural Engineer	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
e. (1) TITLE AND LOCATION (CITY AND STATE) <b>Districtwide Bridge Miscellaneous Structures Consultant Services, FDOT District 4</b>   Districtwide, FL	(2) YEAR COMPLETED <b>On-going</b>	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR is responsible for a variety of services, including design of structural repairs and preparation of structural repair plans, emergency assistance/response, inspections, plans reviews and other miscellaneous services. Scope also includes coating condition assessments, NDT testing, welding inspection, metal failure analysis, value engineering & QA/QC reviews, field surveys, multi-beam swath bathymetric & laser scan surveys, minor roadway & MOT design, and geotechnical services. <b>Role:</b> Project Manager	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Tom Rieger, PE</b>	<b>Facilities Inspection</b>	<b>8 years</b>	<b>8 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Houston, TX**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Design Technology, Bemidji State University, 2002

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

N/A

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Tom has over eight years of related experience with maintenance facility design, including more than 60 facility projects for transportation and municipal clients. His responsibilities include programming, master planning, and equipment selection, specification, and layout for new or renovated facilities, as well as Facility Maintenance Plans to ensure clients continue to operate their facilities with maximum efficiency.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
	<b>FXE Aviation Equipment Service Building Expansion   Fort Lauderdale, FL</b>	<b>10/2018 (Anticipated)</b>	<b>6/2019 (Anticipated)</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>The Airport selected HDR to prepare design concepts for expansion of the facility and the adjacent hardstand apron. HDR's local aviation group teamed up with the Maintenance Design Group (MDG) an independent studio of architects, engineers, and mechanical systems experts within HDR who specialize in transportation support facilities. The HDR team worked with Airport leadership, operations, and maintenance staff to develop design alternatives to satisfy the need for additional storage capacity, expanded airside apron, loft space, storage racks, expanded office space, security offices, additional bays, emergency bunk room / flex space for staff, and covered pedestrian walkway between the administration and AES buildings. Once the preferred concept was chosen, HDR developed full construction documents, including 3D digital renderings of the exterior and interior expansions. HDR obtained all required entitlements, including stormwater permitting, building permits, concurrency applications, and site plan approval.</p> <p><b>Role:</b> Facilities Designer</p>		
	<b>New CDIA Fleet Maintenance Center, Charlotte-Douglas International Airport   Charlotte, NC</b>	<b>2017</b>	<b>2018 (Anticipated)</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Provided program confirmation, equipment selection and specifications, preparation of construction documents, and administration of construction for the new 60,000 GSF Vehicle Maintenance Facility for Charlotte-Douglas International Airport. Est. Construction Cost: \$15.1M; Approx. 218,600 sf; 500+ vehicles.</p> <p><b>Role:</b> Senior Facility Designer</p>		
	<b>Public Works Facility Master Plan, City of Palm Coast   Palm Coast FL</b>	<b>2017</b>	<b>N/A</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Assisted with a facilities master plan for public works facility. The master plan shall allow Palm Coast efficiently utilize and improve existing facilities, provide recommendations for new facilities, and identify long term needs. The creation of a facilities master plan will assist in providing a reasonable priority of needs for capital and budget planning purposes.</p> <p><b>Role:</b> Senior Facility Designer</p>		
	<b>Maintenance Facility, Bay Town Trolley Transit   Panama City, FL</b>	<b>2016</b>	<b>2016</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Provided planning and design for a transit maintenance facility and renovation of two buildings. The Bay County Transportation Planning Organization (TPO) operates the Bay Town Trolley, which needed a new transit maintenance facility and renovation of existing buildings, including one shared with Bay Area Transportation (BAT). Approx construction cost: \$3.9M; 7 acre site size; 30 vehicles.</p> <p><b>Role:</b> Project Manager and Senior Facility Designer</p>		
	<b>Administration/Operations and Maintenance Facility, Manatee County Area Transit   Bradenton, FL</b>	<b>2016</b>	<b>2016</b>
	<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>Provided planning/design for a new administrative, maintenance, and operations facility for Manatee County. The 142-bus facility will include office and support areas for transit administration, operations staff, bus operator support areas, and fleet maintenance offices and mechanic support areas. Vehicle maintenance includes maintenance shops and support areas, parts storage areas, running repair bays, PM/inspection bays, and major repair bays all sized for standard buses, trolley buses, and paratransit buses. The project also involves master planning for a future 12-bay multimodal transit center. Construction Cost: \$14M; 122,100 sf; 34 acre site.</p> <p><b>Role:</b> Facility Designer</p>		

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON.)

12. NAME  <b>Stephen Culberson</b>	13. ROLE IN THIS CONTRACT  <b>Environmental Assessment   EIS</b>	14. YEARS EXPERIENCE	
		A. TOTAL <b>30 years</b>	B. WITH CURRENT FIRM <b>12 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE) <b>Ricondo &amp; Associates, Inc., Chicago, IL</b>
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16. EDUCATION (DEGREE AND SPECIALIZATION) Master of Science, Information Systems Management, Loyola University Chicago Bachelor of Science, Biology, College of William & Mary	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
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18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)
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### 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Runway to Parallel Taxiway Separation Improvements Environmental Assessment, Florida Keys Marathon International Airport   Marathon, FL</b>	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
a. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> Stephen is the Officer-in-Charge for the ongoing environmental assessment (EA) to correct the non-standard runway and parallel taxiway separation. The Proposed Action would relocate the runway 40 feet to the northwest to provide the appropriate separation. Total project cost for the EA is \$501,067. <b>Role:</b> Officer in Charge		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Northeast Area Development Plan Environmental Assessment for Phoenix-Mesa Gateway Airport Authority   Phoenix, AZ</b>	PROFESSIONAL SERVICES <b>2017</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
b. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> Led the development of an Environmental Assessment (EA) for the Northeast Area Development Plan (NADP) at Phoenix-Mesa Gateway Airport. Phase I of the NADP involves the relocation of the passenger terminal complex at the airport to the northeast area of the airport. The relocation of the passenger terminal is needed to accommodate the forecast number of passengers at the airport at an acceptable level of service within the next 5 to 10 years. The proposed facilities would be located northeast of Runway 12L-30R on a mostly undeveloped 700-acre parcel. Potential environmental effects of the proposed project include impacts to flood control channels, air quality, and archaeological resources associated with prior Native American uses. <b>Role:</b> Environmental Assessment Lead		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Terminal Planning and Environmental Consulting, Midfield Satellite North Concourse Facility at Los Angeles International Airport   Los Angeles, CA</b>	PROFESSIONAL SERVICES <b>2015</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
c. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> Ricondo was engaged by Los Angeles World Airports (LAWA) to prepare an Environmental Impact Report (EIR) for the construction and operation of the Midfield Satellite Concourse (MSC) at Los Angeles International Airport (LAX). The MSC Program consists of a new multi-level concourse located within the western portion of the airfield west of the existing Tom Bradley International Terminal (TBIT) and associated passenger processing space in a proposed Central Terminal Processor (CTP) that would be located in the Central Terminal Area (CTA) of LAX. The MSC Program also includes conveyance systems connecting the MSC and CTP as well as a new taxiway, taxiway, and apron and utilities required to serve the MSC. Ricondo prepared an EIR assessing the construction and operation of the MSC North Project (the first phase of the MSC Program) at a project-level, while assessing the MSC Program at a program-level. Environmental issues of primary concern for the MSC North Project and MSC Program included air quality, greenhouse gas emissions, public services, and transportation / traffic. <b>Role:</b> Environmental Lead		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Northside Improvements Environmental Assessment, San Diego International Airport   San Diego, CA</b>	PROFESSIONAL SERVICES <b>2013</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
d. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> Under an on-call planning contract with the San Diego County Regional Airport Authority, Ricondo prepared an EA of proposed improvements to the northside of San Diego International Airport. The improvements included relocation of general aviation (GA) facilities, new air cargo facilities, a receiving distribution center, parking, consolidated rental car facility, and an on-airport roadway linking the consolidated rental car facility to the terminal area. The primary environmental issues of concern were traffic, visual impacts, threatened and endangered species, air quality, and water quality. Cost: \$165,000 <b>Role:</b> Environmental Lead		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Environmental Assessment for the Relocation of the Airport Traffic Control Tower, San Francisco International Airport   San Francisco, CA</b>	PROFESSIONAL SERVICES <b>2012</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
e. (3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> For an Environmental Assessment at San Francisco International Airport, Stephen served as project manager for an EA assessing the potential environmental effects of relocating the Airport Traffic Control Tower. Key issues of the project included existing groundwater contamination, potential visual impacts to residences and historic sites, and construction impacts. <b>Role:</b> Project Manager		

# 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	
<b>Paula Sessions, PG</b>	<b>Environmental Assessment</b>	A. TOTAL <b>30 years</b>	B. WITH CURRENT FIRM <b>1 year</b>
15. FIRM NAME AND LOCATION (CITY AND STATE) <b>Cherokee Enterprises, Inc., Miami Lakes, FL</b>			
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science in Geology, University of Texas at Austin		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Geologist, Florida, No. 1416	
18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.) OSHA 40 Hour HAZWOPER, Red Cross Adult CPR, First Aid AED.			

19. RELEVANT PROJECTS			
	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	<b>Pepsi Fuel Island Demolition   Miami, FL</b>	PROFESSIONAL SERVICES <b>2018</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
a.	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE CEI was tasked with removing the three (3) existing underground storage tanks (USTS), dispensers, and canopy at the Pepsi Plant Miami location. The tanks are two (2) 10,000 gallon diesel and one (1) 12,000 gallon gasoline. <b>Role: Project Manager</b>		
	<b>Port Everglades, Slip 1 Expansion   Broward County, FL</b>	PROFESSIONAL SERVICES <b>2018</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
b.	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE CEI widened Slip 1 by constructing a new south bulkhead in Slip 1 (Berths 9 and 10) approximately 175 feet south of its previous location and temporarily relocated the port's petroleum offloading facilities. In addition to the bulkhead and marine infrastructure design, the design required the integration of removal and disposal of privately owned, operational petroleum facilities that served Berths 9 and 10. <b>Role: Project Manager</b>		
	<b>Environmental Contract (and predecessors E04-DERM 01 and E98-DERM-01), Various Sites   Miami-Dade County, FL</b>	PROFESSIONAL SERVICES <b>2016</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
c.	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Responsible for program management of \$3M E08-DERM-01 environmental contract providing site assessments, source removals, remedial action design and implementation, O&M, and other environmental services to various user departments from the county. <b>Role: Project Manager</b>		
	<b>PROS Ives Estates Park Ammonia and Methane Gas Assessment and Remediation   Miami-Dade County, FL</b>	PROFESSIONAL SERVICES <b>2017</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
d.	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Project Manager for design and preparation of a Methane Gas Monitoring Plan and Design Drawings for a methane gas collection system to prevent landfill gases from intruding into recreational and maintenance buildings. <b>Role: Project Manager</b>		
	<b>Miami-Dade Aviation Authority, Concourse C Source Removal Oversight at MIA   Miami-Dade County, FL</b>	PROFESSIONAL SERVICES <b>2012</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
e.	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Managed the oversight of source removal of 84,000 gallons of FFP and 20,000 gallons of petroleum saturated soil in two phases. Prepared and submitted Source Removal Reports to DERM. <b>Role: Project Manager</b>		



## 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Brenda Clark, PE</b>	<b>Remediation</b>	<b>35 years</b>	<b>10 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, Florida International University, 1985

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 42754

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Brenda has been responsible for performing and managing environmental site assessments, regulatory interaction, development of remedial action plans, regulatory compliance monitoring, and reporting for contaminated sites.

### 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>FLL National Car Rental - Fuel Contaminated Site Remediation</b>   Broward County, FL	<b>9/2013</b>	<b>9/2013</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>a. The HDR team was selected to implement the Remedial Action Plan (RAP) at the National Car Rental Quick Turn Around Facility at FLL. The HDR team provided professional services for the installation of the intermediate depth petroleum plume remediation system. During the treatment of a shallow plume a portion split and moved into an intermediate depth plume area. The HDR team prepared a RAP Modification that was approved by the regulatory agency. The approved RAP system included air sparge (AS) / soil vapor extraction (SVE) for the remediation of petroleum impacted groundwater. The scope of work included the installation of the intermediate depth AS/SVE system startup testing air sampling startup reporting operation and monitoring of the system including quarterly water quality sampling and reporting Post Active Remediation Monitoring (PARM) and site closure. The HDR team was also responsible for agency interaction regarding the project. <b>Role:</b> Project Manager</p>		
<b>FLL Westside Maintenance Facility - Fuel Contaminated Site Remediation</b>   Fort Lauderdale, FL	<b>4/2016</b>	<b>4/2016</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>b. The HDR team was selected to perform the site assessment, prepare a remedial action plan, and perform the remediation of a fuel-contaminated site, located at the Westside Maintenance Facility. Upon discovery, a leaking fuel dispenser was repaired and contaminated soil removed. After the source was controlled, an assessment to determine the extents of soil and groundwater petroleum impacts was performed in accordance with regulatory guidelines. Upon regulatory approval of the site assessment report (SAR), a remedial action plan (RAP) was prepared and submitted to the regulatory agency having jurisdiction. The HDR team was responsible for all regulatory agency integration and reporting. <b>Role:</b> Project Manager</p>		
<b>FLL Terminal 4 Apron Civil Works</b>   Fort Lauderdale, FL	<b>9/2013</b>	<b>12/2018 (Anticipated)</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>c. Replacement and expansion of FLL Terminal 4 Apron, which modified the existing airport terminal civil works and underground utility infrastructure, including apron and airside infrastructure and impacted landside utilities, and relocate security fencing and a guardhouse needed to enable the Terminal 4 Gate Replacement Project. All proposed work was completed while maintaining operations to the existing Terminal and Concourse. HDR provided preliminary engineering, final design services, and construction bid documents for the project. Also provided planning and design services for environmental restoration of contaminated sites in Project construction footprint. Services included existing infrastructure evaluations, design, construction cost estimating, construction phasing and sequencing, permitting services, and design coordination. HDR also oversaw multiple subconsultants who performed specialized services such as Environmental restoration, Pavement analysis and design, and Stormwater and Drainage Design. <b>Role:</b> Environmental</p>		
<b>FLL Terminal Site Fuel Contamination Remediation</b>   Fort Lauderdale, FL	<b>6/2014</b>	<b>mm/yyyy</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>d. We are leading a team of seven subconsultants conducting work primarily at FLL. The HDR team was selected to perform the remediation of a fuel-contaminated site, located in an area where a new terminal will be constructed. The advanced remediation system used for the fuel-contaminated site had never been deployed on such a large scale in Florida. The soil vapor extraction and ozone injection remediation system infuses ozone at various layers in the soil under the contaminated area. The ozone percolates up and removes the pollutant. <b>Role:</b> Engineer of Record</p>		
<b>FLL Fuel Contamination Site Assessment (Arsenic)</b>   Fort Lauderdale, FL	<b>8/2012</b>	<b>N/A</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>e. Performed a site assessment of arsenic contamination detected at the former Budget Taylor Road site. A site assessment, previously performed by others, had been completed following the removal of underground storage tanks. During the removal, the regulatory agency required additional testing and arsenic was detected. We performed a site assessment to delineate the extents of arsenic in the soil and groundwater at the site. Following completion of the site assessment, the HDR team, prepared a soil management plan for regulatory approval (FDEP), that detailed the soil monitoring, management, and reporting to be implemented by contractors working at the site. The Soil Management Plan was approved by the FDEP and was provided to the Contractor for implementation. We worked with FDEP to obtain approval of the Soils Management Plan. <b>Role:</b> Engineer of Record</p>		

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON)

12. NAME  <b>Virginia Jackson, AAE</b>	13. ROLE IN THIS CONTRACT  <b>Environmental Impact Statement</b>	14. YEARS EXPERIENCE	
		A. TOTAL <b>33 years</b>	B. WITH CURRENT FIRM <b>3 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Ricondo & Associates, Inc., Atlanta, GA**

16. EDUCATION (DEGREE AND SPECIALIZATION)

B.S., Aviation Management – Auburn University

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Member, American Association of Airport Executives (AAAE); "Sustainable Airport Projects: Going beyond LEED," in AAAE Airport Magazine, December/January 2009; "Leaping Environmental Hurdles," win AAAE Airport Magazine, January/February 2000

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Runway 9-27 Line-of-Sight Rehabilitation and Runway 18-36 Extension Environmental Assessment, Tallahassee Regional Airport   Tallahassee, FL</b>	<b>2010</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Virginia served as the project manager of the environmental assessment to evaluate the environmental impacts of constructing and operating an extension to Runway 18-36, constructing Runway 9-27's rehabilitation, operating only on Runway 18-36 extended during the rehabilitation of Runway 9-27, and operating on both Runway 18-36 extended and the newly rehabilitated Runway 9-27. Primary focus areas of the EA were alternatives, noise, endangered and threatened species, biotic resources, and historic cultural resources. <b>Role:</b> Project Manager		
b.	<b>Runway to Parallel Taxiway Separation Improvements Environmental Assessment for Florida Keys Marathon International Airport   Marathon, FL</b>	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Virginia is the Project Manager for the ongoing environmental assessment (EA) to correct the non-standard runway and parallel taxiway separation. The Proposed Action would relocate the runway 40 feet to the northwest to provide the appropriate separation. Total project cost for the EA is \$501,067. <b>Role:</b> Project Manager		
c.	<b>Roadway Network Improvements and Associated Projects and Environmental Assessment for Reagan Washington National Airport   Alexandria, VA</b>	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM The current roadway system for Reagan Washington National Airport experiences congestion and delay in multiple locations, and the existing Consolidated Rental Car (ConRAC) is operationally inefficient and inadequately sized to meet existing and future demand for rental cars. Additionally, the quantity of public and employee parking is not adequate to meet future passenger and employee levels. The Authority is proposing to construct a new ConRAC facility, increase the number of public and employee parking spaces, and improve the landside access to these facilities. <b>Role:</b> Environmental		
d.	<b>Landside Access Modernization Program Environmental Assessment for Los Angeles International Airport   Los Angeles, CA</b>	<b>2018</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Virginia was the Deputy Project Manager for the EA analyzing the environmental impacts of the Landside Access Modernization Program. The Proposed Action improves access options to the Central Terminal Area, alleviates congestion of the on-airport and surrounding roadways, and provides a direct connection to the Metro rail and transit system. Total project cost for the EA was \$1,021,300. <b>Role:</b> Deputy Project Manager		
e.	<b>Northeast Area Development Plan Environmental Assessment, Phoenix Mesa Gateway Airport   Mesa, AZ</b>	<b>2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM The Northeast Area Development Plan was proposed by the Airport Authority to correct existing deficiencies with the existing passenger terminal complex and to accommodate the existing and forecast number of passengers at the airport at an acceptable level of service. Virginia prepared the Purpose and Need section of the EA and served as the Deputy Project Manager and senior technical reviewer of the EA. Total project cost for the EA was \$965,965. <b>Role:</b> Deputy Project Manager and Senior Technical Reviewer		

# 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	
<b>Danielle Goveia</b>	<b>Environmental Impact Statement</b>	A. TOTAL <b>5 years</b>	B. WITH CURRENT FIRM <b>2 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Cherokee Enterprises, Inc., Miami Lakes, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Science in Environmental Studies  
Bachelor of Science in Environmental Studies

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Society of Environmental Toxicology & Chemistry, Soil Science Society of America; OSHA 40/8 Hour HAZWOPER; Bloodborne Pathogens; First Aid/CPR/AED; OSHA 8 Hour Refresher

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Port Everglades, Slip 1 Expansion</b>   Broward County, FL	<b>2018</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HASP, Soil boring log research and sample collection research <b>Role:</b> Project Scientist	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
b.	<b>Port Everglades, South Port</b>   Broward County, FL	<b>2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE CEI revised a Soil Management Plan, completed associated sampling, and provided various consulting services (GIS Mapping & Results Analysis.) The project entailed attending progress meetings, site visits, and meetings with regulatory agencies and Port personnel. <b>Role:</b> Project Scientist	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
c.	<b>Miami-Dade Aviation Department- Miami-International Airport Terminal E</b>   Miami-Dade County, FL	<b>2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE FIS Ramp Level Remediation, Source Removal and Reporting <b>Role:</b> Project Scientist	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
d.	<b>Port Everglades- Slip 2 Expansion</b>   Broward County, FL	<b>2016</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Source Removal and Reporting (excavated approximately 7,000 tons of arsenic and petroleum-impacted soil and prepared an SR Report summarizing site activities. <b>Role:</b> Project Scientist	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
e.	<b>Miami-Dade Aviation Authority, Opa-Locka Airport- Building 180</b>   Opa-Locka, FL	<b>2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Source removal reporting, monitoring, well installation, source removal and reporting. <b>Role:</b> Project Scientist	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	

# 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	
<b>Jennifer Smith, PE</b>	<b>Permitting</b>	A. TOTAL <b>11 years</b>	B. WITH CURRENT FIRM <b>11 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Chen Moore and Associates, Inc., Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, Florida Atlantic Engineering, 2006

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 72232

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Jennifer's experience in the civil engineering field includes GIS and AutoCAD design work, detailed design work on the Broward County UAZ Water and Sewer Improvement Project, Stormwater Master Plan for the City of Pompano Beach and Coral Springs, Drainage Design for the City of Pompano Beach and Lauderdale by the Sea and the Design of GIS Utility Atlases. Current duties include water main, sanitary sewer and lift station design and permitting, drainage modeling, design and permitting as well as GIS modeling.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FLL Stormwater Master Plan Update, Phase 1</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>2011</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
a. Under Phase 1 of this project, Broward County Aviation Department (BCAD) retained Chen Moore and Associates (CMA) to update the FLL Stormwater Master Plan (SWMP), which was completed by a previous consultant in 2001. CMA reviewed the data and analysis from all prior reports, converted the existing stormwater model from SWMM to ICPR, and updated the ICPR model with any new system data and new projects provided by BCAD. CMA updated the existing conditions stormwater model and created the future conditions stormwater model to assess alternative drainage improvements needed to achieve required and desired Levels of Service (LOS) for various storm events. <b>Role:</b> Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FLL Stormwater Master Plan Update Phase 2</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>8/2012</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
b. The purpose of Phase 2 was to provide routine updates to the stormwater model(s) based on progress design drawings of the South Runway Expansion Project and the associated future development, including but not limited to, terminal and gate area improvements. The existing stormwater model created during Phase 1 includes design assumptions based on preliminary planning documents for the South Runway Expansion Project. The updates to the stormwater model during Phase 2 were based on progress design submittals for the South Runway Expansion Project and approved design plans for other new development at FLL, which enhanced the accuracy of the stormwater model. <b>Role:</b> Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FLL North Runway Pavement Rehabilitation</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>2018</b>	CONSTRUCTION (IF APPLICABLE) <b>2018</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
c. CMA was responsible for all planning, design, and permitting of all stormwater improvements required for the North Airfield Pavements Rehabilitation Project at Fort Lauderdale-Hollywood International Airport (FLL). The pavement improvements within the associated Runway and Taxiway Safety and Object Free Areas impacted on other facilities within the FLL North Airfield, including the existing stormwater management system. CMA was responsible for determining the additional drainage improvements that were necessary to handle the additional stormwater runoff from any new impervious pavement areas. The CMA team reviewed the exiting overall ICPR stormwater model for FLL to verify the additional stormwater management areas need to be developed in the FLL North Airfield Area. <b>Role:</b> Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Hollywood Stormwater Master Plan Update</b>   Hollywood, FL		PROFESSIONAL SERVICES <b>2011</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
d. Chen Moore and Associates was retained by the City of Hollywood to prepare a Stormwater Master Plan Update for the entire City limits. The City of Hollywood is fully developed with chiefly residential properties mixed with commercial properties and also includes some agricultural, industrial, institutional and government-owned properties. The project area includes approximately 18,680 acres of land which are separated into 44,745 properties. <b>Role:</b> Engineer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Sanitary Sewer at Pompano Air Park</b>   Pompano Beach, FL		PROFESSIONAL SERVICES <b>2010</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
e. Chen Moore and Associates was contracted by the City of Pompano Beach for thelandside improvements at Pompano Beach Air Park (PBO). The proposed development included the installation of the utilities (new force main, water main, gravity sewer and reuse services) as well as parking and drainage improvements to the existing parking lot servicing the tower and a reconstructed access roadway. <b>Role:</b> Project Engineer			



# 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	
<b>Raheel Dossani, EI</b>	<b>Construction Administration   CEI and RPR</b>	A. TOTAL <b>3 years</b>	B. WITH CURRENT FIRM <b>1 year</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, Florida Atlantic University, 2015

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Engineering Intern, Florida, No. 1100019449

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   West Palm Beach, FL		PROFESSIONAL SERVICES <b>6/2018 (Anticipated)</b>	CONSTRUCTION (IF APPLICABLE) <b>6/2019 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
a. Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDs. Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. For this project, we've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. <b>Role:</b> Project Designer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>8/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>8/2018</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
b. Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Designer; Construction Administration			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL		PROFESSIONAL SERVICES <b>03/2017</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
c. Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Construction Administration and Inspection			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FXE Airport Administration Building Addition and Renovations</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>02/2018</b>	CONSTRUCTION (IF APPLICABLE) <b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
d. Renovation and addition to the FXE Administration building, which is being designed with the intent of achieving a LEED-EBOM certified level or better. Design includes converting existing conference room into offices, new 1,900 sqft conference/multi-purpose room, new patio area, existing parking adjustments, installation of covered parking structures, and entrance driveway modifications. This project also includes landscape architecture in the surroundings of the Administration building as well as new site lighting. We also evaluated the existing lighting, mechanical, and plumbing systems and proposed upgrades as necessary to the systems. Major disciplines include civil, structural, geotechnical, landscape, irrigation, architectural, mechanical, electrical, plumbing, and fire protection services. <b>Role:</b> Project Designer			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>10/2016</b>	CONSTRUCTION (IF APPLICABLE) <b>10/2017</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
e. Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Construction Administration and Project Designer			

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Tony Sabbag, CGC</b>	<b>CEI and Resident Project Representative</b>	<b>29 years</b>	<b>12 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Miami Lakes, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Science, Construction Management, Florida International University, 1997  
Bachelor of Science, Construction Science/Mgmt., Florida International University (FIU), 1991

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Certified General Contractor, Florida, No. 1520637

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Tony is proficient in project and program management scheduling claims avoidance constructability reviews and expedient decision-making and dispute resolution.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> CEI		
b.	<b>FLL Taxiway C Pavement Evaluation and Repair</b>   Fort Lauderdale, FL	<b>5/2014</b>	<b>5/2014</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Performed forensic study to determine potential causes of the failure of new asphalt pavement, which had been installed on Taxiway C at the Ft Lauderdale-Hollywood International Airport. Significant rutting was observed shortly after the new pavement was installed and the HDR Team was immediately called in to begin evaluating the pavement. HDR conducted a thorough review of the pavement design, quality of materials used, workmanship performed, quality control measures implemented during construction and material test results during construction. Based on this review, HDR issued a report which summarized the results of the forensic study and provided the probable cause of the failure. As part of this report, HDR also developed a range of repair alternatives and solutions and prepared detailed cost estimates to assist BCAD in determining a rehabilitation approach. <b>Role:</b> CEI / Construction Management		
c.	<b>FDOT District 6 - 014 57 Ave Grouping</b>   Miami-Dade County, FL	<b>On-going</b>	<b>On-going</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Project Administrator for four (4) projects on the continuing NW 57 Ave. (Red Road) corridor improvements, consisting of complete roadway reconstruction widening, sheet pile walls, drainage systems, lighting, signalization, and a new 54" water main. The construction value is estimated at \$44.7 million. <b>Role:</b> Project Administrator		
d.	<b>City of Miami Capital Improvement Program (CIP) Program Management Services</b>   Miami, FL	<b>7/2011</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Performed program management duties involving City owned roadways, park buildings, and facilities - all facets of consultant management of construction projects and production/design projects. Some of the construction projects included W. End Park Pool Building Renovation, Henry Reeves Park Bldg. Renovation, Pinehurst Drainage, and Shenandoah/Silver Bluff Traffic Circles. Design projects included South Miami Ave. Reconstruction/ Roundabout, NE 4th Street, Brickell Ave. Streetscape, NW 20 St. Streetscape, and Miami Baywalk/Museum Park. <b>Role:</b> Production / Construction Program Manager		
e.	<b>FDOT District 6 CEI Landscape Grouping</b>   Districtwide, FL	<b>1/2014</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE Developed CEI processes and checklists to accurately and efficiently inspect Contractor conformance with plans, specifications, and Design Standards. Performs CEI administration services on all stand alone landscaping projects on major corridors such as I-95, SR-826, I-195, and US-1. Provides full-service landscape inspection service, quality control, and establishment period reviews of plant materials. Project received Davis Productivity Award for Department cost savings and process improvements. <b>Role:</b> Project Administrator		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Ryan Beckman, EI</b>	<b>CEI and Resident Project Representative</b>	<b>2 years</b>	<b>Less than a year</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Fort Lauderdale, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Science, Civil Engineering, University of Florida, 2017

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Engineering Intern, Florida, No. 1100020641

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
a. Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Designer; Environmental		
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
b. Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Project Designer		
<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	<b>10/2016</b>	<b>10/2017</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
c. Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Project Designer		
<b>FXE Design Services for West Perimeter Loop Road</b>   Fort Lauderdale, FL	<b>On-going</b>	<b>On-going</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
d. Develop plans and contract specifications to construct an approximately 4,300 linear foot loop perimeter road on the western property of FXE. Currently, vehicles on the north and south side of FXE cross the western approach end of the runway in order to relocate equipment as well as provide fuel for aircraft. These crossings affect aircraft operations and airfield traffic, in addition to increasing the possibility of unauthorized incursions and traffic delays. The loop perimeter road will eliminate these crossings, minimize the potential for runway incursions, and enhance airfield operations. Key elements include civil/site, survey, and geotechnical investigation and design. Tasks include schematic design, design development, construction documents, field survey & mapping, geotechnical & materials testing, species survey, and bidding phase services. <b>Role:</b> Environmental		
<b>FXE Parcel 21B Parking Lot Design Services</b>   Fort Lauderdale, FL	<b>03/2018</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
e. Develop plans and contract specifications to construct an approximately 300 space parking lot on an approximately 6.0 acre Airport owned vacant lot (Parcel 21B) at the Fort Lauderdale Executive Airport (FXE). HDR is responsible for conducting FXE staff review meetings, preparing the construction plans and phasing schedule, geotechnical testing, electrical design, cost estimating, preparation of bid specifications, permitting review, and providing assistance during the bidding process. Scope includes geotechnical investigations, parking pavement and roadway design, lighting, fire protection, drainage, structural security wall, striping, canopy design and foundations, signage, CCTV capability and a security gate. Tasks include pre-design, schematic design, design development, contract document preparation, permitting, materials testing, and bidding phase services. <b>Role:</b> Project Designer		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Morris Smith, Jr.</b>	<b>CEI and Resident Project Representative</b>	<b>21 years</b>	<b>15 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Keith and Associates, Inc., Pompano Beach, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

BS, Business Administration, Florida Memorial College

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Asphalt Paving Technician Level 1 & 2 (FDOT), Earthwork Construction Inspection, Level 1 (FDOT), Concrete Field Technician, Level 1 (FDOT), ACI Concrete Field Testing Technician, Grade I, Troxler Nuclear Gauge, Final Estimates Level 1 (FDOT), FDOT Workzone Traffic Control Intermediate Level MOT

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Fort Lauderdale/Hollywood International Airport Expansion Program III (AEP3) Taxiway C and Westside Infrastructure</b>   Fort Lauderdale, FL	<b>2008</b>	<b>2008</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM This project is a new taxiway construction 5,000 feet long which includes earthwork, lighting, signage pavement markings, asphalt, drainage and utilities (water and sewer) relocations. Morris provided all CEI services checking material and installation observations, determination of quantities, compliance with specifications & coordination with contractor personnel. <b>Role: CEI</b>		
b.	<b>Taxiway C West Reconstruction Project at Fort Lauderdale/Hollywood International Airport</b>   Fort Lauderdale, FL	<b>2012</b>	<b>2013</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM This project is a taxiway reconstruction approximately 2,600 feet long, from Taxiway Delta to the west end of 9-Left, which includes asphalt, earthwork, lighting, signage pavement markings, and drainage. Morris provided all CEI services checking material and installation observations, determination of quantities, compliance with specifications & coordination with contractor personnel. <b>Role: CEI</b>		
c.	<b>North Runway (9L/27R) Airfield Modification / High-Speed Exits at Fort Lauderdale/Hollywood International Airport</b>   Fort Lauderdale, FL	<b>2011</b>	<b>2011</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM This project included a number of critical construction projects and installation of several safety enhancement features including: Constructing high speed runway exits which will enhance the safety and capacity of the Airport; Installing Runway Status Lights to advise pilots of potential runway conflicts; Widening of taxiways at the east end of the runway; and Relocating Navigational Aids. The work was accelerated by the Broward County Aviation Department and the construction was completed in 13 days early. <b>Role: CEI</b>		
d.	<b>Taxiway C and C2 Interconnector at Fort Lauderdale/Hollywood International Airport</b>   Fort Lauderdale, FL	<b>2011</b>	<b>2012</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM This project included construction work related services for extending Taxiway C and C2 East End – Phase II and Repackaged Airfield Enhancements. <b>Role: CEI</b>		
e.	<b>Runway 13/31 Rehabilitation Project at Fort Lauderdale / Hollywood International Airport</b>   Fort Lauderdale, FL	<b>2012</b>	<b>2012</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM This project included full depth reconstruction of touchdown intersections at Taxiway "A" and Taxiway "C" and consists of milling and resurfacing at the North approach end of Runway 13/31 at Taxiway "C" and Taxiway "D" areas. Morris provided all CEI services, checking material with specifications & coordination with contractor personnel. <b>Role: CEI</b>		



# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Michael Schmedt, GISP</b>	<b>GIS</b>	<b>20 years</b>	<b>12 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Orlando, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Science, Geography, Universität zu Köln, 2002

Bachelor of Science, Geography, University of Cologne, Germany, 1998

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Certified GIS Professional, US, No. 00063147

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Michael utilizes his strong technical expertise on the development of data driven decision support systems, data management, analysis and visualization, transportation planning studies, travel demand modeling and environmental impact assessments.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
a. Open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> GIS Analyst		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Greater Orlando Aviation Authority (GOAA) Transportation Planning Consulting Services</b>   Orlando, FL	<b>On-going</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
b. HDR has served as a trusted advisor and extension of staff to GOAA since 1996. As the Transportation Planning Consultant, HDR is responsible for addressing both planned projects and on-demand needs and issues related to transportation planning and traffic engineering. Projects have included Development of Regional Impacts, horizontal permitting design reviews, roadway facility planning and design, land use planning, land development, environmental assessments, traffic counts and data collection, traffic circulation and parking, and off-airport traffic impact mitigation, master planning, and spot safety and traffic operations improvements. <b>Role:</b> GIS Analyst		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>City of West Palm Beach General Engineering Consultant</b>   West Palm Beach, FL	<b>On-going</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
c. Scope tasks include pre-design analysis & studies, preliminary & final design, construction documents, cost estimates, permitting, bidding assistance, and construction administration. Specific tasks assigned under this contract have included the Fern Street Feasibility Study, CCTV Feasibility Study, Cordova & Sunset Road Water Service Rerouting (S. Olive to S. Flagler), Stormwater Condition Assessment, NW Cultural Trail, and Pump Stations 4 and 153 Improvements. <b>Role:</b> GIS Analyst		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>FL Turnpike Enterprise, Existing Roadway Conditions Assessment Report (ERCAR) - Mile Marker 92.5 to 106.1</b>   Palm Beach County, FL	<b>On-going</b>	<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
d. The creation of the ERCAR report required the collection of numerous assets along the Turnpike mainline. A cloud-based mobile GIS solution, Collector for ArcGIS, was used by HDR and the subcontractor team. Michael developed the GIS database used for the collection effort and helped instructing team members in how to install and use the Collector software on their personal smartphones or tablet computers. Using Collector and web-based maps stored in the ArcGIS Online cloud environment, the project team collected over 1,200 field observations and digital photos for the various asset types including roadway, drainage, ITS, lighting, and structures. These data were used in subsequent map figures, tables and reports, as well as KMZ files exported for use by FL Turnpike staff and contractors in Google Earth. <b>Role:</b> GIS		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>GOAA Regulatory Sign Inventory</b>   Orlando, FL		<b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
e. The Greater Orlando Aviation Authority (GOAA) needed a comprehensive inventory of regulatory and warning signs on the public access roadways on Orlando Int'l Airport (OIA) property. Michael developed the database for use with the Collector for ArcGIS application for mobile data collection via smart phone/tablet and the workflow for collecting sign locations, attributes and photographs in the field. The resulting comprehensive asset database was then used to conduct analysis, create reports and develop a maintenance plan. <b>Role:</b> GIS		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Ryan Hanson, PE</b>	<b>BIM / Visualization</b>	<b>5 years</b>	<b>5 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Omaha, NE**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Science, Civil Engineering, University of Illinois, 2019 (Est.)  
Bachelor of Science, Civil Engineering, University of Wisconsin, Madison, 2012

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Nebraska, No. E-16414

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Ryan is a transportation engineer with experience in a variety of transportation projects including aviation planning and design, roadway design, drainage design and modeling, and pavement assessment. He has been involved in all phases of the transportation infrastructure life cycle, from planning and conceptual design through final design and pavement preservation. He has experience with the CAD software packages, AutoCAD Civil 3D and MicroStation/Geopak

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>PBI Airfield Design Improvements and Rehabilitation Program</b>   West Palm Beach, FL	<b>6/2018 (Anticipated)</b>	<b>6/2019 (Anticipated)</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>a. Design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDs. Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. For this project, we've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft based at PBI. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects, as well as for weekly Temporary Flight Restrictions during presidential visits. <b>Role:</b> BIM / Visualization</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Blue Grass Airport Runway 4-22 Rehab and RSA Determination</b>   Lexington, KY	<b>12/2018 (Anticipated)</b>	<b>12/2020 (Anticipated)</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>b. HDR was selected to provide professional planning and design services for the rehabilitation of the sole commercial Runway 4-22 and Engineered Materials Arresting System (EMAS) at Blue Grass Airport. HDR performed a pavement investigation, alternatives analysis, runway safety area determination, assisted in procuring EMAS in accordance with FAA PGL 15-2, developed contract documents, and provided bid assistance. The project also included the rehabilitation of the a large segment of parallel Taxiway A. HDR worked closely with the Airport and the FAA ADO to analyze tower visibility, airspace penetrations, and impacts to NAVAIDs caused by construction. HDR utilized 3D modeling of the construction phasing to minimize impacts to the Airport's commercial service while optimizing the contractor's available work area. <b>Role:</b> BIM / Visualization</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Andrews Air Force Base Taxiways Sierra &amp; Whiskey</b>   Joint Base Andrews, FL	<b>On-going</b>	<b>2020 (Anticipated)</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>c. HDR was selected to provide a design-bid-build for the Air Force Civil Engineering Support Agency's (AFCEA) Design for Replacement of Taxiways Sierra and Whiskey at Joint Base Andrews, MD. HDR provided the design and developed separate contract documents for both Taxiway Sierra and Whiskey in accordance with Air Force requirements for airfield pavement and lighting in addition to State of Maryland Department of Environment (MDE) drainage, erosion control and wetland permitting requirements. Completed a topographical survey, geotechnical investigation, utility investigations and produced design drawings in Autocad and BIM. <b>Role:</b> BIM / Visualization</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>USACE Hawaii District Kwajalein Atoll Marshall Islands</b>   Marshall Islands	<b>9/2017</b>	<b>N/A</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>d. HDR provided engineering services to develop repair plans project definition and 35% design documents for 3 airfield pavement repair projects located on Roi Namur and Kwajalein Atolls located in the Marshall Islands. The projects required us to develop repair plans for runways taxiway and aprons at both locations while keeping the facilities open to aircraft operations. <b>Role:</b> BIM / Visualization</p>		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>Storm Drain Design Repair Andrews Air Force Base</b>   MD	<b>1/2015</b>	<b>N/A</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>e. HDR designed for repair/replacement of collapsed storm drains on airfield at Joint Base Andrews Camp Springs MD. <b>Role:</b> Plans Production / Drainage Modeler</p>		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Francois Thomas, PE</b>	<b>Geotechnical and Threshold Inspections</b>	<b>25 years</b>	<b>16 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Tierra South Florida, Inc., West Palm Beach, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

MS in Geotechnical Engineering, 1993

BS in Civil Engineering, 1991

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida, No. 56381

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Special Inspector 7021399, Certified Masonry Inspector, Radiation Safety Officer

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
	<b>Private Parking Lot-Parcel 21B, Fort Lauderdale Executive Airport (FXE)   Fort Lauderdale, FL</b>	<b>2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
a.	Francois was the principal engineer for the geotechnical engineering services for the project which includes a new on-grade parking lot for 300 vehicle parking spaces and a privacy wall located off NW 21st Avenue, near Commercial Boulevard in Fort Lauderdale. The parking lot is restricted to employees, rental cars, long term customer parking, and special activities at the Fort Lauderdale Executive Airport. Provided Geotechnical engineering evaluations and recommendations regarding General site conditions; Permanent Cut and Fill Slopes; Excavations; Groundwater Control; On-Site Soil Suitability; Foundation and Pavement Design Considerations. <b>Role:</b> Principal Geotechnical Engineer		
	<b>FXE Loop Perimeter Road   Fort Lauderdale, FL</b>	<b>2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
b.	Francois was the principal engineer for the Geotechnical Engineering Services for the project which included the design phase of the Loop Perimeter Road within the Fort Lauderdale Executive Airport. The new 4,300± linear foot loop perimeter road along the western portion of the airport will eliminate vehicles from crossing the western approach end when relocating equipment and fueling aircraft. The purpose of the study was to provide geotechnical input to the design team to assist in evaluation of the merits of the planned construction. <b>Role:</b> Principal Geotechnical Engineer		
	<b>FXE Taxiway Intersection Improvements   Fort Lauderdale, FL</b>	<b>2016</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
c.	Francois served as principal geotechnical engineer for the Taxiway Intersection Improvements within the Fort Lauderdale Executive Airport. The purpose of the study was to provide geotechnical input to the design team to assist in evaluation of the merits of the potential improvements. Provided geotechnical engineering evaluation of the site and subsurface conditions with respect to the planned taxiway improvements based upon site observations, field exploratory test data obtained during the geotechnical study, and our understanding of the project information. <b>Role:</b> Principal Geotechnical Engineer		
	<b>FXE Taxiway Foxtrot Pavement Rehabilitation   Fort Lauderdale, FL</b>	<b>2016</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
d.	Francois served as principal geotechnical engineer for the Geotechnical Engineering Services for the project which included pavement rehabilitation of Taxiway Foxtrot within the Fort Lauderdale Executive Airport. The purpose of the study was to provide geotechnical input to the design team to assist in evaluation of the merits of the potential improvements. The study was performed to obtain information on the existing subsurface conditions at the proposed project site to assist in the design of construction plans for the proposed improvements. <b>Role:</b> Principal Geotechnical Engineer		
	<b>Taxiway F Rehabilitation   Fort Lauderdale, FL</b>	<b>On-going</b>	
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
e.	Francois is the principal geotechnical engineer for the QA construction material testing and inspection services for the Taxiway F Rehabilitation project at the Fort Lauderdale Executive Airport. TSF's scope of services include inspection of asphalt plant supplier prior to starting construction; Density tests on backfill and stabilized subgrade material along with representative Proctor and LBR tests, Gradation, Atterberg Limits and Organic Content tests; TSF is also providing a Senior Engineering Technician to assist with asphalt plant inspections and testing during initial test section; asphalt plant and field inspections and testing during production; Witness asphalt core drilling and delivery to asphalt plant. TSF is providing daily reports in FAA format; testing logs, and signed / sealed material testing and asphalt summary reports. The project is on-going. <b>Role:</b> Principal Geotechnical Engineer		

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Lee Powers, PSM</b>	<b>Survey &amp; Mapping / SUE</b>	<b>13 years</b>	<b>8 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)
<b>Keith and Associates, Inc.</b> , Pompano Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS Land Surveying & Geomatics Engineering, Purdue University, 2005	Professional Surveyor & Mapper, Florida, No. 6805

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)
Florida Society of Professional Surveyors & Mappers, BIM Smart Foundation, Member, BuildingSMART Foundation Member. Certifications: Transportation Worker Identification Credential (TWIC), FDOT Maintenance of Traffic

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Ft. Lauderdale-Hollywood International Airport Phase 1 &amp; 2 Utility Atlas Update for South Runway Expansion of 9R/27L</b>   Fort Lauderdale, FL	<b>2013</b>	<b>2014</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Keith and Associates was tasked with providing the preconstruction design survey, horizontal and geodetic control surveys and aerial photography survey support. Lee served as the Project Surveyor, in which he established Primary Airport Control Station (PCAS) and Secondary Airport Control Station (SACS) Monuments in accordance with the FAA Advisory Circular 150/5300-16A. He also completed the processing and Blue Booking procedures for publication of the monuments in the National Geodetic Survey registry. <b>Role:</b> Project Surveyor		
b.	<b>Merritt Island Airport Hangar</b>   Merritt, FL	<b>2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM To facilitate the design of a modern hangar system, Lee provided a design survey of the area around the existing hangar. Including elevation model and detailed survey of drainage system. <b>Role:</b> Surveyor		
c.	<b>Various Taxiway Rehabilitation Projects at Ft. Lauderdale Executive Airport (FXE)</b>   Fort Lauderdale, FL	<b>On-going</b>	<b>On-going</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM For rehabilitation of Taxiways Charlie, Delta, Echo and Foxtrot, Keith and Associates performed topographic surveys as per FAA A/C 150/5300-16A, 17B and 18B and successfully uploaded information to the FAA GIS database. <b>Role:</b> Surveyor		
d.	<b>Broward County Water &amp; Wastewater Services (WWS) GPS/GIS Project</b>   Broward County, FL	<b>2014</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Lee served as the Project Surveyor for this utility location project. Keith and Associates was the Prime Professional on this Broward County Water and Wastewater Services (BCWWS) contract, which included several hundred miles of water and sewer piping and appurtenances. The goal of this 18-month project was to obtain sub-meter accurate NAD83 HARN state plane coordinates for the WWS' surface visible features and to populate the BCWWS GIS shapefiles with the pertinent utility survey information. <b>Role:</b> Project Surveyor		
e.	<b>Wave Modern Streetcar</b>   Fort Lauderdale, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Keith and Associates was tasked with providing Surveying and Subsurface Utility Engineering (SUE) services for this modern streetcar in Downtown Fort Lauderdale between Northwest 6th Street and Southeast 17th Street. The system would operate 5 modern streetcars through 2.7 miles in mixed traffic along existing roadways and would utilize transit signal priority. Surveying services include project control, aerial targets, topography/DTM, aerial clearances, drainage and sanitary details, recovery of property and right-of-way monumentation, boundary surveys, and survey support for the geotechnical operations. <b>Role:</b> Surveyor		



# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Mike Digregorio, PE</b>	<b>Cost Estimating / Scheduling</b>	<b>19 years</b>	<b>6 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Salt Lake City, UT**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Business Admin, Finance, Loyola Marymount University, 2001  
Bachelor of Civil Engineering, Civil Engineering, University of Utah, 1999

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Utah, No. 368491-2202

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Mike is a senior cost estimator within the project controls group at HDR. Over the last six years, he has provided independent cost estimating, cost engineering and scheduling services on various transportation and transit related projects.

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Engineering and design services to support FXE's current development programs via a four year on call contract. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Cost Estimator		
b.	<b>FXE Airport Administration Building Addition and Renovations</b>   Fort Lauderdale, FL	<b>02/2018</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Renovation and addition to the FXE Administration building, which is being designed with the intent of achieving a LEED-EBOM certified level or better. Design includes converting existing conference room into offices, new 1,900 sqft conference/multi-purpose room, new patio area, existing parking adjustments, installation of covered parking structures, and entrance driveway modifications. This project also includes landscape architecture in the surroundings of the Administration building as well as new site lighting. We also evaluated the existing lighting, mechanical, and plumbing systems and proposed upgrades as necessary to the systems. Major disciplines include civil, structural, geotechnical, landscape, irrigation, architectural, mechanical, electrical, plumbing, and fire protection services. <b>Role:</b> Cost Estimator / Scheduler		
c.	<b>City of West Palm Beach General Engineering Consultant</b>   West Palm Beach, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Scope tasks include pre-design analysis & studies, preliminary & final design, construction documents, cost estimates, permitting, bidding assistance, and construction administration. Specific tasks assigned under this contract have included the Fern Street Feasibility Study, CCTV Feasibility Study, Cordova & Sunset Road Water Service Rerouting (S. Olive to S. Flagler), Stormwater Condition Assessment, NW Cultural Trail, and Pump Stations 4 and 153 Improvements. <b>Role:</b> Cost Estimator / Scheduler		
d.	<b>Wave Streetcar Program Management Consultant (PMC)</b>   Fort Lauderdale, FL	<b>2/2021 (Anticipated)</b>	<b>2/2021 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM HDR is leading the project management team that is overseeing the design, construction and implementation of the Wave Streetcar. The PMC responsibilities includes full-service project management, public involvement, preliminary engineering, procurement support, and plan reviews. Additionally duties include supporting FTA coordination, Wave partner communications, public outreach, FTA project reporting, and vehicle procurement. We lead the program management effort with the goal of commencing streetcar revenue service in February 2021. <b>Role:</b> Cost Estimator / Scheduler		
e.	<b>Willamette Water Supply Preliminary Design</b>   WA and OR	<b>5/2017</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Based on projected population growth and to help sustain Washington County's expanding economy, Tualatin Valley Water District (TVWD) will require an additional source of supply around the year 2025. The Preliminary Design project is intended to establish a preferred alternate route, water tank locations, and investigate potential construction techniques - as well as develop cost and schedule for completion of the program. Mike served as cost estimator for this project and was responsible for developing parametric and contractor-style cost estimates for the program. <b>Role:</b> Cost Estimator		

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON.)

12. NAME  <b>Matthew Ruffra</b>	13. ROLE IN THIS CONTRACT  <b>Financial Analysis</b>	14. YEARS EXPERIENCE A. TOTAL <b>10 years</b> B. WITH CURRENT FIRM <b>10 years</b>	
15. FIRM NAME AND LOCATION (CITY AND STATE) <b>Ricondo &amp; Associates, Inc, Chicago, IL</b>			
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science – Business Economics, Auburn University Master of Arts – Applied Economics, University of Cincinnati		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)	
18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.) American Association of Airport Executives			

### 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Bond Feasibility Reports for Tampa International Airport</b>   Tampa, FL	PROFESSIONAL SERVICES <b>2015</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> a. Matthew was the project manager for the TPA Series 2015 Feasibility Report for the expected issuance of both GARBs and CFC Bonds. He compiled and provided final edit and review of the document, and prepared the financial tables to assess the financial feasibility of the bond issuances; including impacts to airline rates, airline cost per enplanement, projected CFC revenues, and the ability of the Airport to meet bond coverage requirements. <b>Role:</b> Project Manager		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>Airport Financial Consulting Services for Louis B. Armstrong New Orleans International Airport</b>   New Orleans, LA	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> b. Matthew analyzed and forecast the recovery in airline traffic at Louis Armstrong New Orleans International Airport following Hurricane Katrina, assisted with a revenue bond feasibility study, and provides ongoing rates and charges modeling to assist with airline negotiations and long-term airport rate planning. <b>Role:</b> Analyst		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>On-Call Financial Services for Capital City Regional Airport</b>   Lansing, MI	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> c. Matthew maintains an airport rates and charges projection model to assist CRAA in financial planning; including budgeting, rates setting, mid-year rate adjustments, airline negotiations, and year-end reconciliation with the airlines. Matthew also assists in providing financial scenarios for changes in airline service or rate methodology. <b>Role:</b> Financial Consultant / Analyst		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>General Financial Planning Services for City of Chicago</b>   Chicago, IL	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> d. Matthew provides on-call general financial support for CDA for both Chicago O'Hare International and Chicago Midway International Airports. These services include maintaining multi-year rates and charges projection models, airline negotiations, airport rate impact studies, PFC applications and amendments, and general financial needs. <b>Role:</b> Financial Consultant		
(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
<b>O'Hare Modernization Program for Chicago O'Hare International Airport</b>   Chicago, IL	PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE)
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <span style="float: right;"><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</span> e. Matthew is a financial planner for the O'Hare Modernization Program, performed for the Chicago Department of Aviation (CDA). He has assisted with various financial planning efforts including airline negotiations, Passenger Facility Charge (PFC) applications, amendments, and PFC and airport revenue debt capacity analyses, and multi-year Letter of Intent Grant Applications submitted to the FAA. <b>Role:</b> Financial Planner		

# 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	
<b>Aubyn Bell, AICP</b>	<b>Grant / JACIP and DBE Support</b>	A. TOTAL <b>12 years</b>	B. WITH CURRENT FIRM <b>10 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Jacksonville, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Arts, Economics, University of North Florida, 2007

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

AICP - American Institute of Certified Planners, U.S., No. 027033

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support.		
b.	<b>CSX Transportation, Dames Point Marine Terminal Intermodal Container Transfer Facility TIGER III Grant Application and Environmental Study</b>   Jacksonville, FL	<b>4/2012</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Aubyn was a primary author of the TIGER Grant application which won JAXPORT \$10 million. The ICTF will serve as an on-dock facility, providing existing and future port customers access to efficient rail transportation, thereby enabling a large-scale reduction of long-haul truck trips from regional and state highways and the regional road network. Aubyn coordinated with CSX and JAXPORT to understand their needs and seek partnerships with other stakeholders to strengthen the application. The grant application included analysis of freight needs, commodity flows, and economic benefits. <b>Role:</b> Planner / Document Author		
c.	<b>CSX Transportation, National Gateway TIGER Grant Application</b>   Jacksonville, FL	<b>9/2010</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Aubyn assisted in authoring the National Gateway TIGER Grant Application, which helped grant CSX more than \$98 million in federal stimulus funds, the most of any applicant. The National Gateway initiative is an on-going public-private partnership consisting of more than \$842 million in rail infrastructure and intermodal terminal projects that will enhance transportation service options for the Mid-Atlantic region. As part of the National Gateway, 61 vertical clearances in six states and the District of Columbia will be modified to help expand capacity and provide clearance for double-stack intermodal trains. The grant application included analysis of freight needs, commodity flows, and economic benefits. CSX used HDR for TIGER II and III grant applications. <b>Role:</b> Grant Author		
d.	<b>CSX Transportation, Positive Train Control FCC Compliance</b>   Various	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Aubyn has been managing the CSX PTC compliance program for over two years. The project involves compliance with NEPA and Section 106 for each tower (over 1000). Her role requires extensive coordination including several departments of CSX, the Federal Communications Commission, the Association of American Railroads, the State Historic Preservation Officer for each state listed, local governments throughout CSX track areas, and over 100 tribes. Aubyn has developed innovative solutions for many tower locations that satisfy the needs of multiple parties. Aubyn developed a GIS database and model to streamline the hundreds of tower reviews. Additionally, she conducts annual compliance training for selected CSX employees. <b>Role:</b> Project Manager		
e.	<b>FDOT District 4, Districtwide ETDM Support</b>   Districtwide, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Managed several task work orders which involved ETDM assistance for FDOT District 4 projects. As part of the SHRP2 project, prepared a revised CE II schedule template which shaved 2 years off of the previous 4 year template. <b>Role:</b> Task Leader		

## 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>John Fallon, RCDD, OSP</b>	<b>Communications</b>	<b>36 years</b>	<b>2 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Orlando, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

BICSI Registered Communications Distribution Designer  
Outside Plant (OSP) Designer

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

John has more than 36 years of experience in communications infrastructure and systems planning and design, and creating detailed designs of various low voltage systems in both new and existing structures around the world. He provides design and coordination of Sensitive Compartmented Information Facilities (SCIF), communications control rooms, and infrastructure for both inside and outside plant applications to government, military, healthcare, and transportation clients. John strives to continually provide creative technology design solutions.

### 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
<b>NAVFAC SW, F-35 Flight Simulator</b>   Fallon Naval Air Station, NV	<b>On-going</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>a. Two-story, approximately 52,000 sqft operation and training facility that will house six full mission F-35 simulators and six deployable mission F-35 rehearsal trainers. The facility provides the users a variety of spaces, including administrative offices and accommodation of other training devices as required by the Marine Corps Weapons System Planning Document (WSPD). HDR was responsible for and completed the preparation of planning and programming support documents including; all architecture and engineering services, concept level design and cost estimates of the building. The building incorporates features that provide the lowest practical life cycle cost solutions satisfying the facility requirements with the goal of maximizing energy efficiency. Design also incorporates other LEED concepts including reducing operation, and maintenance costs, reducing building related illnesses, increasing building/component durability and flexibility, and using construction materials and methods that foster sustainability through resource conservation and recycling. Building Information Modeling (BIM) was used to develop design documents and the construction contractor will be required to provide a BIM implementation plan as part of the construction contract deliverables. <b>Role:</b> IT / Technology / Communications</p>		
<b>Kunwon - Project Management Consortium (K-C PMC) YRP/LPP</b>   Seoul, Korea	<b>On-going</b>	<b>N/A</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>b. John's responsibilities included oversight, reports, schedule, subject matter expert, and the success of multiple projects. As an RCDD, he oversaw Command, Control, Communications, Computers, and Intelligence (C4I) planning for and execution of the Yongsan Relocation Plan/Land Partnership Plan (YRP/LPP). The C4I portfolio was comprised of more than 100 C4I systems to be migrated from U.S. Army Garrison (USAG) – Yongsan, and other in-Korea sites, and integrated at USAG - Humphreys in Korea. <b>Role:</b> IT / Technology / Communications</p>		
<b>Fort Bliss Replacement Hospital, Central Processing System</b>   El Paso, TX	<b>On-going</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>c. Communications infrastructure and systems included data, telephone, intercom, public address, nurse call, radio paging, EMS radio, and the entertainment and training television. Additionally, there will be campus-wide wireless infrastructure, telemedicine, intelligent OR, and WAN teleconferencing. Outside plant includes redundant campus-wide fiber optic ring network system and copper feeds. <b>Role:</b> IT / Technology / Communications</p>		
<b>Los Angeles Metro Transportation Authority, Emergency Security Operations Center</b>   Los Angeles, CA	<b>On-going</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>d. HDR is leading the architectural design and civil engineering on the development of the Emergency Security Operations Center, located in the Arts District of downtown. The project is proposed to enhance existing traffic monitoring systems, operational monitoring systems, communication network infrastructure and systems, and emergency management systems. <b>Role:</b> IT / Technology / Communications</p>		
<b>U.S. Marine Corps Cyber Command, Command &amp; Control Headquarters Facility</b>   MD	<b>On-going</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>e. HDR as part of the Mortenson Grunley design-build team was selected to design a new 158,000 sqft secure command and control headquarters facility for U.S. Marine Corps Cyber Command at Fort Meade Maryland. The entire secure building is a Sensitive Compartmented Information Facility (SCIF) for classified communications that will use the most advanced audio-visual technology and offer the capacity to accommodate significant power requirements. The design-build team worked very hard to eliminate inefficiencies from the program using value added design features to streamline construction and to be more cost-competitive. <b>Role:</b> IT / Technology / Communications</p>		



## 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Bob Bosco</b>	<b>Security</b>	<b>41 years</b>	<b>17 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Orlando, FL**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master of Science, Criminal Justice, Rollins College, 1982  
Bachelor of Science, Criminal Justice, Rollins College, 1981

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Florida CPTED Practitioner, FL  
Certified Protection Professional, US, No. 08359

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Bob leads HDR's security and communications technology consulting program. In this capacity, he guides the approach to the planning and designing of these technologies for a broad range of HDR's projects. He is expert in the application of government antiterrorism and force protection (AT/FP) guidelines as prescribed in the Department of Defense Unified Facilities Criteria (UFC), the Interagency Security Committee Security Design Criteria (ISC) SCIF design as prescribed by the ICD 705 / ICS 705-1 and ICS 705-2. His law enforcement experience compliments his abilities as a security and countermeasures designer. He rose to the rank of Captain in the Volusia County, Florida, Sheriff's Office, and was responsible for all facets of law enforcement activities, including S.W.A.T. operations, criminal investigations and court security management.

### 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FXE General Engineering Aviation Consultant</b>   Fort Lauderdale, FL	<b>8/2018</b>	<b>8/2018</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Providing general engineering services to support FXE's current development programs via a four year on call contract. HDR is leading a team of seven specialty subconsultants providing a wide variety of services. The range of projects includes rehabilitation of existing taxiways, performance of Runway PCN evaluation, resident project representative and construction administration services; airside infrastructure studies and improvements; safety, security and communication projects; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Security		
b.	<b>Broward County Aviation Dept. General Engineering Consultant</b>   Broward County, FL	<b>03/2017</b>	<b>12/2018 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM HDR led a team of specialty subconsultants in support of BCAD's current development programs via a five-year, \$9.3 million task order contract. The range of projects performed by our team included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support. <b>Role:</b> Security		
c.	<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	<b>10/2016</b>	<b>10/2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Security		
d.	<b>FXE Airport Master Plan Update</b>   Fort Lauderdale, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM HDR is serving as a major subconsultant to update the 2010 FXE Master Plan, which is needed to reflect new facilities, reassess future projections of airport activity, address new environmental and other regulatory constraints, and plan for an appropriate mix of land uses to support projected aviation and non-aviation needs. The update will outline a plan for the provision of future facilities to accommodate the projected demand. This plan will insure that short-term actions and recommendations do not preclude long-range planning options and provide a financially sound implementation plan for short, intermediate, and long-term improvements. HDR is responsible for providing an inventory of existing conditions, demand/capacity and facility requirements, alternative analysis and recommended development concepts and developing an implementation plan. <b>Role:</b> Security		
e.	<b>City of West Palm Beach General Engineering Consultant</b>   West Palm Beach, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Scope tasks include pre-design analysis & studies, preliminary & final design, construction documents, cost estimates, permitting, bidding assistance, and construction administration. Specific tasks assigned under this contract have included the Fern Street Feasibility Study, CCTV Feasibility Study, Cordova & Sunset Road Water Service Rerouting (S. Olive to S. Flagler), Stormwater Condition Assessment, NW Cultural Trail, and Pump Stations 4 and 153 Improvements. <b>Role:</b> Security		

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON.)

12. NAME <b>Timothy Ward, PE</b>	13. ROLE IN THIS CONTRACT <b>TERPs</b>	14. YEARS EXPERIENCE A. TOTAL <b>12 years</b>	B. WITH CURRENT FIRM <b>Less than a year</b>
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15. FIRM NAME AND LOCATION (CITY AND STATE)

**HDR Engineering, Inc., Pittsburgh, PA**

16. EDUCATION (DEGREE AND SPECIALIZATION)

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

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Pennsylvania, No. PE078762

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Tim has over 12 years of professional experience in aviation engineering. He is experienced with airport geometric designs, grading and drainage, pavement design, airfield lighting, airfield fueling, signage, marking, construction phasing, airport planning, construction plans and specifications, shop drawing and contractor submittal reviews, project bidding, cost estimates and budgeting, and field observation and inspection. His experience includes working with FAA, UFC, ICAO, and DMG airfield standards in addition to working on design bid build and design build projects.

## 19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	CONSTRUCTION (IF APPLICABLE)
<b>Blue Grass Airport Runway 4-22 Rehab and RSA Determination</b>   Lexington, KY	<b>12/2018 (Anticipated)</b>	<b>12/2020 (Anticipated)</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p><input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>a. HDR was selected to provide professional planning and design services for the rehabilitation of the sole commercial Runway 4-22 and Engineered Materials Arresting System (EMAS) at Blue Grass Airport. HDR performed a pavement investigation, alternatives analysis, runway safety area determination, assisted in procuring EMAS in accordance with FAA PGL 15-2, developed contract documents, and provided bid assistance. The project also included the rehabilitation of the a large segment of parallel Taxiway A. HDR worked closely with the Airport and the FAA ADO to analyze tower visibility, airspace penetrations, and impacts to NAVAIDs caused by construction. HDR utilized 3D modeling of the construction phasing to minimize impacts to the Airport's commercial service while optimizing the contractor's available work area. <b>Role:</b> Senior Civil Engineer</p>		
<b>Runway 14-32 Safety Area Improvements and Pavement Rehabilitation, Bid Package 3, Pittsburgh International Airport</b>   Pittsburgh, PA	<b>12/2017</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p><input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>b. Pittsburgh International Airport. Assisted in preparing construction documents for this project. Specific tasks included grading, drainage, geometry, lighting, signage, markings, cost estimates, and technical specifications. <b>Role:</b> Design Manager</p>		
<b>NW Taxiway Development, Piedmont Triad International Airport</b>   Greensboro, NC	<b>12/2017</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p><input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>c. Served as the project manager for the Northwest Taxiway Development project. The project included major earthwork planning (approximately 16 million CY) for the over 150 acre development site. The first phase of construction included erosion and sediment control for the phased development, as well as clearing, grubbing and initial earthwork placement. <b>Role:</b> Project Manager</p>		
<b>East Aircraft Parking Apron, George Bush Intercontinental Airport</b>   Houston, TX	<b>12/2015</b>	<b>N/A</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p><input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>d. This \$54 million project involved the design of the East Aircraft Parking Apron suitable to serve eight B777/A380 aircraft parking positions, as well as design for two temporary terminal PODs for servicing aircraft and passenger boarding. The project also included an 800 foot extension of parallel Taxiway NB with a taxiway bridge to span one of the main airfield drainage swales. Other major elements of the design included utility investigation, airspacing, security and blast fencing, geometric layouts, asphalt and concrete pavement design, site grading and drainage, site utilities, lighting, marking, signage, and high-mast lighting. The design manager role was responsible for overseeing all elements of the design. <b>Role:</b> Design Manager</p>		
<b>City of Philadelphia, Department of Aviation, Capital Development Program</b>   Philadelphia, PA	<b>12/2017</b>	<b>On-going</b>
<p>(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE</p> <p><input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM</p> <p>e. Projects, which totaled \$200 million, included the relocation existing taxiways, the establishment of new taxiways, and extending Runway. Design elements of these projects included geometric, drainage, lighting, signage and marking layout, environmental permitting, Construction Safety Phasing Planning, preparation and coordination of the Safety Management Systems Safety (SMS) Safety Risk Management (SRM) panel and construction bid document preparation. Additional design elements included extensive stormwater design and permitting activities. The Airfield Design Lead role was responsible for preparing conceptual design documents, provide oversight and support to final design consultants, and support construction for the program. <b>Role:</b> Airfield Design Lead</p>		

## 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Mark Johnson, AICP</b>	<b>FAR Part 77 Evaluation</b>	<b>31 years</b>	<b>9 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE)

**Ricondo & Associates, Inc, Carlsbad, CA**

16. EDUCATION (DEGREE AND SPECIALIZATION)

Bachelor of Arts – Geography, University of Nebraska

Master of Arts – Urban and Regional Planning, University of Iowa

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

### 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
	<b>Comprehensive Airport Land Use Compatibility Plan for San Francisco International Airport   San Francisco, CA</b>	<b>2012</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
a.	The plan involves the development of policies for airport noise/land use compatibility, air-port vicinity safety compatibility, and airspace protection in the SFO environs. Mark is coor-dinating directly with the SFO planning department and local city planning officials. The plan is leading to the establishment for the first time at SFO of airport vicinity safety policies and airspace protection policies that consider both TERPS and one-engine inoperative air-space surfaces, in addition to FAR Part 77 surfaces. <b>Role:</b> Project Manager		
	<b>Airport Land Use Compatibility Plan for Public and Military Airports   San Diego County, CA</b>	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
b.	Comprehensive airport land use compatibility plans for five urban airports and San Diego International Airport (SDIA), in compliance with California law relating to airport land use commissions. Plan includes policies addressing noise compatibility, airport vicinity safety, and airspace protection. Project included outreach to public, local governments, and Airport Land Use Compatibility Plan Steering Committee. The plans for the urban airports have been adopted and the plan for SDIA is nearing completion. <b>Role:</b> Project Manager		
	<b>General Advisory and Airport Consulting Services for Clark County Airports   Las Vegas, NV</b>	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
c.	Ricondo is providing ongoing planning services to the Clark County Department of Aviation through a general advisory services agreement, which has been renewed annually since its inception. The types of services provided under the general advisory services agreement have included airfield and airspace planning, airport land use planning, terminal planning, environmental assessments, oversight and conduct of aircraft noise analyses, air quality analyses, ground access and parking planning studies, architectural/engineering design reviews, feasibility studies, height studies, benefit-cost analyses, and general staff support. Mark pre-pared a noise mitigation property acquisition and reuse plan to aid in implementing rec-ommendations of the CFR Part 150 Noise Compatibility Plan.		
	<b>As-Needed Airport Planning and Management Services for San Francisco International Airport   San Francisco, CA</b>	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
d.	Ricondo's major assignments under this contract included a Runway Safety Area (RSA) Study and the related updated of the Airport Layout Plan. Ricondo also provided airport land use compatibility planning services on behalf of the Airport for use by the City/County Association of Governments (C/CAG) of San Mateo County, which serves as the county's Airport Land Use Commission. C/CAG was updating its Airport Land Use Compatibility Plan for San Francisco International at the time. Mark managed the airport land use compatibility work, providing analyses and proposed policies relating to noise, airport vicinity safety, and air-space protection. <b>Role:</b> Land-Use		
	<b>Airport Zoning Plans for Detroit Metropolitan Wayne County and Willow Run Airports   MI</b>	<b>2015</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM		
e.	The project involves the preparation of airspace zoning ordinances and maps for Detroit Metro and Willow Run Airports in suburban Detroit, Michigan. Ricondo is developing air-space maps, land use maps, and draft zoning ordinances for both airports, in compliance with Michigan law. Ricondo is coordinating with the staff of the Michigan Aeronautics Commission. <b>Role:</b> Project Manager		

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(COMPLETE ONE SECTION E FOR EACH KEY PERSON.)

12. NAME  <b>Sebastien Carreau</b>	13. ROLE IN THIS CONTRACT  <b>Land-Use / Zoning Review</b>	14. YEARS EXPERIENCE A. TOTAL <b>16 years</b> B. WITH CURRENT FIRM <b>13 years</b>	
15. FIRM NAME AND LOCATION (CITY AND STATE) <b>Ricondo &amp; Associates, Inc., Orlando, FL</b>			
16. EDUCATION (DEGREE AND SPECIALIZATION) <b>Bachelor of Science – Aeronautical Science, Florida Institute of Technology</b>		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)	
18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.) <b>Member, American Association of Airport Executives</b>			
19. RELEVANT PROJECTS			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Key West International Airport Master Plan Update</b>   Key West, FL		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
a. Ricondo is assisting the Monroe County with the development of an update to the Key West International Airport Master Plan. This project will address a number of key issues including runway length requirements, passenger terminal capacity, curbside and parking capacity, aircraft parking positions and apron capacity and configuration, runway and taxiway geometry, and future general aviation facility requirements. An ALP drawing set that depicts the full buildout of aviation- and non-aviation-related facilities associated with the preferred development will also be developed. Sebastian is Deputy Project Manager and is responsible for the accuracy of all technical analyses, as well as quality assurance. <b>Role:</b> Deputy Project Manager			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>General Consultant Services for Boca Raton Airport</b>   Boca Raton, FL		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
b. On-going tasks include the development of a wildlife hazard assessment and engineering design, bidding and award services for the construction of taxiway fillet widening at existing Connectors F and P4. Sebastian is responsible for the update of the CIP for the airport and associated federal grant requests. In 2015/2016, Sebastian oversaw the planning and design of EMAS that were installed at both ends of the runway. In 2012, he completed a runway safety area study including a review of existing and projected activity levels by aircraft type to confirm the airport designation/ARC, the identification of alternative airfield layouts that provided the basis for defining the practicability for adopting full ARC C-II compliance, cost estimates for developing the Airport in compliance with current FAA standards, and a runway safety area study to identify and assess feasible alternatives to mitigate existing deficiencies associated with the Runway 5-23 RSA. <b>Role:</b> Project Manager			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>General Consultant Services for the Greater Orlando Aviation Authority</b>   Orlando, FL		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
c. As part of this contract, Sebastian is responsible for various planning assignments including airfield planning, passenger terminal simulation modeling, curbside analysis, airspace analyses, etc. Sebastian is currently overseeing the airfield planning and the analysis of terminal processor requirements associated with the South Terminal Complex Phase 2. Other ongoing assignments include the development of alternatives for the expansion of the west security screening checkpoint, an analysis of future aircraft gate requirements, and the development of strategies to accommodate existing and future airlines at the existing airdises. Sebastian serves as the Project Manager for Ricondo. He defines the most appropriate approach for each planning task, actively participates in technical workshops, and lead the overall quality assurance program on behalf of the Team. <b>Role:</b> Project Manager			
(1) TITLE AND LOCATION (CITY AND STATE)		(2) YEAR COMPLETED	
<b>Fort Lauderdale Executive Airport Master Plan Update</b>   Fort Lauderdale, FL		PROFESSIONAL SERVICES <b>On-going</b>	CONSTRUCTION (IF APPLICABLE) <b>N/A</b>
(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
d. Ricondo is assisting the City of Fort Lauderdale with the development of an update to the Fort Lauderdale Executive Airport Master Plan. Key objectives that were addressed as part of this project included the update of the airport base mapping, the identification of options to capitalize on the city's real estate holdings, the evaluation of airfield taxiway geometry, and the incorporation of previously completed study. Sebastian serves as the project manager for this project. <b>Role:</b> Project Manager			

# 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	
		A. TOTAL	B. WITH CURRENT FIRM
<b>Maurene Balmaseda</b>	<b>Public Involvement</b>	<b>5 years</b>	<b>5 years</b>

15. FIRM NAME AND LOCATION (CITY AND STATE) <b>HDR Engineering, Inc., Fort Lauderdale, FL</b>
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16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Environmental Studies, Florida State University, 2011	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
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18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)
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## 19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)
a.	<b>FLL Southwest Airlines Terminal One Modernization</b>   Fort Lauderdale, FL	<b>10/2016</b>	<b>10/2017</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Planning and design to replace and expand the current apron area to accommodate the new International Concourse A. Performed all airfield pavement design utilizing the FAA FAARFIELD design software. Provided detailed Construction Safety and Phasing Plan which allowed all construction activities to be completed while maintaining operations to the existing Terminal and Concourse. Also performed apron planning and gate layout design, planning and design for the expansion of the existing Ground Transportation areas (GTA) and Curbside areas; design and permitting of utilities; and design and permitting of a stormwater management system in coordination with the airport's Master Model to modify existing SFWMD ERP. <b>Role:</b> Planner		
b.	<b>Let's Talk Transportation Public Outreach, Speak Up Broward Phase 2, Broward MPO</b>   Broward County, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM he Speak Up Broward Phase 2 project consists of two main tasks, which is the development of a Local Transportation Funding plan and General MPO Awareness. The Local Transportation Funding Plan will consist of education efforts to inform the public about local transportation funding plans that may be advanced by Broward County or the municipalities. As part of this outreach, we will develop infographics to simply convey complex issues, conduct multimedia Town Hall events, coordinate a Speakers Bureau, and conduct other engagement activities. We are also assisting in the development of PublicPrivate Partnership (P3) strategies by working with the MPO and its stakeholders to provide fact sheets and guiding principles. <b>Role:</b> Planner / Public Involvement		
c.	<b>Wave Streetcar Program Management Consultant (PMC)</b>   Fort Lauderdale, FL	<b>2/2021 (Anticipated)</b>	<b>2/2021 (Anticipated)</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM HDR is leading the project management team that is overseeing the design, construction and implementation of the Wave Streetcar. The PMC responsibilities includes full-service project management, public involvement, preliminary engineering, procurement support, and plan reviews. Additionally duties include supporting FTA coordination, Wave partner communications, public outreach, FTA project reporting, and vehicle procurement. We lead the program management effort with the goal of commencing streetcar revenue service in February 2021. <b>Role:</b> Public Involvement		
d.	<b>I-95 Express Phase 3 Corridor Design Consultant, FDOT District 4</b>   Broward & Palm Beach Counties, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM The I-95 Express Phase 3 project involves implementation of an HOV to HOT conversion for I-95 in southeast Florida from southern Broward County (Stirling Road) to southern Palm Beach County (Linton Blvd). Maurene's responsibilities has been to serve as an extension of Florida Department of Transportation staff to collect multi-modal data at Broward Park & Ride lot, prepare final project definition, NEPA reevaluations, Project Schedules, Risk Analysis, and Public Involvement for the 30+ mile corridor. <b>Role:</b> Planner / Public Involvement		
e.	<b>SR 924 / Gratigny Parkway PD&amp;E Study, Miami-Dade Expressway Authority</b>   Miami-Dade County, FL	<b>On-going</b>	<b>N/A</b>
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM Maurene supported the Project Development and Environment (PD&E) Study on the extension of the Gratigny Parkway east from NW 37th Avenue to I-95. The Study will be led by HDR and worked through the FDOT Project Development Process, including ultimate approval by the Federal Highway Administration. Services include execution of a Public Involvement Program, analyze and select a final project alignment and alternative, and prepare a Categorical Exclusion Type II (Federal NEPA Process). Improvements under evaluation include a 2.5 mile 4-lane bridge viaduct serving as the limited access expressway. The viaduct would be constructed over and within the median of an existing 6-lane urban arterial (converted to a 4-lane arterial with the proposed improvements). Additional alternatives under evaluation include a full system to system interchange at the I-95 location, with connections under consideration to either the I-95 Express (Managed Lanes) or the I-95 General Purpose Lanes. Intermodal transit improvements are also being considered, including interface and coordination with the Miami-Dade Transit Orange Line Metrorail extension, park and ride lots, transit stations, etc. <b>Role:</b> Planner / Public Involvement		



<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <small>(PRESENT AS MANY PROJECTS AS REQUESTED BY THE AGENCY, OR 10 PROJECTS, IF NOT SPECIFIED. COMPLETE ONE SECTION F FOR EACH PROJECT.)</small>		<b>20. EXAMPLE PROJECT KEY NUMBER</b> <b>1</b>					
<b>21. TITLE AND LOCATION (CITY AND STATE)</b> <b>General Engineering Aviation Consultant   Fort Lauderdale, FL</b>		<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (IF APPLICABLE)</td> </tr> <tr> <td><b>8/2018</b></td> <td><b>8/2018</b></td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)	<b>8/2018</b>	<b>8/2018</b>
PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)						
<b>8/2018</b>	<b>8/2018</b>						
<b>23. PROJECT OWNER'S INFORMATION</b>							
<b>A. PROJECT OWNER</b> City of Fort Lauderdale		<b>B. POINT OF CONTACT NAME</b> Fernando Blanco					
		<b>C. POINT OF CONTACT TELEPHONE NUMBER</b> (954) 828-6536					
<b>24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)</b>							



**Intuitive Client Service**

Weekly task order status summary provided to client includes updated schedules, project issues, and pending actions required of the client and our team.

**Innovative Approach**

We developed a conceptual design for the AES facility expansion utilizing the latest maintenance systems while keeping the signature architectural style intact. In doing so, we accounted for the planned development of adjacent sites to enable future projects and save the City money.

HDR is providing general consulting services to support the Fort Lauderdale Executive Airport's (FXE) development programs via a four year on call contract. HDR has worked closely with the airport engineer and management to deliver nearly 30 task orders while coordinating a team of eight specialty subconsultant teammates.

Highlighted tasks include:

**Taxiway Intersection Improvements:** HDR was tasked with the evaluation and development of plans and contract specifications for modifications to the taxiway airfield geometry at Fort Lauderdale Executive Airport (FXE). These modifications will improve the level of safety at specific locations of work on the airfield in accordance with Federal Aviation Administration Advisory Circular (FAA A/C) 150/5300-13A. The area of work includes the modification to the intersection of Taxiway November, Taxiway Golf and Taxiway Echo - a five node intersection. In adherence to FAA's three-node concept, which will keep taxiway intersections simple by reducing the number of taxiways intersecting at a single location and allows for proper placement of airfield markings, signage and lighting, this modification brings the five node intersection into compliance with the three-node concept. These modifications includes the removal of existing airfield pavement, airfield geometry correction, and airfield lighting, signage, and striping installation.

**Aviation Equipment Service (AES) Building Equipment:** We prepared design concepts for expansion of the facility and the adjacent hardstand apron. HDR's local aviation group teamed up with the Maintenance Design Group (MDG) an independent studio of architects, engineers, and mechanical systems experts within HDR who specialize in transportation support facilities. We worked with Airport leadership, operations, and maintenance staff to develop design alternatives to satisfy the need for additional storage capacity, expanded airside apron, loft space, storage racks, expanded office space, security offices, additional bays, emergency bunk room / flex space for staff, and covered pedestrian walkway between the administration and AES buildings. Once the preferred concept was chosen, HDR developed concept plans, including 3D digital renderings of the exterior and interior expansions. HDR obtained all required entitlements, including stormwater permitting, building permits, concurrency applications, and site plan approval.

Additional tasks have included the following:

- Remote Parking Lot Design
  - Airfield Lighting Rehabilitation
  - FXE West Perimeter Loop Road
  - Airfield Electrical Vault Improvements
  - Downtown Heli-stop Improvements
  - Tenant Shared Cost Analysis
  - Gopher Tortoise Relocation
  - Runway Incursion Mitigation Program
  - Airfield Pavement Safety Modifications
  - Runways 9/27 and 13/31 Pavement Rehabilitation
  - DBE Program Goal Update
  - Airport Administration Building Renovation
  - Taxiway F Western Electrical Rehabilitation Design
  - Tenant Shared Cost Analysis
  - Runway PCN Reporting to FAA
  - Taxiway Sierra Rehabilitation

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. HDR Engineering, Inc.	Fort Lauderdale, FL	Prime consultant: Various
b. Hillers Electrical Engineering, Inc.	Boca Raton, FL	Airfield electrical
c. Chen Moore and Associates, Inc.	Fort Lauderdale, FL	Stormwater design
d. Keith & Associates, Inc.	Pompano Beach, FL	Survey & Mapping / SUE
e. Avcon, Inc.	Orlando, FL	Airfield Lighting & Signage
f. Cherokee Enterprises, Inc.	Miami Lakes, FL	Environmental
g. Tierra South Florida, Inc.	West Palm Beach, FL	Geotechnical and Materials Testing

**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.)

20. EXAMPLE PROJECT KEY NUMBER

**2**

21. TITLE AND LOCATION (CITY AND STATE)

**General Engineering Consultant** | Broward County, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES

**03/2017**

CONSTRUCTION (IF APPLICABLE)

**12/2018 (Anticipated)**

**23. PROJECT OWNER'S INFORMATION**

A. PROJECT OWNER

Broward County Aviation Department

B. POINT OF CONTACT NAME

Marc Gambrill

C. POINT OF CONTACT TELEPHONE NUMBER

(954) 359-2343

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)



HDR was one of three teams providing general engineering services to support BCAD's current development programs via a five-year, \$9.3 million task order contract. We led a team of seven specialty subconsultants providing a wide variety of services primarily at FLL. The range of projects includes airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; and airport capital project support.

Our team was assigned over 45 task orders. These projects have been diverse in scope and size, and have included both programming and design on both the airside and landside. HDR has worked closely with the FAA and the numerous state and local regulatory agencies having jurisdiction over the BCAD facilities.

**Task orders completed under this contract have included the following:**

- Specific Purpose Surveys of Runways at FLL & NPA
- FLL Terminal 4 Apron Civil Works
- FLL Pedestrian Bridge Rehabilitation
- Airport Pavement Management System Implementation
- Parcel Map for Eastside FLL
- National Car Rental Facility Site Remediation
- US 1 & Taylor Road Parcel Map Survey
- FLL Runway Inspections
- FLL Budget Taylor Road Fuel Contamination Site Assessment
- HWO Runway Rehabilitation
- Survey FAR Part 77 for 10L/28R and 9L/27R
- FLL Phase I/II Environmental Site Assessments (ESA) for the Expanded South Runway
- Elevated Guard Lights (Wig Wags) and Elevated Signs at HWO
- FLL CCTV System
- Taxiway C Pavement Evaluation
- FLL Curbside Canopy & Soffit Replacement
- FLL Terminal 3 Paralleling Switchgear Replacement
- FLL Sheltair Westside Lease Hold Survey
- FLL National Car Rental Fuel Contaminated Site Remediation
- Westside Maintenance Facility
- Fuel Farm & Gate 100/101

**WORK ELEMENTS IN YOUR PROGRAM**

- Program administration and management
- Aviation design development
- Engineering design
- Surveying
- Vertical facility design
- Environmental / EIS / ESAs / Remediation
- Structural
- Mechanical
- Electrical
- Geotechnical testing & analysis
- Architecture
- Construction management / inspection
- Bidding
- Cost estimating and scheduling
- Grant and DBE support
- Site plan review and analysis
- Land-use / zoning review
- Structures evaluation
- TERPs
- FAR Part 77 evaluation

**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. HDR Engineering, Inc.	Fort Lauderdale, FL	Prime consultant: Various
b. Chen Moore and Associates, Inc.	Fort Lauderdale, FL	Stormwater design and permitting
c. Hillers Electrical Engineering, Inc.	Boca Raton, FL	Airfield electrical
d. Keith & Associates, Inc.	Pompano Beach, FL	Survey & Mapping / SUE
e. Tierra South Florida, Inc.	West Palm Beach, FL	Geotechnical & Materials Testing
f. Cherokee Enterprises, Inc.	Miami Lakes, FL	Environmental



<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <small>(PRESENT AS MANY PROJECTS AS REQUESTED BY THE AGENCY, OR 10 PROJECTS, IF NOT SPECIFIED, COMPLETE ONE SECTION F FOR EACH PROJECT.)</small>		<b>20. EXAMPLE PROJECT KEY NUMBER</b> <div>3</div>
<b>21. TITLE AND LOCATION (CITY AND STATE)</b> <b>FXE Master Plan Update</b>   Fort Lauderdale, FL		<b>22. YEAR COMPLETED</b> PROFESSIONAL SERVICES: <b>On-going</b> CONSTRUCTION (IF APPLICABLE): <b>N/A</b>
<b>23. PROJECT OWNER'S INFORMATION</b>		
<b>A. PROJECT OWNER</b> City of Fort Lauderdale	<b>B. POINT OF CONTACT NAME</b> Fernando Blanco	<b>C. POINT OF CONTACT TELEPHONE NUMBER</b> (954) 828-6536
<b>24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)</b>		



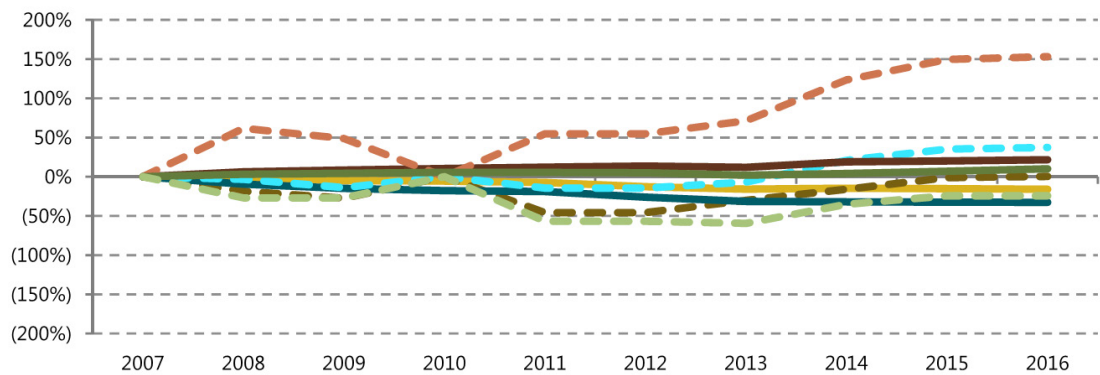
HDR and Ricondo are serving the City of Fort Lauderdale in updating the FXE Master Plan. The update is needed to reflect new facilities, reassess future projections of airport activity, address new environmental and other regulatory constraints, and plan for an appropriate mix of land uses to support projected aviation and non-aviation needs. The Master Plan Update will outline a plan for the provision of future facilities to accommodate the projected demand. This plan will insure that short-term actions and recommendations do not preclude long-range planning options and provide a financially sound implementation plan for short, intermediate, and long-term improvements.

Ricondo serves as the prime consultant, updating the airport base map, developing options for capitalizing the City's real estate holdings, integrating the master plan with off-airport land uses, evaluating airfield taxiway geometry, engaging stakeholders, performing activity forecasts, running the Technical Advisory Group, environmental overviews, sustainability initiatives, and financial analysis.

HDR is responsible for providing an inventory of existing conditions, demand/capacity and facility requirements, alternative analysis and recommended development concepts and developing an implementation plan.

WORK ELEMENTS IN YOUR PROGRAM

- Program administration and management
- Aviation design development
- Engineering design
- Surveying
- Cost estimating and scheduling
- Site plan review and analysis
- Land-use / zoning review
- Structures evaluation
- TERPs
- FAR Part 77 evaluation



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. Ricondo and Associates, Inc.	Miami, FL	Prime Consultant: Various
b. HDR Engineering, Inc.	Fort Lauderdale, FL	Site assessment, engineering design, cost estimating and scheduling, site plan review, structures evaluation

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <small>(PRESENT AS MANY PROJECTS AS REQUESTED BY THE AGENCY, OR 10 PROJECTS, IF NOT SPECIFIED. COMPLETE ONE SECTION F FOR EACH PROJECT.)</small>		<b>20. EXAMPLE PROJECT KEY NUMBER</b> <div>4</div>				
<b>21. TITLE AND LOCATION (CITY AND STATE)</b> <b>GOAA Continuing Civil Engineering Services   Orlando, FL</b>		<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (IF APPLICABLE)</td> </tr> <tr> <td><b>On-going</b></td> <td><b>N/A</b></td> </tr> </table>	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)	<b>On-going</b>	<b>N/A</b>
PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)					
<b>On-going</b>	<b>N/A</b>					

<b>23. PROJECT OWNER'S INFORMATION</b>		
<b>A. PROJECT OWNER</b> Greater Orlando Aviation Authority	<b>B. POINT OF CONTACT NAME</b> Mark Birkebak, AIA	<b>C. POINT OF CONTACT TELEPHONE NUMBER</b> (407) 825-4058

<b>24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)</b>	
	<div> <b>WORK ELEMENTS IN YOUR PROGRAM</b> <ul style="list-style-type: none"> <li>• Program administration and management</li> <li>• Aviation design development</li> <li>• Engineering design</li> <li>• Surveying</li> <li>• Vertical facility design</li> <li>• Civil</li> <li>• Electrical</li> <li>• Geotechnical testing &amp; analysis</li> <li>• Architecture</li> <li>• Construction management / inspection</li> <li>• Bidding</li> <li>• Cost estimating and scheduling</li> <li>• Site plan review and analysis</li> <li>• Land-use / zoning review</li> <li>• Structures evaluation</li> <li>• TERPs</li> <li>• FAR Part 77 evaluation</li> </ul> </div>

AVCON has served as a Prime Consultant and Subconsultant to the Greater Orlando Aviation Authority since 1988. Over the past 30 years AVCON has completed over 450 projects for the Authority. Some of the projects completed under this Continuing Civil Engineering Services contract have included:

**Vehicle Checkpoint CCTV Additions – MCO (2014-2015):** This project included installation of new CCTV security cameras at Vehicle Checkpoint Charley (E-50). Additionally, new CCTV security cameras were provided and installed at Vehicle Ch eckpoint Bravo (E-31) and at Guard Post 1 (E-31). This project also comprised installation of Local Area Network (LAN) switches and video data storage arrays for data retention for up to 30-days.

**Repair and Paint Enplane Road Steel – MCO (2013-2017):** The project consisted of structural repairs and repainting of the tension fabric structural steel members of the Terminal-Level 3, A-Side Enplane Drive canopies.

**Taxiway E and Related Work – ORL (2013-2016):** The objective of the project was to extend the useful life of the airfield pavements, enhance deficient pavement geometry and preserve the safety of air operations at ORL. Additionally, the airfield lighting, marking and signage was replaced or upgraded as needed. The scope also included evaluating and upgrading existing drainage within the project limits and improving existing taxiway lighting, marking and signage systems to comply with current FAA standards.


**Airfield Lighting System, Markings, Signage and Other Airport Equipment Assessment – ORL (2015-2016):** AVCON completed an Airport-wide lighting system, marking, signage, and other Airport equipment assessment, including a condition assessment of the electrical vault at Orlando Executive Airport as a follow-up to a similar facility assessment performed in 2002. The project included completion of an operational and code assessment of the airfield lighting vault; visual review of the existing airfield lighting, guidance signs and other NAVAID systems; East Ramp concept high mast lighting; evaluation of the existing Closed Circuit Television (CCTV) Security Cameras; evaluation of the enhanced airfield markings, raised pavement markers (RPMs), and rubber removal at designated locations on the airfield; and development of a CIP Implementation Plan (2015-2026) to complete the recommended options.

**GSE Inventory and Management Plan – MCO (2013):** The objective of the assignment was to assist the Authority in developing policies and procedures for GSE parking, storage, and inventory. Ultimately, the goal was for the Authority to develop a Ramp Management Plan which delineates space and lease costs for GSE parking and storage areas within the leased gate or surrounding areas. AVCON identified an equitable allocation of available space for each of the GSE parking and storage areas on all of the airsides and within any excess GSE storage areas. AVCON also researched other airports' best practices for policies and procedures for GSE parking and storage, as well as suggested lease rates for the parking of GSE at MCO. Finally, AVCON made recommendations regarding best practices for the registration, inspection, equipment monitoring, and enforcement of GSE parking and storage.

**North Loop Fiber Optic Duct Bank – MCO (2015-2017):** The project consisted of design and construction of the Fiber Optic Duct Bank and associated infrastructure. BP-461 starts from the general vicinity of Security Gate E-31, north along the AOA Secure Service Road, west across the northwest airfield inside the AOA Security Fence parallel to Bear Road, exiting the AOA near Gate E-10, and terminating at a Manhole at the intersection of Bear Road and Tradeport Drive.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. AVCON, Inc.	Orlando, FL	Prime consultant: Various
b. HDR Engineering, Inc.	Fort Lauderdale, FL and Orlando, FL	Traffic, Civil, Fuel
c.		

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <small>(PRESENT AS MANY PROJECTS AS REQUESTED BY THE AGENCY, OR 10 PROJECTS, IF NOT SPECIFIED. COMPLETE ONE SECTION F FOR EACH PROJECT.)</small>		<b>20. EXAMPLE PROJECT KEY NUMBER</b> <div style="text-align: center; font-size: 1.2em;">5</div>	
<b>21. TITLE AND LOCATION (CITY AND STATE)</b> <b>General Consultant Services for Boca Raton Airport</b>   Boca Raton, FL		<b>22. YEAR COMPLETED</b> PROFESSIONAL SERVICES: <b>On-going</b> CONSTRUCTION (IF APPLICABLE): <b>N/A</b>	
<b>23. PROJECT OWNER'S INFORMATION</b>			
<b>A. PROJECT OWNER</b> Boca Raton Airport Authority and State of Florida		<b>B. POINT OF CONTACT NAME</b> Clara Bennett	
		<b>C. POINT OF CONTACT TELEPHONE NUMBER</b> (561) 391-2202	
<b>24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)</b>			



WORK ELEMENTS IN YOUR PROGRAM

- Program administration and management
- Aviation design development
- Engineering design
- Vertical facility design
- Environmental / EIS / ESAs / Remediation
- Structural
- Mechanical
- Electrical
- Geotechnical testing & analysis
- Architecture
- Construction management / inspection
- Cost estimating and scheduling
- Site plan review and analysis
- Land-use / zoning review
- Structures evaluation
- TERPs
- FAR Part 77 evaluation

In 2000, Ricondo & Associates, Inc. (Ricondo) and a Team of subconsultants were selected to serve as the on-call general consultant for the Boca Raton Airport Authority, operator of Boca Raton Airport. As the prime consultant, Ricondo's role was to update the airport master plan and manage all design services for improvements to this corporate/general aviation airport. Specialty subconsultants selected as part of the Ricondo Team for this project provided the required design services.

Initially, Ricondo updated the airport master plan and Airport Layout Plan (ALP) in 2002. As part of this update, a variety of airfield capacity enhancements and facility development needs were identified. Site planning and programming services for dedicated Airport administrative office buildings and maintenance facilities were also provided. A detailed runway safety area assessment was conducted, including an evaluation of aircraft performance to determine operational effects associated with declared distances. The ALP update formed the basis for the Airport's 5-year capital improvement program, which Ricondo formulated with the Authority. The ALP Update included the preparation of an Exhibit A – Property Map set, the first ever prepared for the Boca Raton Airport.

Ricondo also managed the various design services undertaken by the Ricondo Team. These design services related to an airfield perimeter service road, airfield lighting improvements, a comprehensive upgrade to the airport's perimeter access and security systems, and replacement of the runway approach lighting systems. The Ricondo Team has also been supporting the Authority with the implementation of the noise abatement and mitigation measures approved under the 14 CFR Part 150 Study. These measures have included the procurement and installation of a federally-funded Noise Monitoring and Flight Tracking System, and the formulation of a residential sound insulation program that is presently ongoing.

In 2006 and again in 2011, Ricondo was reselected for the General Consulting Services Contract (the current contract expires in 2016). As part of Ricondo's work program under these new contracts, a large Airfield Improvement Program was programmed, designed, and successful constructed (within schedule and under budget). The Program, totaling \$5.5 million in construction included a complete mill and overlay of the Airport's single runway, Runway 5-23 (6,276 feet long by 150 feet wide), and parallel taxiway (Taxiway P). The Program also included the widening of the runway hold pads and blast pads, the construction of a new midfield runway-taxiway connector, a new access controlled airfield security gate, and new runway end identified lights.

The most recent work program implemented by Ricondo includes another update to the Airport Layout Plan and 10-year Capital Improvement Program as well as design services for the installation of a jet blast deflector wall, a replacement AWOS system, and a new Airport Administration Building.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. Ricondo and Associates, Inc.	Miami, FL	Prime Consultant: Various
b. Hillers Electrical Engineering, Inc.	Boca Raton, FL	Electrical Engineering
c.		
d.		



**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.)

20. EXAMPLE PROJECT KEY NUMBER

6

21. TITLE AND LOCATION (CITY AND STATE)

**Airfield Design Improvements & Rehabilitation Program | Palm Beach County, FL**

22. YEAR COMPLETED

PROFESSIONAL SERVICES

**6/2018 (Anticipated)**

CONSTRUCTION (IF APPLICABLE)

**6/2019 (Anticipated)**

**23. PROJECT OWNER'S INFORMATION**

A. PROJECT OWNER

Palm Beach County Department of Airports

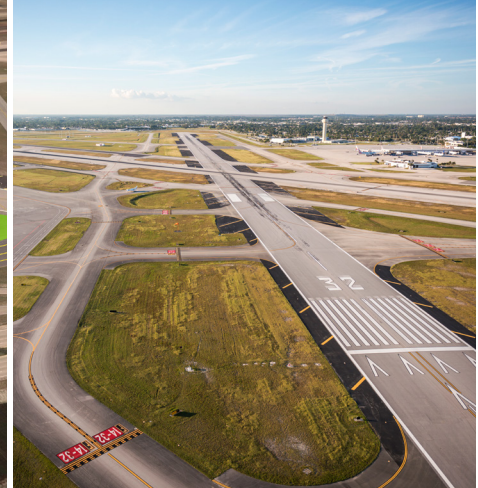
B. POINT OF CONTACT NAME

Gary Sypek

C. POINT OF CONTACT TELEPHONE NUMBER

(561) 471-7474

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)



At Palm Beach International Airport (PBI), minimizing impacts during construction is vital to airfield operations. HDR is providing professional design services for the rehabilitation of the taxiway network serving Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater facilities, permitting, and upgrades to NAVAIDs.

Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration. For this project, we've incorporated advanced aircraft movement modeling into the geometric design and phasing, which considered the mobility of the specialized military aircraft using the PBI airfield under power and under tow. This advanced movement modeling supports the project's Construction Phasing and Safety Plan, and will minimize the project's impact on an airfield with three other concurrent construction projects. HDR then incorporated the movement modeling results into a 3D animation for use by airport operations staff in their stakeholder review with the aircraft operators and the air traffic control tower.

**WORK ELEMENTS IN YOUR PROGRAM**

- Program administration and management
- Aviation design development
- Engineering design
- Surveying
- Environmental
- Structural
- Electrical
- Geotechnical testing & analysis
- Construction management / inspection
- Bidding
- Cost estimating and scheduling
- Grant and DBE support
- Structures evaluation
- TERPs
- FAR Part 77 evaluation

**Intuitive Client Service**

- B747-200 routing animations to help the DOA explain new taxi procedures to aircraft operators and Air Traffic Control
- Three factor weighted project elements analysis to assist the DOA in ranking project phases for funding purposes.

**Innovative Approach**

- Civilian and military aircraft movement modeling integration with BIM design environment

**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. HDR Engineering, Inc.	West Palm Beach and Fort Lauderdale, FL	Prime Consultant: Various
b. Chen Moore and Associates, Inc.	Fort Lauderdale, FL	Stormwater
c. Hillers Electrical Engineering, Inc.	Boca Raton, FL	Electrical Engineering
d. Tierra South Florida, Inc.	West Palm Beach, FL	Geotechnical and materials testing

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <small>(PRESENT AS MANY PROJECTS AS REQUESTED BY THE AGENCY, OR 10 PROJECTS, IF NOT SPECIFIED, COMPLETE ONE SECTION F FOR EACH PROJECT.)</small>		<b>20. EXAMPLE PROJECT KEY NUMBER</b> <div>7</div>				
<b>21. TITLE AND LOCATION (CITY AND STATE)</b> <b>FLL Terminal 4 Apron Civil Works</b>   Fort Lauderdale, FL		<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (IF APPLICABLE)</td> </tr> <tr> <td>9/2013</td> <td>10/2018 (Anticipated)</td> </tr> </table>	PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)	9/2013	10/2018 (Anticipated)
PROFESSIONAL SERVICES	CONSTRUCTION (IF APPLICABLE)					
9/2013	10/2018 (Anticipated)					
<b>23. PROJECT OWNER'S INFORMATION</b>						
<b>A. PROJECT OWNER</b> Broward County Aviation Department	<b>B. POINT OF CONTACT NAME</b> Marcos Souza	<b>C. POINT OF CONTACT TELEPHONE NUMBER</b> (954) 359-2468				
<b>24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)</b>						



The Terminal 4 (T-4) Apron Civil Works project is part of the overall Airport Expansion Program (AEP) currently underway at the Fort Lauderdale-Hollywood International Airport. This project will modify the existing airport terminal utility infrastructure and required to facilitate the Terminal 4 Gate Replacement Project. The project will require the rehabilitation of existing Taxiway Tango and the existing Terminal 4 Apron. The project will also expand the current apron area to the east allowing for additional gates and Remain Over Night (RON) parking. HDR performed the design of all airfield pavements utilizing the FAA FAARFIELD design software.

All proposed work will be completed while maintaining operations to the existing Terminal and Concourse. This required HDR to develop a detailed Construction Safety and Phasing Plan for submittal to and approval by the FAA and effected airlines. HDR also utilized 4D Visualization to provide a real life look at the project impacts and as a tool to refine the overall construction phasing plans with all affected stake holders.

HDR provided preliminary engineering and final design services and is currently developing construction bid documents for the project. In addition, HDR is providing planning and design services for environmental restoration of contaminated sites in Project construction footprint. HDR was responsible for the design of the stormwater management system and obtaining both and Environmental Resource and Water Use Permit through the South Florida Water Management District. In addition, HDR is overseeing multiple subconsultants who are performing specialized services such as environmental restoration, environmental assessments, airfield electrical design and enhanced airport/airfield security.

PROJECT DETAILS

Design: 11/2010-9/2013

Construction: 11/2013-10/2018 (Anticipated)

Contract Value: \$6M

Construction Value: \$55M



WORK ELEMENTS IN YOUR PROGRAM

- Program administration and management
- Aviation design development
- Engineering design
- Surveying
- Vertical facility design
- Environmental / EIS / ESAs / Remediation
- Structural
- Mechanical
- Electrical
- Geotechnical testing & analysis
- Construction management / inspection
- Bidding
- Cost estimating and scheduling
- Grant and DBE support
- Structures evaluation
- TERPs
- FAR Part 77 evaluation

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. HDR Engineering, Inc.	Fort Lauderdale, FL	Prime Consultant: Various
b. Hillers Electrical Engineering, Inc.	Boca Raton, FL	Electrical Engineering
c. Chen Moore and Associates, Inc.	Fort Lauderdale, FL	Stormwater
d. Cherokee Enterprises, Inc.	Miami Lakes, FL	Environmental
e. Tierra South Florida, Inc.	West Palm Beach, FL	Geotechnical & materials testing
f. Keith and Associates, Inc.	Pompano Beach, FL	Survey and construction management

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <small>(PRESENT AS MANY PROJECTS AS REQUESTED BY THE AGENCY, OR 10 PROJECTS, IF NOT SPECIFIED. COMPLETE ONE SECTION F FOR EACH PROJECT.)</small>		<b>20. EXAMPLE PROJECT KEY NUMBER</b> <div>8</div>		
<b>21. TITLE AND LOCATION (CITY AND STATE)</b> <b>FLL Southwest Airlines Terminal One Modernization   Fort Lauderdale, FL</b>		<b>22. YEAR COMPLETED</b> <table border="1"> <tr> <td>PROFESSIONAL SERVICES <b>10/2016</b></td> <td>CONSTRUCTION (IF APPLICABLE) <b>10/2017</b></td> </tr> </table>	PROFESSIONAL SERVICES <b>10/2016</b>	CONSTRUCTION (IF APPLICABLE) <b>10/2017</b>
PROFESSIONAL SERVICES <b>10/2016</b>	CONSTRUCTION (IF APPLICABLE) <b>10/2017</b>			

<b>23. PROJECT OWNER'S INFORMATION</b>		
<b>A. PROJECT OWNER</b> Broward County Aviation Department	<b>B. POINT OF CONTACT NAME</b> Richard Welch	<b>C. POINT OF CONTACT TELEPHONE NUMBER</b> (954) 359-2317

<b>24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)</b>	
	

The Southwest Airlines Fort Lauderdale Terminal One Modernization Program (FLMP) includes the design and construction of a Concourse A facility consisting of five international “swing” gates, an apron facility, concessions and a Federal Inspection Services (FIS) area along with improvements to the existing Terminal facility.

HDR provided planning and design services to replace the current single taxilane condition with dual airplane design group III (ADG III) taxilanes to meet operational requirements with the addition of Concourse A.

All work was completed while maintaining operations to the existing terminal and concourse. This required HDR to develop a detailed Construction Safety and Phasing Plan for submittal to and approval by the FAA and affected airlines.

This project will also modify the existing airport terminal utility infrastructure as required to facilitate the FLMP. HDR was responsible for the design of the stormwater management system and obtaining both an Environmental Resource and Water Use Permits through the South Florida Water Management District. HDR also obtained all required permits for the proposed potable water and sanitary sewer system improvements through local, county and state agencies.

PROJECT DETAILS

Design: 8/2014-10/2016

Construction: 3/2015- 10/2017

Contract Value: \$3M

Construction Value: \$12M

WORK ELEMENTS IN YOUR PROGRAM

- Program administration and management
- Aviation design development
- Engineering design
- Surveying
- Vertical facility design
- Environmental / EIS / ESAs / Remediation
- Structural
- Mechanical
- Electrical
- Geotechnical testing & analysis
- Architecture
- Construction management / inspection
- Bidding
- Cost estimating and scheduling
- Grant and DBE support
- Site plan review and analysis
- Land-use / zoning review
- Structures evaluation
- TERPs
- FAR Part 77 evaluation

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. HDR Engineering, Inc.	Fort Lauderdale, FL	Airfield design, stormwater management, construction administration
b. Keith and Associates, Inc.	Pompano Beach, FL	Survey & Mapping
c. Cherokee Enterprises, Inc.	Miami Lakes, FL	Environmental
d. Tierra South Florida, Inc.	West Palm Beach, FL	Geotechnical & materials testing



**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.)

20. EXAMPLE PROJECT KEY NUMBER

9

21. TITLE AND LOCATION (CITY AND STATE)

**Blue Grass Airport Runway 4-22 Rehabilitation and RSA Determination** | Lexington, KY

22. YEAR COMPLETED

PROFESSIONAL SERVICES

**12/2018 (Anticipated)**

CONSTRUCTION (IF APPLICABLE)

**12/2020 (Anticipated)**

23. PROJECT OWNER'S INFORMATION

A. PROJECT OWNER

Blue Grass Airport

B. POINT OF CONTACT NAME

Mark Day

C. POINT OF CONTACT TELEPHONE NUMBER

(859) 425-3100

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)



At Blue Grass Airport in Lexington, Kentucky, minimizing impact is critical because its operations rely on the 7,000-foot runway being rehabilitated, which is the only commercial-service runway in Lexington. The airport serves Delta, American and Allegiant airlines in a city of more than 300,000. HDR was selected to provide professional planning and design services for the rehabilitation of the sole commercial Runway 4-22 and Engineered Materials Arresting System (EMAS) at Blue Grass Airport.

We performed a pavement investigation, alternatives analysis, and runway safety area determination. We also assisted in procuring EMAS in accordance with FAA PGL 15-2, developed contract documents, and provided bid assistance.

This project also included the rehabilitation of the a large segment of parallel Taxiway A. HDR worked closely with the Airport and the FAA ADO to analyze tower visibility, airspace penetrations, and impacts to NAVAIDs caused by construction. We utilized 3D modeling of the construction phasing to minimize impacts to the Airport's commercial service while optimizing the contractor's available work area.

**PROJECT DETAILS**

**Design:** 10/2017-12/2018 (Anticipated)

**Construction:** 3/2019-12/2019 (Anticipated)

**Contract Value:** \$800k

**Construction Value:** \$75M

**WORK ELEMENTS IN YOUR PROGRAM**

- Program administration and management
- Aviation design development
- Engineering design
- Surveying
- Environmental / EIS / ESAs / Remediation
- Structural
- Electrical
- Geotechnical testing & analysis
- Construction management / inspection
- Bidding
- Cost estimating and scheduling
- Grant and DBE support
- Site plan review and analysis
- Land-use / zoning review
- TERPs
- FAR Part 77 evaluation

**25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT**

(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. HDR Engineering, Inc.	Lexington KY; Fort Lauderdale and West Palm Beach, FL	Prime Consultant: various
b. AVCON, Inc.	Charlotte, NC	Pavement rehabilitation, construction phasing
c.		
d.		

<b>F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</b> <small>(PRESENT AS MANY PROJECTS AS REQUESTED BY THE AGENCY, OR 10 PROJECTS, IF NOT SPECIFIED. COMPLETE ONE SECTION F FOR EACH PROJECT.)</small>		<b>20. EXAMPLE PROJECT KEY NUMBER</b> <b>10</b>
<b>21. TITLE AND LOCATION (CITY AND STATE)</b> <b>Andrews Air Force Base Taxiways Sierra and Whiskey   Joint Base Andrews, MD</b>		<b>22. YEAR COMPLETED</b> <b>Ongoing</b> <b>CONSTRUCTION (IF APPLICABLE)</b> <b>2020 (Anticipated)</b>
<b>23. PROJECT OWNER'S INFORMATION</b>		
<b>A. PROJECT OWNER</b> <b>United States Air Force</b>	<b>B. POINT OF CONTACT NAME</b> <b>Rick Wilson</b>	<b>C. POINT OF CONTACT TELEPHONE NUMBER</b> <b>(301) 981-7171</b>
<b>24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (INCLUDE SCOPE, SIZE, AND COST)</b>		



"HDR proceeded on the common thread of keeping the project moving forward, and constantly engaging with the Air Force personnel to get the critical information necessary to keep the project moving forward. In the end HDR provided a design product that met and exceeded the expectations of the Air Force."

-Jerry Gould, Contract Specialist  
Air Force 772 ESS PKD, April 23, 2015

HDR provided professional engineering services for the design for replacement of two taxiways at Joint Base Andrews (JBA), MD under a prime agreement with the Air Force Civil Engineering Support Agency (AFCEA). This project prepared two separate, stand alone construction packages for the replacement of Taxiway Sierra and Taxiway Whiskey. The purpose of this Task Order was to provide the government with a complete 100% design. We provided the design and developed separate contract documents for both taxiways in accordance with Air Force requirements for airfield pavement and lighting in addition to State of Maryland Department of Environment drainage, erosion control and wetland permitting requirements. Completed a topographical survey, geotechnical investigation, utility investigations and produced design drawings in AutoCAD and BIM.

HDR lead close coordination with the Base Chief and all divisions of the armed service. We utilized the latest in visualization technology which allowed these key stakeholders to see first hand our plan and to provide real time feedback. This allowed us to quickly move through the planning phase and into design and it continues to be used today as construction activities progress.

#### Taxiway Sierra

Taxiway Sierra is approximately 1,800 ft long by 75 ft wide, has approximately 10 inches thick Portland Cement Concrete (PCC) pavement and includes 25 ft wide asphalt (ACC) shoulders. It is being replaced with PCC pavement capable of supporting the Air Force's Modified Heavy Load aircraft traffic mix.

#### Taxiway Whiskey

Taxiway Whiskey is approximately 10,700 ft long by 75 ft wide, has approximately 19 inches thick PCC pavement and includes 50 ft wide ACC shoulders. This project replaces the existing pavement with pavement capable of supporting the Air Force's Modified Heavy Load aircraft traffic mix. This project also involved the replacement of portions of the West Apron that is connected to the taxiway.

**Unique Aircraft Design Criteria:** JBA anticipates newer and larger aircraft such as the Boeing 747-8I (wing span 225 ft) or the Airbus A-380 (wing span 262 ft) to traffic the taxiways in the future. The design accounts for the larger geometric requirements for those aircraft.

**Lighting:** The taxiways include new Taxiway Edge lights, Taxiway Centerline lights, and ILS hold location lighting for Runway 1R-19L on Taxiway Sierra. Due to the addition of new Taxiway Centerline lights, the project also includes a new east airfield electrical vault that will provide power to airfield lighting.

**Pavement:** Our paving experts worked with staff in the development and implementation of a pre-paving workshop, which was held prior to commencement of any construction activities. This allowed the Owner, Engineer, and Contractor to review the plans and specifications in detail, develop a thorough understanding of technical submittal requirements and discuss proposed construction means and methods.

**Storm Drainage:** We replaced storm drain lines within the project limits to reduce flooding problems and to meet United Facilities Criteria (UFC).

#### PROJECT DETAILS

**Design:** 10/2011-ongoing

**Construction:** 2020 (Anticipated)

**Contract Value:** \$2.8M

**Construction Value:** \$50M

#### WORK ELEMENTS IN YOUR PROGRAM

- Airfield design
- Surveying
- Technical reviews
- Environmental / EIS / ESAs / Remediation
- Structural
- Mechanical
- Electrical
- Geotechnical testing & analysis
- Construction management / inspection
- Bidding
- Cost estimating and scheduling
- Site plan review and analysis
- Land-use / zoning review
- Structures evaluation
- TERPs
- FAR Part 77 evaluation

#### 25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME	(2) FIRM LOCATION (CITY AND STATE)	(3) ROLE
a. HDR Engineering, Inc.	Newark, NJ; Fort Lauderdale, FL	Prime: various



**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
Joe Sawmiller, PE	Program Manager	x	x	x	x		x	x	x	x	
Cody Parham	Deputy Program Manager   Airside Task Leader	x	x	x	x		x	x	x	x	
Tim Fish, PE	Program Principal	x	x	x	x		x	x	x	x	x
Joe Grubbs, PE	Quality Manager	x					x		x	x	
Daniel Suarez, PE	Landside Task Leader	x							x		
Alan Temple, AIA	Architecture Task Leader		x								
Sherri Swanson, PWS	Environmental Task Leader	x	x	x			x	x			
John Neff, PE	Construction Task Leader	x	x				x	x	x		
Posh Supupramai, PE	Airside Pavement & Markings	x	x	x			x	x	x	x	
Russell Holliday, PE	Airside Pavement & Markings				x						
Brandon Hiers, PE	Airside Pavement & Markings				x						
James Kappes, PE	NAVAIDS / Airside Lighting & Signage	x	x			x	x	x			
Amy Champagne-Baker, PE	NAVAIDS / Airside Lighting & Signage   Electrical	x	x			x	x	x			
Ron Geiger, PE	Airside Stormwater Management		x								
James Kriss, PE	Airfield Operations   Site Plan Review & Analysis				x						
Dan Ford, PE	Roadway	x	x					x			
Daniel Checchia	Utilities & Infrastructure   Survey & Mapping / SUE		x					x			
Jason McClair, PE	Landside Stormwater Management	x	x				x	x			
Ian Denholm, PE	Landside Electrical	x	x						x	x	x
Sunshine Bullock, RLA	Landscape Architecture		x					x			
Brian McCabe, AIA	Architecture										
Zach Sachsenmaier, PE	MEP / Fire Protection										x
Eric Martin, PE	Structural	x							x		x
John Danielsen, PE	Structures Evaluation	x	x								
Tom Rieger, PE	Facilities Inspection	x									
Stephen Culbertson	Environmental Assessment   EIS			x							
Paula Sessions, PG	Environmental Assessment	x	x								
Brenda Clark, PE	Remediation		x	x				x	x		
Virginia Jackson, AAE	Environmental Impact Statement	x	x								
Danielle Goveia	Environmental Impact Statement		x					x			
Jennifer Smith, PE	Permitting	x	x				x	x			
Raheel Dossani, EI	Construction Management and Construction Administration   CEI and RPR	x	x	x			x	x	x	x	
Tony Sabbag, CGC	CEI and RPR		x					x			
Ryan Beckman, EI	CEI and RPR	x	x					x	x	x	
Morris Smith, Jr.	CEI and RPR							x			
Michael Schmedt, GISP	GIS		x								
Ryan Hanson, PE	BIM / Visualization						x			x	x
Francois Thomas, PE	Geotechnical and Threshold Inspections	x	x				x	x	x		
Lee Powers, PSM	Survey & Mapping / SUE							x			
Mike Digregorio, PE	Cost Estimating / Scheduling	x									
Matthew Ruffra	Financial Analysis			x							
Aubyn Bell, AICP	Grant / JACIP and DBE Support		x								
John Fallon, RCDD, OSP	Communications										
Bob Bosco	Security	x	x	x					x		
Tim Ward, PE	TERPs						x			x	
Mark Johnson, AICP	FAR Part 77 Evaluation			x		x					
Sebastien Carreau	Land-Use / Zoning Review			x	x	x					
Maurene Balmaseda	Public Involvement								x		

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	FXE General Engineering Aviation Consultant	6	PBI Airfield Design Improvements and Rehabilitation Program
2	BCAD General Engineering Consultant	7	FLL Terminal 4 Apron Civil Works
3	FXE Master Plan Update	8	FLL Southwest Airlines Terminal One Modernization
4	GOAA Continuing Civil Engineering Services	9	BGA Runway 4-22
5	Boca Airport General Consultant	10	Andrews AFB Taxiways Sierra and Whiskey

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Not Applicable

I. AUTHORIZED REPRESENTATIVE THE FOREGOING IS A STATEMENT OF FACTS.

31. SIGNATURE



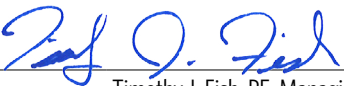
32.

DATE

4/2/2018

33. NAME AND TITLE

Timothy Fish, PE

<b>ARCHITECT-ENGINEER QUALIFICATIONS</b>				1. SOLICITATION NUMBER (IF ANY) <b>12120-986</b>		
<b>PART II - GENERAL QUALIFICATIONS</b> <small>(If a firm has branch offices, complete for each specific branch office seeking work.)</small>						
2a. FIRM (OR BRANCH OFFICE) NAME <b>HDR</b>				3. YEAR ESTABLISHED <b>2010</b>		
2b. STREET <b>3250 W. Commercial Blvd, Suite 100</b>				4. UNIQUE ENTITY IDENTIFIER <b>02-188-9259 (Engineering)</b>		
2c. CITY <b>Fort Lauderdale</b>				5. OWNERSHIP		
2d. STATE <b>FL</b>				a. TYPE <b>Private Corporation</b>		
2e. ZIP CODE <b>33309</b>				b. SMALL BUSINESS STATUS <b>Large Business</b>		
6a. POINT OF CONTACT NAME AND TITLE <b>Timothy Fish, Managing Principal</b>				7. NAME OF FIRM (IF BLOCK 2A IS A BRANCH OFFICE) THE BRANCH OFFICE IDENTIFIED IN BLOCK 2(A-E) INCLUDES PERSONNEL FROM ONE OR MORE OF OUR OPERATING COMPANIES WHICH ARE WHOLLY OWNED SUBSIDIARIES OF HDR, INC. COLLECTIVELY WE BRING RESOURCES OF MORE THAN 9,000 MULTI-DISCIPLINARY PROFESSIONALS TOGETHER AS ONE SEAMLESS ENTITY		
6b. TELEPHONE NUMBER <b>954-531-7848</b>				6c. E-MAIL ADDRESS <b>Timothy.Fish@hdrinc.com</b>		
8a. FORMER FIRM NAME(S) (IF ANY) <b>Henningson, Durham &amp; Richardson, Inc.-1951; Henningson Engineering Company, Inc.-1930; Henningson Engineering Company - 1917</b>				8b. YR. ESTABLISHED <b>1985</b>		
				8c. UNIQUE ENTITY IDENTIFIER <b>06 866 8805</b>		
9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administrative	901	3	A04	Air Pollution Control	3
08	CADD Technician	634	3	A06	Airports; Terminals & Hangers; Freight Handling	6
12	Civil Engineer	523	18	B02	Bridges	10
16	Construction Manager	163	1	C15	Construction Management	10
23	Environmental Engineer	80	3	D01	Dams; (Concrete; Arch)	5
47	Planner: Urban/Regional	218	7	D02	Dams; (Earth; Rock); Dikes; Levees	8
57	Structural Engineer	235	1	E09	Enviro. Impact Studies, Assessments, or Stmts	9
				E12	Environmental Remediation	10
				H07	Highways: Streets; Airfield Paving; Parking Lots	10
				I01	Industrial Buildings; Manufacturing Plants	4
				P06	Planning (Site, Installation, and Project)	8
				P12	Power Generation, Transmission, Distribution	10
				R03	Railroad: Rapid Transit	10
				R11	Rivers: Canals; Waterways; Flood Control	7
				S04	Sewage Collection; Treatment and Disposal	10
				S07	Solid Wastes; Incineration; Landfill	8
				S10	Surveying; Platting; Mapping; Flood Plain Studies	6
				S13	Storm Water Handling & Facilities	7
				T02	Testing & Inspection Services	7
				T03	Traffic & Transportation Engineering	10
	OTHER EMPLOYEES			W02	Water Resources; Hydrology; Ground Water	9
	TOTAL	9,998	36	W03	Water Supply; Treatment and Distribution	10
11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <small>(Insert revenue index number shown at right)</small>				PROFESSIONAL SERVICES REVENUE INDEX NUMBER		
a. Federal Work		7		1. Less than \$100,000		
b. Non-Federal Work		10		2. \$100,000 to less than \$250,000		
c. Total Work		10		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 <b>4/2/2018</b>	
c. NAME AND TITLE <b>Timothy J. Fish, PE, Managing Principal</b>						

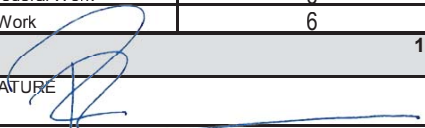
# ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (IF ANY)

12120-986

## PART II –GENERAL QUALIFICATIONS

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

2a. FIRM (OR BRANCH OFFICE) NAME <b>Chen Moore and Associates, Inc.</b>				3. YEAR ESTABLISHED <b>2011</b>		4. DUNS NUMBER <b>859459547</b>	
2b. STREET <b>500 W. Cypress Creek Rd., Suite 630</b>				5. OWNERSHIP			
2c. CITY <b>Fort Lauderdale</b>		2d. STATE <b>FL</b>		2e. ZIP CODE <b>33309</b>		a. TYPE <b>Corporation</b>	
6a. POINT OF CONTACT NAME AND TITLE <b>Jason McClair, P.E., CFM, LEED AP, Vice President/Treasurer</b>				b. SMALL BUSINESS STATUS <b>N/A</b>			
6b. TELEPHONE NUMBER <b>(954) 730-0707, ext 1035</b>		6c. E-MAIL ADDRESS <b>jmcclair@chenmoore.com</b>		7. NAME OF FIRM (If block 2a is a branch office)			
8a. FORMER FIRM NAME(S) (if any) <b>Chen and Associate Consulting Engineers, Inc.</b>				8b. YEAR ESTABLISHED <b>1986</b>		8c. DUNS NUMBER <b>859459547</b>	
9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS			
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index No. (see below)	
		(1) Firm	(2) Branch				
02	Administrative	10	7	C10	Commercial Building; (low rise); Shopping Centers	1	
08	CADD Technician	29	13	C15	Construction Management	1	
12	Civil Engineer	12	5	C18	Cost Estimating; Cost Engineering and Analysis; Parametric Costing; Forecasting	2	
15	Construction Inspector	3	2	E02	Education Facilities; Classrooms	2	
16	Construction Manager	1	0	E09	Environmental Impact Studies, Assessments or Statements	1	
39	Landscape Architect	3	0	G04	GIS development, analysis, data	2	
				H07	Highways; Streets; Airfield; Parking	2	
				L03	Landscape Architecture	1	
				P05	Planning (Community, Regional)	2	
				P06	Planning (Site, Installation)	2	
				P13	Public Safety Facilities	2	
				R04	Recreation Facilities (Parks, etc.)	2	
				R06	Rehab. (Buildings, Structures)	3	
				R11	Rivers Canals; Waterways; Flood Control	1	
				S04	Sewage Collection & Treatment	4	
				S11	Sustainable Design	1	
				S13	Stormwater Handling & Facilities	4	
				T02	Testing & Inspection Services	4	
				T03	Traffic & Transportation	2	
				V01	Value Analysis; Life-Cycle Costing	1	
				W03	Water Supply, Treatment, Distrib.	4	
<b>Total</b>		<b>58</b>	<b>27</b>				
11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)				PROFESSIONAL SERVICES REVENUE INDEX NUMBER			
a. Federal Work		1		1. Less than \$100,000			
b. Non-Federal Work		6		2. \$100,000 to less than \$250,000			
c. Total Work		6		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 <b>3/23/2018</b>	
c. NAME AND TITLE <b>Peter Moore, P.E., F.ASCE, ENV SP, LEED AP, President</b>							

# ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any)

## PART II – GENERAL QUALIFICATIONS

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


2a. FIRM (OR BRANCH OFFICE) NAME <b>Keith and Associates, Inc.</b>			3. YEAR ESTABLISHED <b>1998</b>		4. DUNS NUMBER <b>618480219</b>	
2b. STREET <b>301 East Atlantic Boulevard</b>			5. OWNERSHIP			
2c. CITY <b>Pompano Beach</b>			2d. STATE <b>FL</b>	2e. ZIP CODE <b>33060</b>		
6a. POINT OF CONTACT NAME AND TITLE <b>A. Dodie Keith-Lazowick, PLS, Principal-in-Charge</b>			a. TYPE <b>Corporation</b>			
6b. TELEPHONE NUMBER <b>954-788-3400</b>			6c. E- MAIL ADDRESS <a href="mailto:mail@keith-associates.com">mail@keith-associates.com</a>			b. SMALL BUSINESS STATUS <b>N/A</b>
8a. FORMER FIRM NAME(S) (If any) <b>N/A</b>			8b. YR. ESTABLISHED <b>N/A</b>		8c. DUNS NUMBER <b>N/A</b>	

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) Firm	(2) Branch			
02	Administrative	12	5	A06	Airports; Terminals and Hangars	6
08	CADD Technician	6	1	B02	Bridges	2
12	Civil Engineer, PE	12	7	C07	Coastal Engineering	2
60	Transportation Engineer, PE	2	1	C10	Commercial Building (Low Rise)	6
15	Construction Inspector	6	3	C11	Community Facilities	5
16	Construction Manager	14	14	C15	Construction Management	6
29	G.I.S. Specialist	1	1	C16	Construction Surveying	4
38	Land Surveyor, PSM	4		E02	Educational Facilities	4
39	Landscape Architect, RLA	3		F02	Field Houses; Gyms; Stadiums	3
47	Planner: Urban/Regional	5		G04	G.I.S. Services; Development, Analysis	2
48	Project Manager	6		H07	Highways, Streets, Airfield Paving	4
53	Scheduler	1	1	H09	Hospitals & Medical Facilities	3
	Landscape Designer	5		I06	Irrigation; Drainage	3
	Project Engineer	5	1	L03	Landscape Architecture	5
	Project Surveyor	2		P05	Planning (Community, Regional ...)	3
	Survey Field Crew	14		R03	Railroad; Rapid Transit	3
	Subsurface Utility Engineer	2		R04	Recreation Facilities (Parks, Marinas, etc)	4
	Subsurface Utility Field Crew	10		S10	Surveying; Platting; Mapping; Flood Study	3
	Utility Coordinator	2	1	S13	Storm Water handling & Facilities	3
	VDC/BIM	1		T04	Topographic Surveying & Mapping	4
				W03	Water Supply; Treatment & Distribution	2
				Z01	Zoning; Land Use Studies	2
Total		113	35			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	N/A	1. Less than \$100,000	6. \$2 million to less than \$5 million
b. Non-Federal Work	8	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total Work	8	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

## 12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 	b. DATE <b>March 26, 2018</b>
c. NAME AND TITLE <b>Eliot Lazowick, Executive Vice President</b>	



# ARCHITECT ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)

## PART II - GENERAL QUALIFICATIONS

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


2a. FIRM (OR BRANCH OFFICE) NAME Ricondo & Associates, Inc.			3. YEAR ESTABLISHED 1989	4. DUNS NUMBER 604932285
2b. STREET 1000 NW 57 <sup>th</sup> Court, Suite 920			5. OWNERSHIP	
2c. CITY Miami	2d. STATE FL	2e. ZIP CODE 33126	a. TYPE S-Corporation	
6a. POINT OF CONTACT NAME AND TITLE Pete Ricondo, Senior Vice President			b. SMALL BUSINESS STATUS	
6b. TELEPHONE NUMBER 305-677-0370	6c. E-MAIL ADDRESS pricondo@ricondo.com		7. NAME OF FIRM (If block 2a is a branch office) Ricondo & Associates, Inc.	
8a. FORMER FIRM NAME(S) (If any)			8b. YEAR ESTABLISHED 1994	8c. DUNS NUMBER 604932285

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administration	24		E11	Environmental Planning	5
06	Architect	12		P05	Planning (Aviation)	8
08	CADD Technical	0		P05	Planning (Financial)	5
12	Civil Engineer	7		A05	Airports; Nav aids; Airport Lighting	4
47	Planner: Urban/Regional	5		A06	Airports, Terminals and Hangars	7
60	Transportation Engineer	9		C15	Construction Management	5
70	Aviation Planner	84	1	H07	Highways; Streets; Airfield Paving	5
71	Environmental Planner	13	2	T03	Traffic and Transportation Eng'g	5
72	Financial Planner	17				
	Other Employees					
Total		172	3			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	3	1. Less than \$100,000.	6. \$2 million to less than \$5 million
b. Non-Federal Work	9	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total Work	9	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

## 12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 	b. DATE March 27, 2018
c. NAME AND TITLE Pete Ricondo, Senior Vice President	

# ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)  
**RFQ # 12120-986**

## PART II – GENERAL QUALIFICATIONS

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

2a. FIRM (OR BRANCH OFFICE) NAME <b>AVCON, INC.</b>			3. YEAR ESTABLISHED <b>1988</b>	4. DUNS NUMBER <b>60-672-0266</b>
2b. STREET <b>5555 E. Michigan Street, Suite 200</b>			5. OWNERSHIP	
2c. CITY <b>Orlando</b>			2d. STATE <b>FL</b>	2e. ZIP CODE <b>32822</b>
6a. POINT OF CONTACT NAME AND TITLE <b>Sandeep Singh, P.E., President</b>			a. TYPE <b>Corporation</b>	
6b. TELEPHONE NUMBER <b>(407) 599-1122</b>			b. SMALL BUSINESS STATUS	
6c. E-MAIL ADDRESS <b>S_Singh@avconinc.com</b>			7. NAME OF FIRM (If block 2a is a branch office)	
8a. FORMER FIRM NAME(S) (If any)			8b. YR. ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees (1) FIRM (2) BRANCH		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
02	Administrative	20	5	A05	Airports; Navajds; Airport Lighting; Aircraft Fueling	6
08	CADD Technician	11	3	A06	Airports; Terminals & Hangars; Freight Handling	4
12	Civil Engineer	28	13	B02	Bridges	4
15	Construction Inspector	7	5	C18	Cost Est; Cost Eng & Analysis; Param. Cost.; Forecas	1
21	Electrical Engineer	4	0	D04	Design-Build - Preparation of Requests for Proposals	1
42	Mechanical Engineer	4	0	E02	Educational Facilities; Classrooms	3
57	Structural Engineer	2	0	H07	Highways; Streets; Airfield Paving; Parking Lots	6
60	Transportation Engineer	4	0	I06	Irrigation; Drainage	1
	Airport Planner	3	0	O01	Office Buildings; Industrial Parks	1
	Engineering Intern	4	0	P05	Planning (Community, Regional, Areawide & State)	1
				P06	Planning (Site, Installation, & Project)	2
				P13	Public Safety Facilities	1
				R03	Railroad; Rapid Transit	1
				R04	Recreation Facilities (Parks, Marinas, Etc.)	2
				S09	Structural Design; Special Structures	2
				S13	Storm Water Handling & Facilities	2
				T03	Traffic & Transportation Engineering	2
				U03	Utilities (Gas and Steam)	1
				W03	Water Supply; Treatment & Distribution	1
				Z01	Zoning; Land Use Studies	1
	Other Employees	0	0			
	<b>Total</b>	<b>87</b>	<b>26</b>			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	<b>3</b>	1. Less than \$100,000	6. \$2 million to less than \$5 million
b. Non-Federal Work	<b>8</b>	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total Work	<b>8</b>	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

## 12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 	B. DATE <b>March 27, 2018</b>
c. NAME AND TITLE <b>Sandeep Singh, P.E., President</b>	

**1. SOLICITATION NUMBER** (If any)

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

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	5	1. Less than \$100,000	6. \$2 million to less than \$5 million
b. Non-Federal Work	8	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total Work	9	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

The foregoing is a statement of facts.

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1. SOLICITATION NUMBER (If any)  
12120-986

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

**12. AUTHORIZED REPRESENTATIVE**  
The foregoing is a statement of facts.

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# Organizational Profile and Project Team

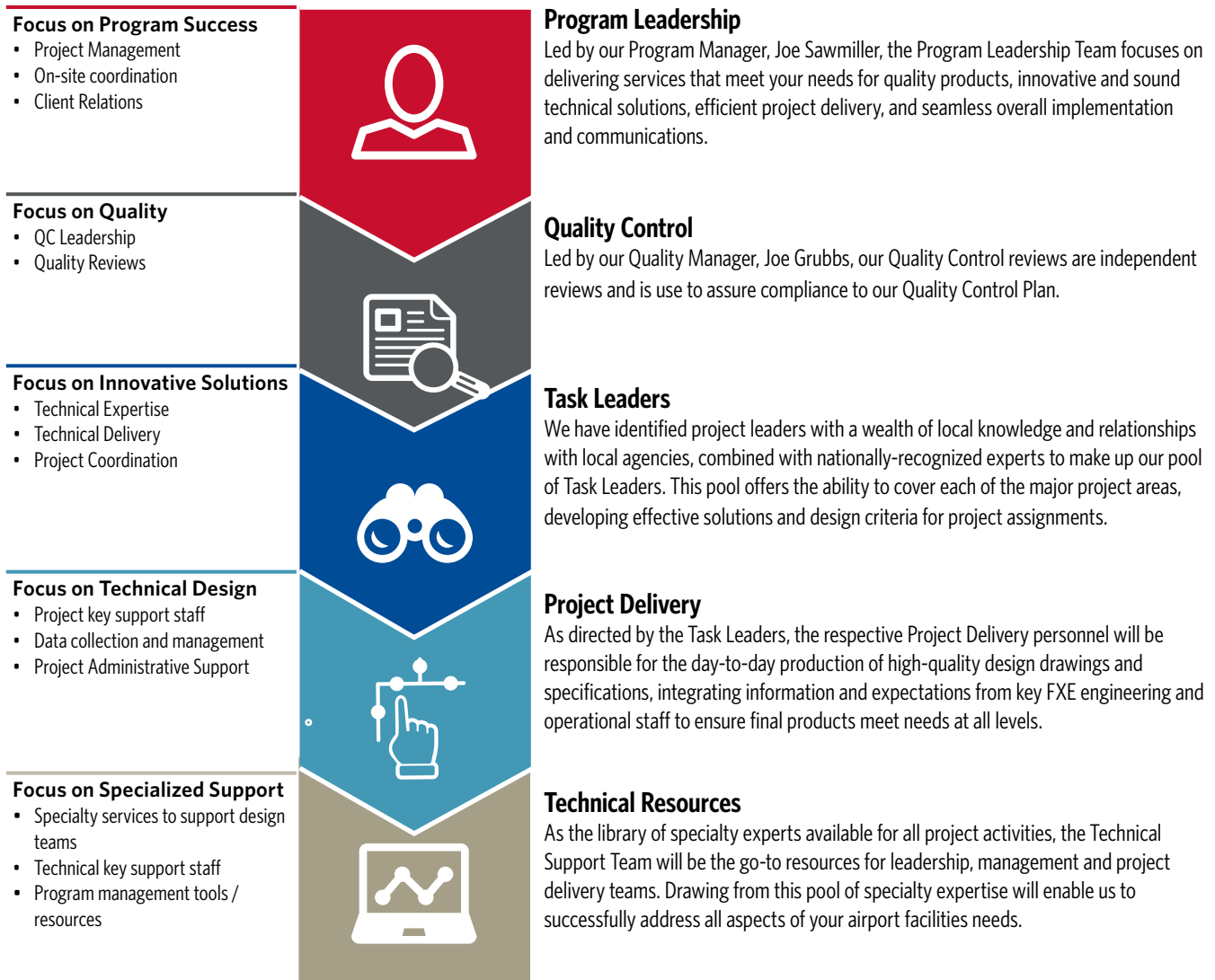
Integrating a full service Aviation design team as well as coordinating efforts with stakeholders and contractors will require seasoned professionals with experience in General Engineering Aviation projects. The HDR Team brings confidence in project management, aviation infrastructure engineering design and construction through verifiable experience on similar projects and contracts throughout the Country. Key personnel have expertise in all elements of the scope of work and are committed to the City's successful implementation of the FXE Capital Improvement Plan.

## Overview of Project Team Organization

The HDR Team is organized into project leadership and quality control, project Task Leaders, project delivery and technical resources. The image below depicts the hierarchical structure from the project leadership team to the technical support services.

- Project Leadership Team is responsible for the overall management as well as the individual project assignments.
- Project Task Leaders are responsible for performing the work to lead, execute, and deliver the projects.
- Project Delivery and Technical Resources provide multi-disciplinary resources to support project delivery teams.

### FOCUS



The Organizational Chart that follows provides a detailed description of our proposed project team.

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FIRM

HDR Engineering, Inc. **(HDR)**

Chen Moore & Associates, Inc **(CMA)**

Keith & Associates, Inc **(KAI)**

Ricondo & Associates, Inc. **(RAI)**

Avcon, Inc. **(AVC)**+

Cherokee Enterprises, Inc. **(CEI)**+

Hillers Electrical Engineering, Inc **(HEE)**+

Tierra South Florida, Inc. **(TSF)**+

Note: Key team members may be assigned to more than one project task

\*Not licensed in Florida

+M/WBE Firm



Program Leadership



Task Leaders



Project Delivery



Technical Resources

**PROGRAM PRINCIPAL**  
Tim Fish, PE **(HDR)**

**PROGRAM MANAGER**  
Joe Sawmiller, PE **(HDR)**

**DEPUTY PROGRAM MANAGER**  
Cody Parham, PE **(HDR)**

**QUALITY MANAGER**  
Joe Grubbs, PE **(HDR)**



Quality Control

**ENGINEERING DESIGN**

**Airside**  
Cody Parham, PE **(HDR)**  
*Task Leader*

**Landside**  
Daniel Suarez, PE **(HDR)**  
*Task Leader*

**Airside Pavement & Markings**  
Posh Supupramai, PE **(HDR)**  
Russell Holliday, PE **(AVC)**  
Brandon Hiers, PE **(AVC)**

**NAVAIDS / Airside Lighting & Signage**  
James Kappes, PE **(HEE)**  
Amy Champagne-Baker, PE **(HEE)**

**Stormwater Management**  
Ron Geiger, PE\* **(HDR)**

**Airfield Operations**  
Cody Parham, PE **(HDR)**  
James Kriss, PE **(AVC)**

**Roadway**  
Dan Ford, PE **(HDR)**

**Utilities and Infrastructure**  
Daniel Checchia **(KAI)**

**Landside Pavement**  
Joe Sawmiller, PE **(HDR)**

**Stormwater Management**  
Jason McClair, PE **(CMA)**

**Electrical**  
Ian Denholm, PE **(HDR)**

**Landscape Architecture**  
Sunshine Bullock, RLA **(HDR)**

**ARCHITECTURE SERVICES**  
Alan Temple, AIA **(HDR)**  
*Task Leader*

**Architecture**  
Brian McCabe, AIA **(HDR)**

**MEP / Fire Protection**  
Zach Sachsenmaier, PE **(HDR)**

**Electrical**  
Amy Champagne-Baker, PE **(HEE)**

**Structural**  
Eric Martin, PE **(HDR)**

**Structures Evaluation**  
John Danielsen, PE **(HDR)**

**Facilities Inspection**  
Tom Rieger, PE **(HDR)**

**ENVIRONMENTAL**  
Sherri Swanson, PWS **(HDR)**  
*Task Leader*

**Environmental Assessment**  
Stephen Culberson **(RAI)**  
Paula Sessions, PG **(CEI)**

**Remediation**  
Brenda Clark, PE **(HDR)**

**Environmental Impact Statement**  
Stephen Culberson **(RAI)**  
Virginia Jackson, AAE **(RAI)**  
Danielle Goveia **(CEI)**

**Permitting**  
Jennifer Smith, PE **(CMA)**

**CONSTRUCTION**  
John Neff, PE **(HDR)**  
*Task Leader*

**Construction Management and Construction Administration**  
John Neff, PE **(HDR)**  
Raheel Dossani, EI **(HDR)**

**CEI and Resident Project Representative**  
Tony Sabbag, CGC **(HDR)**  
Ryan Beckman, EI **(HDR)**  
Raheel Dossani, EI **(HDR)**  
Morris Smith, Jr. **(KAI)**

**SHARED RESOURCES**

**Construction Safety & Phasing**  
Cody Parham, PE **(HDR)**

**Site Plan Review & Analysis**  
Cody Parham, PE **(HDR)**  
James Kriss, PE **(AVC)**

**GIS**  
Michael Schmedt, GISP **(HDR)**

**BIM /Visualization**  
Ryan Hanson, PE\* **(HDR)**

**Geotechnical and Threshold Inspections**  
Francois Thomas, PE **(TSF)**

**Survey & Mapping / SUE**  
Lee Powers, PSM **(KAI)**  
Daniel Checchia **(KAI)**

**Cost Estimating / Scheduling**  
Mike Digregorio, PE\* **(HDR)**

**Financial Analysis**  
Matthew Ruffra **(RAI)**

**Grant / JACIP and DBE Support**  
Aubyn Bell, AICP **(HDR)**

**Communications**  
John Fallon, RCDD, OSP **(HDR)**

**Security**  
Bob Bosco **(HDR)**

**FAA Coordination**  
Cody Parham, PE **(HDR)**

**TERPs**  
Tim Ward, PE\* **(HDR)**

**FAR Part 77 Evaluation**  
Mark Johnson **(RAI)**

**Land-Use / Zoning Review**  
Sebastien Carreau **(RAI)**

**Public Involvement**  
Maurene Balmaseda **(HDR)**

CAM# 18-0676

Exhibit 5

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## Program Leadership

Our proposed Program Leadership Team will focus on the overall success of the program. Our Leadership Team consists of the Program Manager, Deputy Program Manager, Program Principal, and the Quality Manager. Our performance metrics are clear:

- **Client and stakeholder satisfaction:** Meet or exceed the expectations of FXE, its partners and stakeholders by delivering excellent service and quality results.
- **Schedule and budget compliance:** Planning and executing all work in compliance with schedule and within allocated budgets.
- **Quality program compliance:** Delivering quality work products that are in accordance with industry standards and to the standards that FXE expects from our team.
- **Technical advisory and oversight:** Providing the absolute best technical solutions that fit the needs of each project.

### Joe Sawmiller, PE - Program Manager



Joe has 27 years of progressive experience in civil engineering, business development and management relating to transportation development projects, including 15+ years in a regional leadership role. He has successfully administered more than a dozen GEC contracts and completed more than 125 projects throughout Florida, the U.S. and the Caribbean. Joe is also experienced with U.S. military (DoD) installation airfields and general base infrastructure. His technical expertise encompasses pavement management systems (airside and landside), airside/landside civil and environmental engineering, flexible/rigid pavement design, construction phasing (including time-sensitive construction), forensic engineering, and facility assessments.

Joe is a nationally recognized leader in pavement management and design for surface and air transportation facilities (airports; ports; highways/roads; parking lots). He has authored several articles and white papers and is a frequent presenter/speaker at industry conferences and seminars. He has also taught several pavement management, design and maintenance courses to internal staff and clients.

#### RELEVANT EXPERIENCE

- City of Fort Lauderdale – Fort Lauderdale Executive Airport
- Broward County Aviation Department
- Miami-Dade Aviation Department
- Palm Beach County Department of Airports
- Pinellas County – St. Petersburg-Clearwater International Airport
- Sarasota Manatee Airport Authority
- Lee County Port Authority
- City of Tallahassee – Tallahassee International Airport
- City of Pensacola – Pensacola International Airport
- Okaloosa County (Aviation)
- Santa Rosa County (Aviation)
- Hernando County (Aviation)
- City of Winter Haven (Aviation)
- City of Daytona Beach (Aviation)
- Louisville International Airport - Standiford Field, Pavement Management System Update

### Cody Parham, PE - Deputy Project Manager



Cody brings 11 years of aviation engineering experience, including eight years of continuous work at FXE. He has managed two GEC contracts at FXE, plus several other individual projects and tenant-led developments. Cody's history of service to your airport includes several airfield rehabilitation projects, existing building expansions, and the design and construction of the U.S. Customs facility, which achieved LEED Silver designation.

Cody is intimately familiar with the City's Development Review Committee (DRC) process, as well as the City Building Department and South Florida Water Management District entitlement programs. His technical expertise includes aviation site layout and design; stormwater management design; hydraulic design and hydrologic modeling; site grading; erosion and sedimentation control; layout and design of utilities, entitlement acquisition and construction administration..

#### RELEVANT EXPERIENCE

- FXE General Engineering Aviation Consultant
- FXE Rehabilitation of Taxiway E
- FXE U.S. Customs and Border Protection Facility
- Lee County Port Authority GEC, Fort Myers, FL
- Broward County Aviation Department General Engineering Aviation Consultant
- Pompano Beach Airpark General Engineering Aviation Consultant
- FDOT Statewide Airfield Pavement Management Program

## Tim Fish, PE - Project Principal



Tim brings 15 years experience in airport planning and design, along with first-hand airfield construction experience. As our proposed Project Principal, Tim will ensure that our professionals are providing you superior service at all times, and that your expectations are being met. Tim has the ability to access our aviation staff from around the Country in order to offer you the depth of resources necessary to accomplish any task that may arise.

Tim has served as the Project Engineer for the past five years on the Terminal 4 Apron Civil Works Project at FLL. In this role he has developed a working knowledge of the Operational, Safety and Security requirements at FLL by coordinating and working directly with BCAD Staff in the development of detailed Construction Safety and Phasing Plans that minimize impact to airfield operations for this heavily phased project. His design experience includes utilizing the FAA FAARFIELD design software for the design of airfield pavements, utilizing Path Planner and AeroTurn to model and analyze aircraft movements in development of maintenance of traffic plans, design of storm, sanitary sewer and potable water systems, regulatory permitting and application of FAA Advisory Circulars and Engineering Briefs to ensure design meets FAA requirements.

### RELEVANT EXPERIENCE

- FXE General Engineering Aviation Consultant
- Broward County Aviation Department General Engineering Aviation Consultant
- Miami-Dade Aviation Department General Engineering Aviation Consultant
- Pompano Beach Airpark General Engineering Aviation Consultant
- Palm Beach International Airport Airfield Design Improvements and Rehabilitation Program
- Greater Orlando Aviation Authority Transportation Planning Consultant Services

## Joe Grubbs, PE - Quality Manager



Joe has nearly 30 years in the aviation industry. During this time, he gained expertise and first-hand experience on a broad range of aviation design projects, including pavement evaluation; concrete and bituminous pavement design; rehabilitation and de-icing collection system design. His experience also includes construction management and program management for airfield runway, taxiway and apron pavements, roadway pavements, drainage systems and airfield lighting systems. Within the past 10 years, Joe served as the program, project and design manager for three military airfield projects worth more than \$90 million in construction, and he led more than 10 commercial airfield projects worth more than \$880 million in construction.

### RELEVANT EXPERIENCE

- Palm Beach County Department of Airports, Airport General Consultant
- Taxiway G and Airfield Site Preparations Projects, Greensboro-Triad International Airport
- Runway 5L-23R Replacement Project, Raleigh-Durham International Airport
- Airfield Pavement Rehabilitation Program, Washington Reagan National Airport
- Displace Threshold for Runway 14L, O'Hare Modernization Program, Chicago O'Hare International Airport
- Construction Phasing and Management Consultant. Terminal 4 Apron Replacement, Phoenix Sky Harbor International Airport

## Program Task Leaders

We have identified Program Task Leaders who will take responsibility for the development and delivery of high-quality design drawings, specifications, and estimates for projects. Assigning Program Task Leaders for each project under this GEC will assure a basic level of consistency for all projects. The benefits that you will gain from this approach include:

- Opportunity to sequence and phase construction projects to minimize impacts to operations and avoid delays in schedules
- Ability to package projects, or components of projects, to realize efficiencies in construction and reduce construction costs
- Dedicated technical experts in a variety of skill sets which is of utmost importance to successfully deliver through the life of a GEC contract

The Program Task Leaders will focus on effective project delivery as they:

- **Engage and oversee design production teams:** Assigning the right team assigned to deliver each component of the design, as well as providing oversight and guidance to each team
- **Assemble project design packages:** Taking responsibility for assembling and assuring quality reviews for each component of the design packages from the production teams, and delivering a complete design package for each project
- **Monitor project cost:** Tracking the design cost being incurred during project execution and making adjustments as needed to keep the project on budget
- **Monitor schedule:** Monitoring progress of the project execution and making adjustments to schedule as necessary, and communicating progress to the Program Leadership Team and FXE

### Dan Suarez, PE - Landside Task Leader



Daniel possesses 13 years of public and private sector experience in a wide array of areas, including program management, master planning, capital improvement planning, design, and construction oversight of water, wastewater, and storm sewer facilities and infrastructure. He is a polished manager, able to coordinate the delivery of projects with multiple stakeholders including project owners, regulatory agencies, designers, and contractors. He is also experienced in overseeing design and construction staff and in executing quality assurance and quality control (QA/QC) measures for his projects.

#### RELEVANT EXPERIENCE

- FXE General Engineering Aviation Consultant
- FLL Southwest Airlines Terminal One Modernization
- Airfield Pavement Rehabilitation Program, Boca Raton Airport Authority
- City of West Palm Beach General Engineering Consultant

### Alan Temple, AIA - Architecture Task Leader



Alan has more than 37 years of experience that includes a broad spectrum of building and client types across the USA, UAE, Taiwan, Greece and India. These commissions included professional Architectural services ranging widely in complexity and cost for both profit and not-for-profit client's, health care, Federal, State, County and local governmental agencies; State universities as well as private industry clients. Alan has overseen, managed and directed projects ranging to over \$600 million including master planning, airports, municipal administration facilities, office buildings, courthouses and detention facilities, convention centers, science and technology research & laboratory buildings, hospitals and medical office buildings, and themed entertainment venues such as theaters, aquariums and theme parks.

#### RELEVANT EXPERIENCE

- Broward County Aviation Department General Engineering Aviation Consultant
- FLL Curbside Canopy and Soffit Replacement
- FLL Pedestrian Bridge Rehabilitation
- South County Advanced Wastewater Treatment Plant Expansion

### Sherri Swanson, PWS - Environmental Task Leader



Sherri has 19 years of diverse experience in environmental science including tenures with local and federal government, the private sector, a not-for-profit organization, and an international water entity. She has spent her career providing studies and environmental solutions to public and private infrastructure projects including airports, highways, pipelines, transmission lines, substations, reservoirs, power plants, shoreline protection, public amenities, and stormwater facilities. Her experiences include wetland mitigation and restoration design, wetlands and wildlife permitting, sustainability, and climate science.

#### RELEVANT EXPERIENCE

- FXE General Engineering Aviation Consultant
- Broward County Aviation Department General Engineering Aviation Consultant
- FXE Master Plan Update
- FLL Terminal 4 Apron Civil Works

## John Neff, PE - Construction Task Leader



John brings over 40 years of Aviation design and construction experience to our team. He has a strong background in planning, design and construction administration on a significant number of aviation project. His experience is focused on a wide range of airside and landside airport projects including parking, terminals, airfield pavements, NAVAIDs, drainage, markings, signage and electrical modifications. He has served in a key role for more than \$20 billion in construction projects, much of that for aviation facilities. Most recently, John has provided Construction Administration services for both the Terminal 4 Civil Works and Terminal 1 Modernization Program at FLL. In these roles, John has provided oversight on a daily basis and has developed an unmatched knowledge of the requirements to track required submittals and test as required per FAA Advisory Circulars so that any grant assurance measures are not only met but exceeded.

### RELEVANT EXPERIENCE

- FXE General Engineering Aviation Consultant
- Broward County Aviation Department General Engineering Aviation Consultant
- Pompano Beach Airpark General Engineering Aviation Consultant
- FLL Terminal 4 Apron Civil Works

## Program Delivery and Technical Resources

A wide range of engineering disciplines are required to perform all needed work under this contract. The core members of each Project Delivery Team are fully capable of developing the final planning, design, and construction documents. However, they will need support from additional staff to provide specialized technical resources at certain points in the execution of each project.

The depth and diversity of our technical resources allows us to simultaneously complete multiple tasks and meet schedule requirements. We offer a wide range of technical expertise, as illustrated on our Organizational Chart.

## Team Member Involvement and Capacity

NAME	ROLE	CAPACITY
<b>HDR</b>		
Joe Sawmiller, PE	Program Manager	100%
Cody Parham, PE	Deputy Program Manager and Airside Engineering Task Leader	100%
Tim Fish, PE	Program Principal	5%
Joe Grubbs, PE	Quality Manager	60%
Daniel Suarez, PE	Landside Engineering Task Leader	50%
Alan Temple, AIA	Architecture Task Leader	50%
Sherri Swanson, PWS	Environmental Task Leader	50%
John Neff, PE	Construction Task Leader	50%
Posh Supupramai, PE	Airside Civil and Pavement Markings	70%
Ron Geiger, PE	Stormwater Management	60%
Dan Ford, PE	Roadway	50%
Ian Denholm, PE	Electrical	60%
Sunshine Bullock, RLA	Landscape Architecture	50%
Brian McCabe, AIA	Architecture	50%
Zach Sachsenmaier, PE	MEP/Fire Protection	50%
Eric Martin, PE	Structural	60%
John Danielsen, PE	Structural Evaluation	50%
Tom Rieger, PE	Facilities Inspection	50%
Brenda Clark, PE	Remediation	65%
Raheel Dossani, EI	Construction Management and Construction Administration   CEI and Resident Project Representative	70%
Tony Sabbag, CGC	CEI and Resident Project Representative	55%
Ryan Beckman, EI	CEI and Resident Project Representative	80%
Michael Schmedt, GISP	GIS	55%
Ryan Hanson, PE	BIM/Visualization	75%



NAME	ROLE	CAPACITY
<b>HDR (Continued)</b>		
Mike Digregorio, PE	Cost Estimating/Scheduling	50%
Aubyn Bell, AICP	Grant / JACIP and DBE Support	50%
John Fallon, RCDD	Communications	60%
Bob Bosco	Security	60%
Tim Ward, PE	TERPs	50%
Maurene Balmaseda	Public Involvement	25%
<b>AVCON</b>		
Russell Holliday, PE	Airside Pavement & Marking	100%
Brandon Hiers, PE	Airside Pavement & Marking	70%
James Kriss, PE	Airfield Operations	100%
<b>KEITH &amp; ASSOCIATES</b>		
Dan Checchia	Utilities and Infrastructure   Survey & Mapping /SUE	50%
Lee Powers, PSM	Survey & Mapping /SUE	50%
Morris Smith, Jr.	CEI and RPR	
<b>CHEN MOORE &amp; ASSOCIATES</b>		
Jason McClair, PE	Stormwater Management	50%
Jennifer Smith, PE	Permitting	50%
<b>TIERRA SOUTH FLORIDA</b>		
Francois Thomas, PE	Geotechnical	60%
<b>CHEROKEE ENTERPRISES</b>		
Paula Sessions, PG	Environmental Assessment	50%
Dan Goveia	Environmental Impact Statement	50%
<b>RICONDO &amp; ASSOCIATES</b>		
Stephen Culberson	Environmental Assessment	80%
Virginia Jackson, AAE	Environmental Impact Statement	75%
Matthew Ruffra	Financial Analysis	50%
Mark Johnson, AICP	FAR Part 77 Evaluation	50%
Sebastien Carreau	Land-Use/Zoning Review	50%
<b>HILLERS ELECTRICAL ENGINEERING</b>		
James Kappes, PE	NAVAIDS/Airside Lighting & Signage	75%
Amy Champagne-Baker, PE	Electrical	75%



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# Approach to Scope of Work

## Our Vision

It is HDR's mission to support activities aligning with our values and areas of expertise to benefit the communities where we live and work. Our vision is to shape the future through creative solutions and visionary leadership. We believe it is our job to listen to you, and do our very best to see that your goals are achieved. Before we can meet your goals and expectations on any project, we must thoroughly understand them. We have developed a proven approach to providing professional services, presented herein, which we will apply to all of your projects. Our approach stresses a proactive role by HDR on every project, with an emphasis on frequent communication and collaboration with you to ensure your complete satisfaction and project success.

## We Understand Your Needs, Goals, and Objectives

HDR takes pride in being able to execute successful projects, which feature a diverse range of operational, planning, architectural, engineering, environmental, and construction issues associated with airport development.

Our team has an excellent understanding of the City's needs, goals and objectives as they relate to projects anticipated to be undertaken at FXE under this contract, based on our nearly thirty years of recent and relevant experience in very similar work elsewhere across Florida and beyond—including the last four years, in which we've had the privilege and pleasure of serving the City as General Engineering Aviation Consultant at FXE. It is important that the City consider the experience gained at FXE and on other local airports and transportation facilities, performed by local Aviation experts, as proof-positive that this local team has what it takes to accomplish every aspect of your program.

The City of Fort Lauderdale administers, operates and maintains a multitude of facilities throughout FXE. This requires a variety and depth of professional knowledge, resources and best practices. The HDR Team understands the variations in FXE's operational requirements, fleet mixes and tenant needs that will be expected, and will work closely with FXE staff to ensure that project expectations and work scopes are well-aligned with our team resources. Our approach to General Consulting Service contracts facilitates building and cultivating relationships as a trusted advisor—and we will continue to be there for you for the long run by serving as extensions of your staff. This means not only being available for project-related tasks and activities, but also remaining an integral part of your team

by assisting in ongoing evaluations of your Capital Improvement Program, helping to generate additional business and revenue for FXE, and by serving as a trusted advisor to your Aviation Advisory Board (AAB) and City Commission.

Our team understands the paramount importance of responsiveness, dedication, flexibility, and providing a wide range of professional airport consulting services and skills based upon your operational and capital improvement requirements and business needs, goals, and objectives. We're ready to serve you and exceed your expectations.

## Our Experience Yields a Proven Approach

The business of airports is about incorporating the right infrastructure — all directed at moving aircraft in a safe and secure manner. This mission demands practical thinking, enterprise, and comprehensive solutions. HDR brings this way of thinking to every aviation project. We think in terms of program cost and benefits to you and your airport users. We will implement “out of the box” solutions and entrepreneurial action.

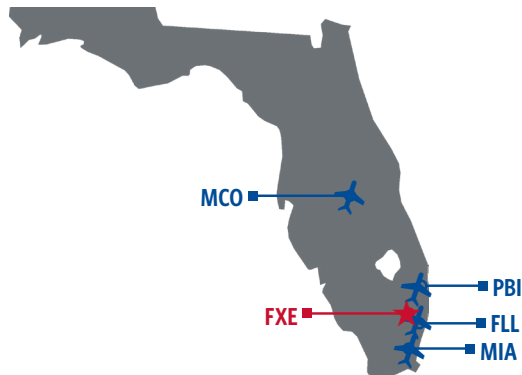
We understand operations, maintenance, and the need to keep people and goods moving. We know all about addressing safety and security concerns, sustainability, and being environmentally responsible.

Our team is crafted with local industry leading specialists who are experienced at FXE and several other Florida airports—and our diverse capabilities and location enable us to respond efficiently and effectively to all of your needs associated with this Program. We have developed an effective and proven approach specifically tailored for GEC task order projects, including recent projects at Fort Lauderdale Executive, Fort Lauderdale-Hollywood International, Miami International and Orlando International Airports. Primary to our approach is a proactive role by HDR, with an emphasis on continuous communication and collaboration with you and other key stakeholders, to ensure complete satisfaction and project success. Your COMPLETE satisfaction is our #1 goal—and to complete this Program to your expected level of service, the following items are considered essential objectives for the team:

- » Minimize impacts to airport operations at all times
- » Clearly and effectively communicate with you
- » Be responsive to your goals and objectives
- » Bring you the expertise of having done it before
- » Provide high quality work products
- » Meet schedule requirements
- » Control project costs & maximize project value



The HDR team has the requisite experience, commitment, and proven collaborative spirit necessary to tackle these challenges and exceed your expectations for your CIP projects. We have used this experience to draft this approach to address each of these objectives. Our team has recently performed similar development projects at other airports throughout Florida, including:



Our local Fort Lauderdale-based team, many of whom are currently working together and/or have worked together previously, were involved in key roles in projects at these airports. We will bring this experience, team cohesion, and associated best practices, to this program for the benefit of the City. To provide a more project-specific look at our project approach and how we will meet your needs, goals and objectives as they relate to the projects anticipated under this contract, we have provided concise approach write-ups for the projects listed in the Request for Qualifications, including projects recently incorporated into the City's updated (draft) CIP for FXE, in which HDR, along with our team member, Ricondo & Associates, were extensively involved in identifying and programming--stemming from FXE's ongoing Master Plan Update.

These projects include:

- » Airfield Signage Replacement
- » Taxiway Extension
- » Taxiway Intersection Improvements
- » By-pass Taxiways
- » Run-up Area Expansion
- » AES Facility Expansion
- » Other Potential CIP Projects: FY 2019 – FY 2022

The following paragraphs depict our understanding of key elements for each of these projects, initial insights on how the HDR Team proposes to approach them, and recent (similar) examples of where we've done it before. We have also integrated our overall approach to each assignment in this section. Based on the work tasks anticipated, our understanding and approach go hand in hand.

## Airfield Signage Replacement

### Project Understanding

In recent years, FXE has undertaken numerous airfield rehabilitation projects which include pavement, electrical, and signage

improvements. Various areas of the airfield will not undergo pavement rehabilitation, but will still require signage improvements to comply with FAA Advisory Circular 150/5345-44J, Specification for Runway and Taxiway Signs. Most sign replacements will comply with sign Type L-858. Some signs will be airport-specific, such as non-movement area signs and signs denoting pavement not for aircraft use.

#### City's Needs

- Airfield signage compliant with FAA regulations
- Airfield equipment with readily available replacement parts

#### City's Goals and Objectives

- Operate a safe and reliable airfield
- Operate an airfield with energy efficient fixtures



### Our Approach

The new signage will be dimensionally compliant and use LED lighting. Depending on the funding source, the project specifications will be tailored to encourage participation from equipment vendors that can supply preferred brands and replacement parts. We will work closely with your maintenance staff and your electrical supervisor, Frank Chesser, to make sure the project addresses the concerns of the people who are responsible for maintaining it after construction. The HDR team will use the opportunity to consider supporting electrical improvements and signage updates to better comply with FAA Engineering Brief No. 89 'Taxiway Nomenclature Convention' as well. Taxiways A and E are good candidates for nomenclature updates. Where possible, new signs will be able to accommodate double or triple digit names. Our unique approach considers the life cycle of the signage, not just construction. The benefit to you is a system with lower maintenance costs and more value for your scarce project funds.

We've Done This Before:

- FXE Taxiway F West Electrical Rehabilitation
- FXE Electrical Upgrades
- FXE RIM Program
- PANYNJ

## Taxiway Extension

### Project Understanding

To support the 1,000 foot extension of Runway 9-27 to the west, parallel Taxiways E and F will need to be extended as well, including the relocation of connectors to Runway 9. Per FAA AC 150/5300-13, Airport Design, the taxiways must be a minimum of 400 feet from the runway centerline. The geometry will be per Taxiway Design Group 3 and safety area grading requirements will be to Airplane Design Group III. Construction will require the demolition and relocation of existing blast fence and run-up area on Taxiway E as well as the western perimeter loop road. Numerous owls and tortoises nest on the western airfield and will require relocation as well. An Environmental Assessment will be required for the extension of Runway 9 prior to design commencement (refer to 'Other Potential CIP Projects: FY 2019 – FY 2022').

#### City's Needs

- Primary runway and taxiway network to serve the next generation of business aviation aircraft

#### City's Goals and Objectives

- Develop a runway extension and supporting parallel taxiways compliant with FAA design standards.



**Taxiways E and F Extension**

### Our Approach

The HDR team will design the taxiway extensions in phases to minimize impacts to operations on primary Runway 9-27. We will investigate whether displaced thresholds and intersection departures could be used to create a larger and safer work area. Enabling projects to demolish and relocate utilities will further reduce the impacts to operations. We recommend performing a Safety Assessment in accordance with FAA Order 5200.11, FAA Airports Safety Management System, to achieve the highest level of safety during construction. The benefits of the HDR approach include shorter closures, reduced impacts to operations, and safer operations during construction.

We've Done This Before:

- FLL T4 Apron
- FXE Western Loop Road
- LEX Runway 4-22 Rehabilitation

## Taxiway

## Intersection Improvements

### Project Understanding

There are several locations on the FXE airfield with non-compliant pavement geometry. The Airport has made great strides in correcting these areas in recent years. The remaining areas requiring work are summarized as:

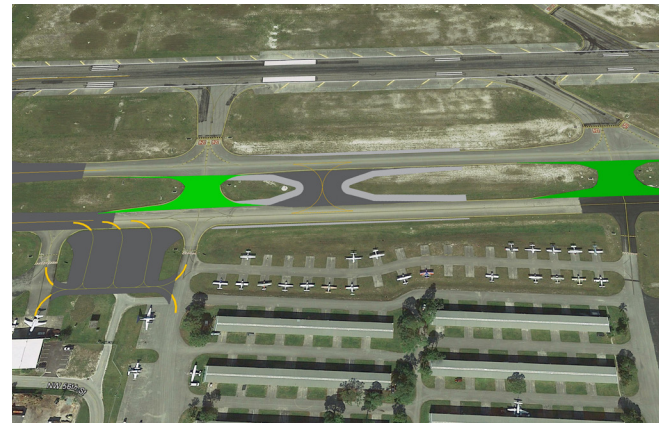
LOCATION	ISSUE
Taxiway A / E West End	<ul style="list-style-type: none"> <li>Non 90 degree termination at runway end</li> <li>4-node intersection</li> <li>Large pavement areas</li> </ul>
Taxiways H and Q	Direct connections to Runway 9-27 from ramp

#### City's Needs

- An airfield pavement network that promotes safe operations of its users

#### City's Goals and Objectives

- Mitigate all known hot spots
- Reduce runway incursions



**Taxiways H & Q Intersection**

### Our Approach

We would approach the Taxiway A/E project as an enabling project for the extension of Taxiway E. All grading, markings, signage, and electrical improvements would anticipate the future extension work, which would reduce the demolition required.

Pavement rutting has been observed in the vicinity of Taxiways H and Q. This is likely due to a structurally deficient pavement section, but a detailed geotechnical investigation of the subgrade soils (with potential non-destructive deflection testing) in this area would be warranted to ensure future pavement structural issues are avoided.

We've Done This Before:

- FXE Western Loop Road
- FXE Taxiway Intersection Improvements
- LEX Runway 4-22 Rehabilitation FXE Western Loop Road



## By-Pass Taxiways

### Project Understanding

FXE serves a variety of aircraft types, from single engine piston aircraft up to ADG III business jets. In order to facilitate the various take-off and landing procedures required, by-pass taxiways are needed at the ends of Runways 9, 27, and 31. A minimum separation of 152 feet between the parallel by-pass taxiways is required for facilities not requiring 180 degree turns.

#### City's Needs

- Operate a safe and efficient airfield for a variety of aircraft types

#### City's Goals and Objectives

- Augment the current airfield pavement network with by-pass taxiways to promote the free flow of piston and jet aircraft with varying pre-flight requirements.



**Taxiway G Bypass**

### Our Approach

This project gives the Airport an excellent opportunity to correct the taxiway names at the runway ends and provide standard 90 degree geometry at the taxiway ends, which is also lacking at Runways 9 and 27. Some adjacent taxiways will also require renaming to maintain progressive order.

We've Done This Before:

- FLL Terminal 4 Apron

## Run-up Area Expansion

### Project Understanding

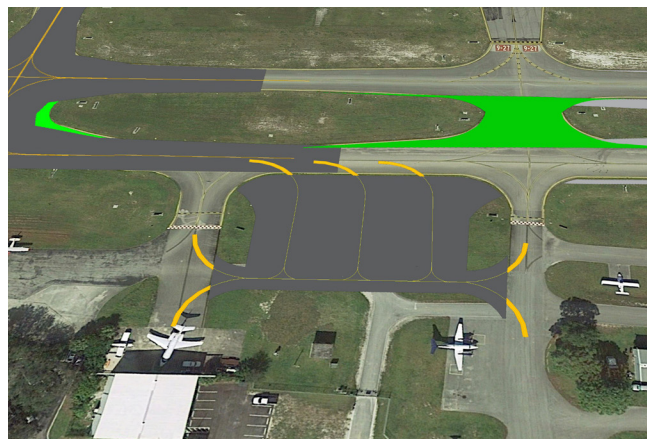
FXE has a very active user base of MROs and piston aircraft. Run-up areas allow for engine diagnostics while keeping the main taxiways clear. Unfortunately, many of the proposed airfield improvements require the relocation of the existing run-ups.

#### City's Needs

- Operate a safe and efficient airfield for a variety of aircraft types

#### City's Goals and Objectives

- Augment the current airfield pavement network with modified existing and proposed run-up areas to promote the free flow of piston and jet aircraft with varying pre-flight requirements.



**Taxiway E Run-Up**

### Our Approach

We've identified several locations where run-ups can be expanded or improved: Taxiway D1, Taxiway S, Taxiway C, Taxiway F, and Taxiway E. Portland cement concrete (PCC) pavements should be considered in areas serving jet engine run-ups, such as on Taxiway D1. PCC pavements are not subject to rutting, punching, and dry turn ripping and shoving the way asphalt pavements are.

We've Done This Before:

- FLL Terminal 4 Apron

## AES Facility Expansion

### Project Understanding

The FXE Aviation Equipment Service (AES) building was completed in 2011 and houses the maintenance staff offices, locker rooms, equipment storage, and maintenance bays. The Airport needs additional space for equipment storage and for emergency operations after storm events. The Airport may also consolidate its Airport Rescue and Fire Fighting (ARFF) operation into the facility. Building 'E' may face demolition soon and the storage space lost could be mitigated by an expansion of the AES.

#### City's Needs

- Facilities to store and maintain a fleet of maintenance equipment used on the airfield
- An operations center for airport employees operating during emergency conditions

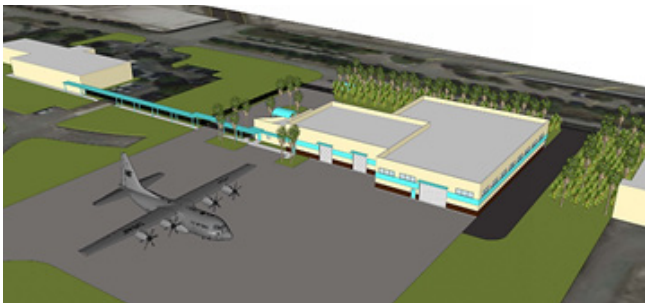


### City's Goals and Objectives

- Leverage the current AES facility to increase capacity with minimum additional investment.
- Anticipate future uses of the facility in the expansion design.

### Our Approach

As your current general engineering aviation consultant, HDR has led the conceptual design process for the AES expansion. We anticipate that we will create the construction documents under the current GEC contract and follow through with construction phase services as part of the next GEC contract. We will keep our Maintenance Design Group involved in the construction phase, a specialty design studio within HDR that focuses solely on transportation maintenance facilities. However, all construction administration will be led locally by your local HDR partners. Having a team of national experts supporting local project managers means you get the benefit of the best technical resources with the client service only a local partner can provide.



**AES Facility Expansion - Conceptual Design Rendering (Looking NW)**



**AES Facility Expansion - Conceptual Design Rendering (Looking NE)**

We've Done This Before:

- FXE AES Facility Expansion – Conceptual Design
- FXE Administration Building Renovation and Expansion

### Other Potential CIP Projects: FY 2019- FY 2022

#### Taxiway E Pavement Rehabilitation

Our Deputy Program Manager, Cody Parham, was the Engineer of Record for the shelved design of this project. We anticipate a need to update the phasing plans per the most recent FAA construction safety and phasing advisory circulars. HDR is prepared to deliver the project updates in the most efficient way due to our comprehensive knowledge and understanding of the project.

#### Runway 9-27 Extension Environmental Assessment (EA)

Our teammate, Ricondo & Associates, has a proven track record of shepherding EAs involving runway extensions to positive outcomes. Our institutional knowledge of your airport and the NEPA process



**Other Potential CIP Projects for FY 2019 - FY 2022**



means you have the most knowledgeable and experienced team guiding your critical expansion process.

## Runway Guard Light (RGL) Program

FXE has significantly reduced the occurrence of incursions on its airfield in the past decade. We will make sure that trend continues by implementing RGLs at vulnerable taxiway intersections.

## Taxiway C Demolition and Apron Development

Developable land on the airfield has virtually disappeared. With the opening of the Customs Facility on Taxiway G, the area adjacent to Taxiway C is poised for development.

## Navigation Easements

With the extension of Runway 9 comes a new RPZ and required land protections. Our Florida-based Real Estate team has served the FDOT for years in Broward County. Our experts know your community and we are best positioned to address the legal and logistical challenges you will face.

## Taxiways G and N Pavement Rehabilitation

Per the FDOT's Pavement Management Program, portions of Taxiway G will need rehabilitation in the near future. Our program manager, Joe Sawmiller, specializes in pavement evaluation and rehabilitation. His Deputy Program Manager, Cody Parham, led the past two pavement inspections at your Airport and has managed seven FXE pavement rehabilitation projects to date.

We pledge to take every aspect of the aforementioned projects (and/or all of those assigned to us) with the needs of the City and other end-users in mind. Our efforts will focus on providing professionals who understand and appreciate airport operating systems and facilities with the knowledge of operational and regulatory requirements, technical expertise, quality standards and safety practices in the interest of providing best value for public expenditures, satisfying the budget and schedule objectives.

## Overall Approach to Design and Construction under GEC Contracts

You are seeking a team under this contract to expeditiously complete projects while providing high quality design work products that result in maximum value and benefit to your operation, as well as minimal requests for additional information during the bidding and construction phases. The HDR Team will implement the following project approach to ensure adequate collaboration and coordination among FXE staff, project stakeholders and our project team so each project can be developed efficiently, effectively, and all required permits can be obtained prior to commencement of the bidding

phase. If schedule constraints warrant acceleration of the design, our team will be flexible on this approach with a firm understanding, again, that one size does not fit all.

As we begin each new assignment under this GEC contract, Joe Sawmiller will meet with City / FXE personnel who may have specific needs through this contract, to perform a "Task Order Initiation / Discovery." The purpose of this initial step will be to gain a full understanding of the particular assignment, from a broad-based understanding of the scope, funding sources, stakeholders, to confirmation of the schedule drivers and unique skill sets or capabilities required from the onset. This information will allow us to prepare / finalize specific task order scopes and fees more efficiently, using the most appropriate HDR and Team Partner personnel that may be required for the assignment. The importance of a well thought out Task Order Initiation / Discovery process is critical to avoiding miscommunications or omissions in the Scopes and Fees that place specific objectives that you wish to meet at risk. Having administered more than fifteen Aviation GEC contracts in Florida throughout his career, Joe has the necessary background and experience to immediately respond to the highly specific and sometimes unique / specialized challenges of an aviation facility.

Our overall approach to the design and construction of your projects will be implemented in the following phases:

- Project Definition and Due Diligence
- Preliminary Design (30% Design)
- Design Development (60% Design)
- Permit / Construction Documents (90% Design)
- Final Construction Documents (100% Design)
- Bidding and Award
- Construction

An overview of these ensuing project phases, including key elements, are presented below.

### Project Definition and Due Diligence

Once a project is clearly defined, Joe will develop a Project Management Plan (PMP). Among other items, the PMP will include project background information, a copy of the project scope and assumptions, a detailed work breakdown structure, a project communications plan, and a detailed critical path schedule. The PMP will document overarching project requirements so that the project team is working toward the same objectives. This phase will also include review of existing data, topographic surveys, pavement inspection and evaluation (as applicable), and any surface and/or subsurface investigations deemed necessary to provide the basis of data and information to be used for schematic design.

**Review of Existing Data:** We will review pertinent available record drawings from any previous relevant projects within the project work areas including original design documents and any modifications that have been completed. We will also collect information from the City regarding historical and forecasted aircraft operations in the

project areas to be used for pavement designs and life-cycle analyses. Additional information, such as photographs, inspection records, and testing reports, will also be compiled and reviewed if available. We will use this information to expedite the site reconnaissance and design process.

**Topographic Survey & Subsurface Utility Engineering (SUE):**

Topographic survey and subsurface utility engineering (SUE) for the project will be performed by Keith & Associates (unless otherwise performed by the City). During the project definition phase and data collection, HDR will work with the City to determine the amount of existing topographic survey and underground utility information on-hand that can be incorporated into the project and create a plan to obtain the necessary additional surveys. The plan will address project survey and SUE requirements, required standards, field access times, and phasing. We will work with FXE staff to ensure that our plan meets your standards and requirements for field access.

**Site Reconnaissance, Inspection and Evaluation:** A site / infrastructure inspection and evaluation will be performed to determine the limits and methods / strategies for each project, as well as general utility locations, drainage considerations, environmental considerations, and other pertinent physical features / infrastructure. Presumably, this effort will be used to supplement data that has already been collected or produced. FXE staff will also be involved to facilitate the inspection / evaluation process.

**Surface / Subsurface Investigations:** Geotechnical investigations for the project will be completed by Tierra South Florida, a South Florida firm specializing in geotechnical engineering, geotechnical drilling, construction materials testing, and laboratory testing. It is anticipated that geotechnical investigations for this project will be used to supplement other relevant data collection and investigations, as well as to provide required input for pavement and structural designs. During the project definition and due diligence phase, HDR and Tierra will coordinate any destructive investigations with SUE data to avoid potential utility conflicts.

**Non-destructive deflection testing (NDT)** and / or ground penetrating radar (GPR) may also be recommended during this phase, depending on the nature of the project. If deemed necessary, we will seek and obtain requisite approval from the City for desired service provider(s).

## Preliminary Design (30% Design)

During this phase, HDR will develop preliminary drawings, an outline of project specifications, and a preliminary Engineer's Report. We will also prepare a preliminary cost estimate and schedule for the City's review. The primary goals of this phase are to develop site investigation plans, meet with project stakeholders and present schematic design alternatives. Additionally, particularly for pavement projects, various pavement rehabilitation alternatives will be developed and presented in a Project Alternatives Report for Airport staff to review and determine which of the recommended alternatives

they wish to proceed with. The final project meeting of the Preliminary Design Phase will be the 30% Design Review Meeting. Major changes to the design scope after this stage can potentially impact the project schedule and budget. This phase will culminate in the preparation of a comprehensive design technical memorandum to be presented to the Airport staff. This memorandum will serve as the detailed and specific basis for all subsequent design. In addition, a preliminary construction cost estimate will be prepared to determine relative conformance with the anticipated project budget.

Through our recent FXE project experience, our team has learned the critical nature and importance of developing design packages that are complete and suitable for the City's Development Review Committee (DRC) meetings / evaluations. These meetings are conducted bi-weekly throughout the year and appropriate review / response periods must be factored into project design schedules. To that end, we understand a Preliminary Development Meeting may be requested to obtain certain information for proposed projects, to help guide discussions during meetings, and to identify any questions or comments from the initial introduction of a project.

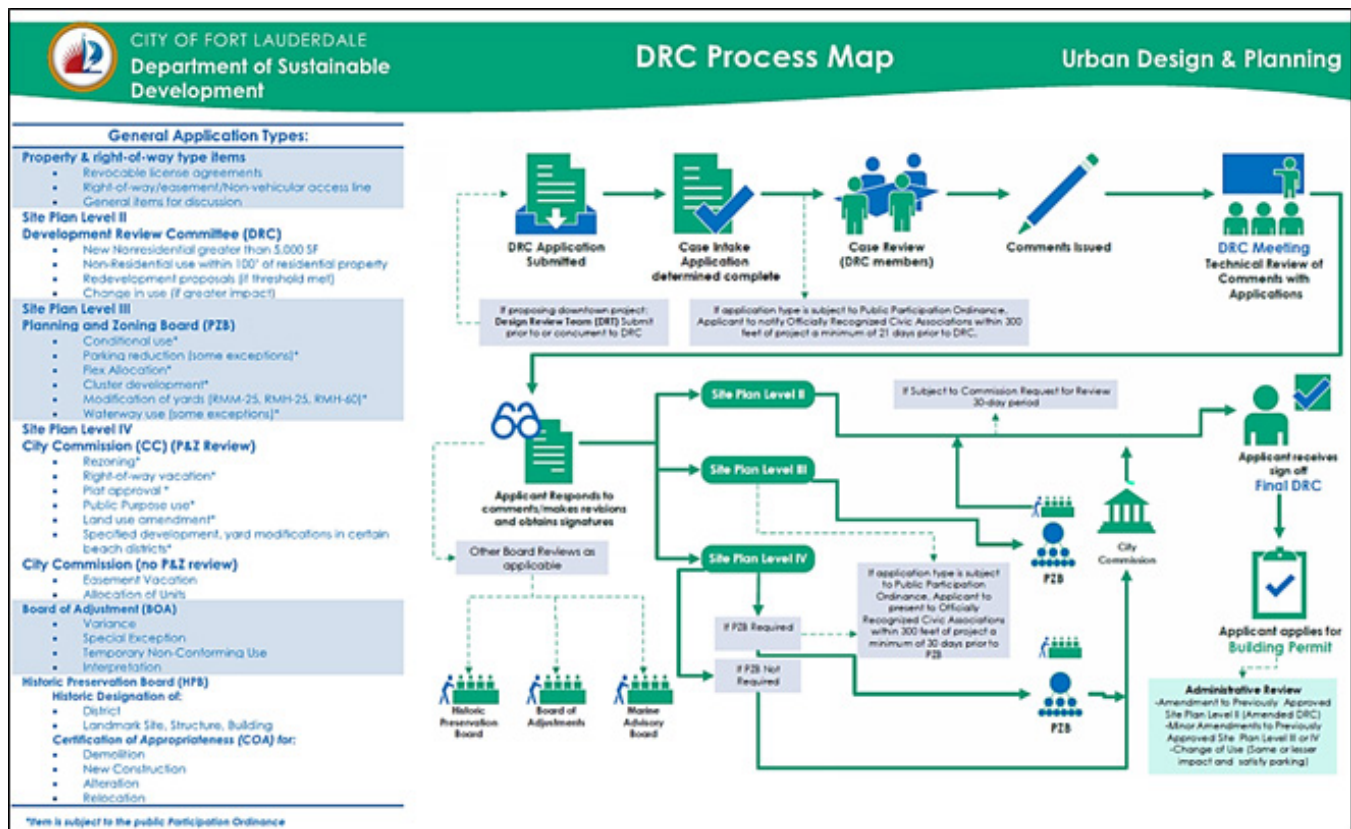
**The DRC process is shown on the following page.**

The preliminary / schematic design report will document (applicable) data collection activities, design and / or rehabilitation strategies, drainage and permitting conditions, airfield lighting & signage considerations, and other standards or code requirements. The report will include exhibit drawings to identify design concepts and rehabilitation alternatives for review by the City. HDR will review the project schedule and budget, and prepare updates based on the findings of this Report.

## Design Development (60% Design)

Upon receipt of the City's review comments on the 30% design documents, HDR will incorporate any necessary changes or considerations to comply with the requirements. For the 60% design, HDR will progress the design by refining the plans, specifications, and Schematic Design / Engineer's Report, including general information and specific disciplines. At the completion of 60 percent, the major components of the design will be essentially completed to allow for any necessary permitting, DRC reviews, and more detailed / refined cost estimating and construction scheduling. Regular coordination meetings and presentations will be held to ensure the project proceeds in accordance with HCAA goals and objectives.

**Construction Phasing / Sequencing:** Minimizing impacts to airport operations during construction—in conjunction with obtaining a high-quality finished project—are important goals of the City and our project phasing plans. FAA AC 150/5370-2G, Operational Safety on Airports During Construction, provides guidance for airport operators to implement procedures to increase safety during construction. During the 60% design phase, we will meet with stakeholders to commence development of construction sequencing and phasing plans. Construction of select projects may require nightly closures



of certain areas—however, these areas will be reopened each morning. Some work may also occur during daylight hours without requisite closures.

On the Terminal 4 Apron Civil Works project at Fort Lauderdale-Hollywood International Airport, completed by HDR, the major limiting factor for the project was that all proposed construction must be completed while maintaining operations to the existing terminal and concourse. We designed the project and displayed aircraft movements in relationship to construction work zones utilizing AutoCAD Civil 3D. We then sought construction sequencing input from the construction management team and added construction scheduling activities and milestones to the 3D environment, creating a 4D simulation. The team used this 4D simulation in several phasing workshops held with client and stakeholders to determine a better construction phasing approach. Stakeholders could easily see how everything would fit together during construction.

A similar approach to reducing impacts to operations through researching alternatives will be applied to construction phasing for this Program. We will employ our proven method of creating phasing plans that set forth operational constraints and performance requirements for the contractor. Our phasing plans will identify work areas and their restrictions, yet will still allow the contractor some flexibility to adapt to preferred construction methods while maintaining appropriate operational controls. This approach varies from traditional phasing plans that prescribe exact time frames and requirements for the contractor. We believe this approach helps foster a team atmosphere by allowing the contractor to have creative input before the project begins. The contractor will also be able to

incorporate specific work methods into the construction phasing.

## Permit / Construction Documents (90% Design)

Upon receipt of the City's review comments on the 60% design, HDR will incorporate any necessary changes or considerations to comply with the requirements. The 90% design will include updating the 60% design drawings and specifications by incorporating more details into the drawings to essentially complete the project design. The documents submitted to the City at this point will include all plans, sections, details, and specifications necessary for bidding. HDR will also submit the final construction phasing / sequencing and Engineer's Report in accordance with the appropriate requirements.

**Safety Risk Management (SRM):** In accordance with FAA AC 150/5200-37, Safety Management Systems for Airport Operators, and FAA Order 5200.11, it is possible that the FAA will require a Safety Risk Management (SRM) panel be formed and a Safety Risk Management Decision Memorandum (SRMDM) be developed for select projects. If required, we will prepare documents and participate as required in the SRM process. The FAA defines the SRM as a "formalized approach to safety" and through the Advisory Circular and Order outlines procedures for identifying, analyzing, assessing, and mitigating risks during a construction project. SRM workshops are held with stakeholders to identify risks associated with the project. The risks are categorized into high, medium, and low categories. High risks are considered unacceptable; medium risks may be acceptable with mitigation; and low risks are typically acceptable. Through the workshops, programs, policies, and procedures are put



in place to mitigate the risks.

Although non-certificated airports are not required to set up their own Safety Management System (SMS), they are required to participate in the safety risk management process when planning and developing projects or changes on their airports. Our team has experience with the SRM process, having participated in workshops for recent airfield projects at Fort Lauderdale-Hollywood International Airport, and Miami International Airport. Our team will bring this valuable experience to you for this project.

Constructability reviews will also be performed at this time to ensure all required information as it pertains to base maps and construction control are complete and clear. The 90% Design Documents will be resubmitted to each regulatory agency in order to obtain final permit approvals.

**Construction Management Plan (CMP):** All construction projects that include paving work in excess of \$250,000 are required to develop a CMP in accordance with the FAA Airport Improvement Program (AIP). The CMP details the measures and procedures required for compliance with the QC provisions of the construction contract. The AIP sponsor is required to submit a copy of the CMP to the FAA for review and approval prior to issuance of the construction notice-to-proceed. After the 90% design is approved, our project manager, lead airfield engineer, and materials testing personnel will collaborate with City staff to develop a CMP, as needed. The CMP will comply with FAA and City format and content requirements.

## Final Construction Documents (100% Design)

During this phase, the design documents are further refined to ensure that the overall design intent is clearly depicted and described to potential bidders. The final bid item list is created, reviewed for conformance with Technical Specification and Contract Documents and provided to the City of Fort Lauderdale Purchasing staff for review and approval. The HDR Team will continue to work closely with all project stakeholders during this phase to ensure that all administrative and technical requirements are complete so that the bidding phase can be completed in an efficient and timely manner.

## Bidding and Award

In preparation of the final bidding documents, the HDR Team will work closely with FXE and City's Purchasing Staff to ensure a seamless integration of any City provided "front end" documentation which may include the appropriate Division 1 documents, Contract and all other required City legal documents. HDR will review and provide suggested revisions to these documents to ensure that there are no conflicts with other contract documents. We will also ensure that required permit documentation and any other supporting information (i.e. site investigation reports) are provided to Purchasing for inclusion in the bidding documents.

During the bidding process, HDR will perform standard bidding assistance procedures including responding to bidders' questions and preparing any required addenda. Questions raised during bidding will be recorded and responded to in writing to maintain a complete record. HDR will also assist with the pre-bid meeting as requested by the City. Once bids are received, our team will review them with the cost estimator and conduct a risk assessment and probability analysis. This analysis will be performed to compare the bids received against each other and against the engineer's estimate to identify peculiar and/or unbalanced unit costs or irregularities. Based on the analysis, we will then prepare a recommendation of award to the City. After the award is approved by the AAB and contracts are signed with the contractor, HDR will prepare conformed documents incorporating the bid documents, changes made via addendum, and contractual documents for use during construction.

## Construction Phase

Before the construction phase begins, the HDR team will assist the City in preparing for a pre-construction conference with the general contractor, subcontractors, and project stakeholders. This session will establish construction procedures including phasing, reporting procedures, and other requirements. Once construction begins, the project manager and appropriate staff will attend weekly construction meetings, coordinate support services, regularly visit the site, and respond immediately to issues. Our key personnel are located in Fort Lauderdale and are readily available to attend



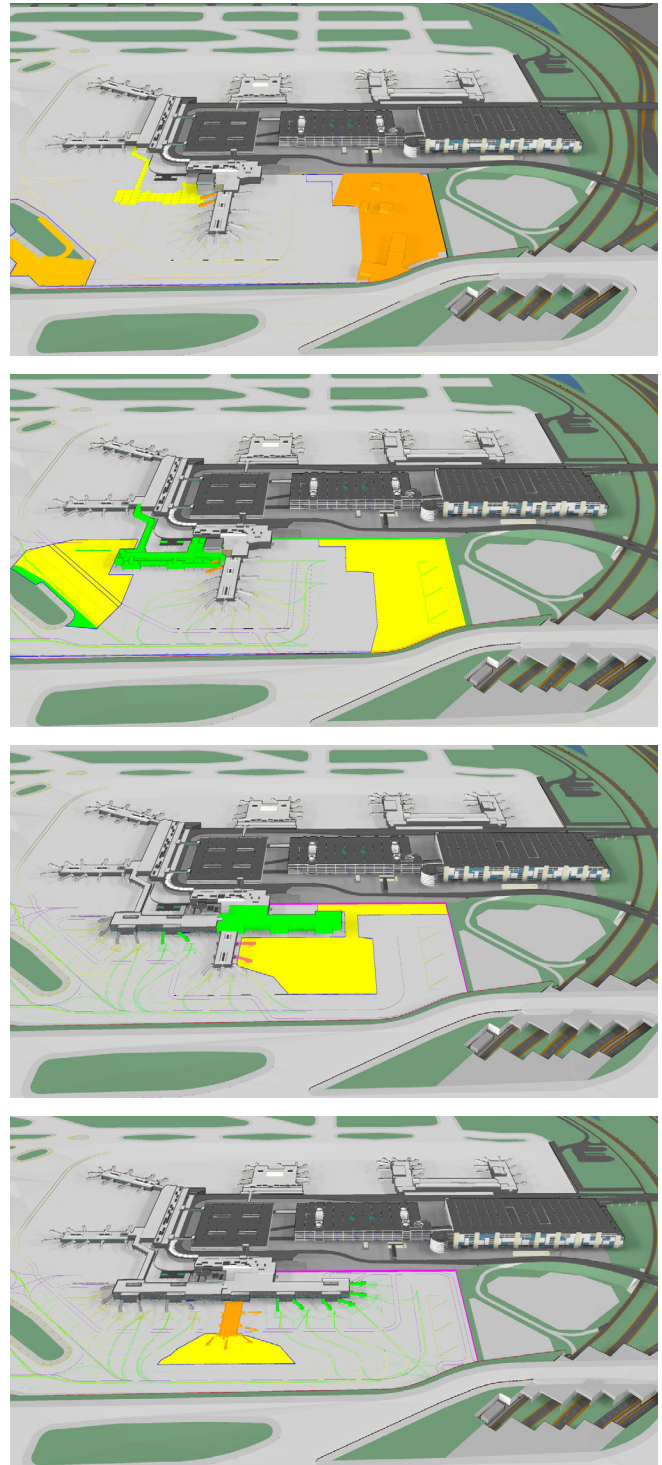


meetings and/or construction site reviews.

Prior to performing any work on the airfield, the contractor is required to submit a contractor's safety plan compliance document (SPCD) in accordance with AC 150/5370-2G, Operational Safety on Airports During Construction. HDR will review and provide appropriate comments on the SPCD before the contractor is allowed to work on the airfield. HDR will review shop drawings and pay requests in a timely manner and coordinate the review with City staff. To track submittal status, HDR will maintain a submittal log that will include the receipt date, date processed and forwarded to the City, and disposition. Contractor requests for information will be addressed promptly with a log maintained for records. During construction, we will follow the City's standard procedures for communication and document control.

We will closely monitor the contractor's schedule during construction. If schedule slippage occurs, we will coordinate with City / FXE staff and the contractor about getting the project back on schedule. We will meet at the construction site to discuss why the schedule is slipping and work with the contractor and owner to facilitate getting the project back on schedule. Design team members will periodically visit the site and observe construction status. Upon substantial project completion, the HDR team will prepare a punch list of items not yet complete or satisfactory. The design team will monitor completion of these activities and will assist in determining and documenting the condition and date of final completion. The HDR team, accompanied by City / FXE staff, will participate in final inspections.

Our materials testing subconsultant, Tierra South Florida, will perform QA testing if / as required by the construction specifications. They will perform necessary testing for earthwork, base materials, and pavement as required by FAA and/or requested by the City. The Tierra testing laboratory contains all certifications required by FAA for construction materials testing. Our team will also provide full-time construction inspection / resident project representative (RPR) in accordance with the RFQ, if requested by the City.



***The above 3D renderings illustrate the construction phasing for the Terminal 4 Apron Improvements at FLL. Though not all phases are shown above, this gives you an example of how HDR applies our simulation tool to communicate our phasing plan to all stakeholders.***

## Project Management Approach



Our approach to each and every task order undertaken is geared towards the successful implementation and completion of projects that are anticipated to be implemented at FXE. This begins with the development of a Project Management Plan (PMP), which is comprised of an Operations Plan, Communications Plan, Production Plan, and QA/QC Plan, and is based on early identification and resolution of project issues and meeting established goals.

### Operations Plan

- ➔ Track and monitor scope, budget, and schedule
- ➔ Accurate and timely invoicing
- ➔ Project reporting that includes project updates to FXE PM and stakeholders
- ➔ Manage project and documents through ProjectWise file management system
- ➔ Establish and define project goals and expectations with subconsultants

The Operations Plan integrates tracking and monitoring of the approved scope, budget, and project schedules for each Task Order and defines requirements for invoicing, document control, and subconsultant management. An Action Item Checklist is used as a management tool to track the project Team's responsibilities and due dates.

Task leaders monitor the progress of Team members on a regular basis. Completion is tracked and compared to the baseline schedule; and corrective actions are taken to manage the schedule requirements, when the need arises.

### Communications Plan

- ➔ Define project roles and responsibilities
- ➔ If necessary, create project SharePoint site for individuals without ProjectWise access
- ➔ Establish a communication protocol

The communication plan identifies the relationship of all key project stakeholders, and establishes the protocol for Team communications and documentation. Typically, a primary and secondary point of contact will be established for both the client and HDR, and all communications will be via that single conduit, thus eliminating duplicitous or contradictory communications and directives and ensuring that all decision documentation is collected, stored, and acted upon as appropriate.

### Production Plan

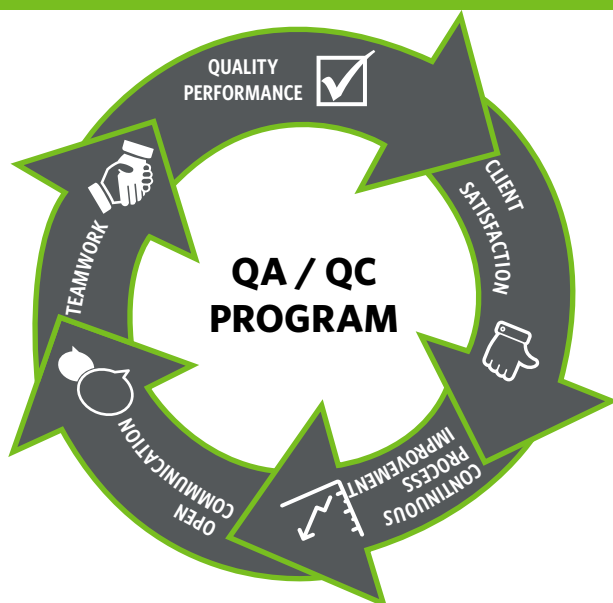
- ➔ Establish task scope and goals
- ➔ Assign appropriate staff
- ➔ Establish CADD standards

The production plan identifies the task scope, task staffing plan, CADD standards (if appropriate), project schedule and critical path, and any other key assumptions, concerns, and risks to be addressed. The staffing plan assigns appropriate personnel who are matched to the unique requirements of each Task Order, utilizing HDR's work planning tools to manage staff workload and availability, as discussed above. For more complex projects, the production plan includes, or

incorporates by reference, a basis of design document. The basis of design provides an accounting of the appropriate design codes, methodology, and driving design assumptions and conclusions as a record of project development. Typically, where utilized, the basis for design will be developed as a standalone deliverable for client review, comment, and approval, and will serve as a living document for the duration of the design phase of the project.

## QA/QC Plan

- Conduct independent, technical, and constructability reviews
- Use of QA checklists
- Ensure quality of technical disciplines and electronic / CADD standards compliance



HDR's management is committed to excellence through the promotion of quality-oriented processes that continually improve the service we provide to clients. HDR staff is knowledgeable regarding policies and procedures and client and industry design standards, as well as Federal, State, City, and County requirements. All deliverables will be submitted after undergoing thorough quality control reviews by appropriate engineering staff. This process will be led by our Quality Manager, Joe Grubbs, PE.

As part of our Program Management Plan, our Team submits a detailed Quality Control and Quality Assurance (QC/QA) Plan that is tailored to meet client and project requirements, and the approved plan will be documented in the Project Guide. The HDR QC/QA Team will perform structured, independent Quality Control Reviews of the work at each milestone. The QC/QA Plan includes the following key components:

- Annotated or highlighted originals of the milestone comments will be returned with the disposition of all comments. A copy of the marked-up quality control file check set(s), as well as

written verification of QC reviews and QA inspection reports, are submitted to the Project Manager. QC/QA audits are performed and these also include verification that subconsultants are adhering to Project QC/QA plans.

- HDR's standard QC/QA Plan includes extensive use of standard "Checklists" for reviews at each milestone, called the "Intra-Design Review" and "Inter-Design Review." An "Intra-Design Review" is performed by senior professionals in the same discipline, and an "Inter-Design Review" is performed by senior professionals in different disciplines to identify and resolve potential conflicts among disciplines.
- The QC/QA Review also includes drafting and electronic drawing files to check that our Team's drafting services and drawings are consistent with the client's CADD requirements, as applicable.

## How Will Our Approach Benefit You?

Successful projects are the result of using experienced and highly-skilled professionals who have excellent communication, planning, and organizational skills—and who are personable, flexible, can work as a team, and see the big picture. Our approach will be to provide individuals to augment City staff who have these characteristics and can blend in seamlessly with the culture and environment currently enjoyed in Fort Lauderdale. These staff are available and ready to partner with you.

We will effectively serve you using the following key attributes:

- **Effective Partnering:** We will provide staff who will establish a strong partnering and team building relationship with all parties involved to maximize participation and cooperation.
- **Selecting the Best Expertise:** We commit to providing our very best staff to you. Joe Sawmiller and Cody Parham will be responsive to you and give you the resources you need.
- **Quality Assurance:** We will implement a Quality Control / Assurance Plan with procedures that help ensure all work fully meets the City's functional, quality, and budget directives.
- **Value Engineering:** We have decades of experience with the design and construction of fast-track airside/landside projects including pavement rehabilitation and expansion, underground utilities, building/facility expansions, lighting/electrical installations, NAVAIDs, demolitions, owner-tenant projects, and aircraft hangars/FBOs. We have a unique record in many of these project types in Fort Lauderdale—and throughout Florida, North America, and worldwide. We will bring best practices from this depth of experience to the City.

- **Strategic Consultation:** We will consider all required activities with a strategic mindset aligning efforts with the support of the City. We will look beyond the obvious and immediate and provide solutions that respond to changing needs, business strategies, and goals of the City.

## Inherent Constraints and Risks – How Will We Overcome These?

At HDR, outstanding client service is our number one priority, and we will do whatever it takes to earn your trust. In line with this, we

also recognize that constraints and risks are intrinsic to professional services contracts—and GEC contracts are no exception. We understand the fundamental importance of good chemistry and cohesion between our team and you, the client, and, although we anticipate very strong, harmonious, and collaborative relationships between our team and the City, we are ready to address and resolve any issues that could potentially arise so we can provide the very best level of service to you.

Below are some of these potential risks / challenges and our proposed solutions:

POTENTIAL CHALLENGES	HDR SOLUTIONS
<b>Staff fitting into a blended management team.</b> One of the potential risks is that selected individuals are unable to fit within the culture and team environment in Fort Lauderdale.	We have selected HDR staff with “can-do” attitudes who are energetic, flexible, open minded, and have a record of successful project delivery at numerous locations. These individuals are team-focused and understand the importance of good communication and engaging colleagues and stakeholders at all levels.
<b>Working on an accelerated program with components already underway.</b> How can we ensure staff will be able to adapt?	We have nominated staff for this assignment who are familiar with FXE, the City, and who are local, experienced, diligent, energized, and willing to “take it, run with it, and make it happen”.
<b>Consistency of Staff.</b> What happens if a nominated HDR individual is unable to complete his/her assignment with the City?	We will first limit this risk by allocating only high-quality staff who have already made a firm commitment to serve the City. This makes significant strides toward assuring staff continuity. However, if unforeseen situations arise where staff cannot complete their assignment, HDR has tremendous depth of staff resources that can be drawn from within our company and from our parent organizations. The staff count of these sources is approximately 10,000 individuals—many of whom are specialists in airport and infrastructure projects.
<b>Work Scope Changes and Staff Qualifications.</b> What happens if the work scope changes midstream in an assignment and the nominated HDR individual lacks the necessary skills to complete the work?	We will augment (or replace) the staff person with another who meets the needs and expectations of the City. If necessary, we will also allocate other HDR assets to you to fulfill the Task and work authorizations. We pledge to deliver!
<b>Risks of Delay.</b> Overlapping schedules for deliverables, separate work packages, ongoing airport operations, and separate phases all create potential for risks of delay. How can these be managed?	Risk management is a specialty of HDR. Our staff are trained and experienced to focus on deliverables and to “work to the plan.” We will ensure initial risks are identified, that these risks are mitigated, that collateral impacts are recognized (both for cost and schedule), and that conflicts are addressed and carefully managed.
<b>Loss of Control.</b> How can we avoid having staff lose control on fast-track, multi-submittal, multi-work package, multi-phased projects?	We will provide staff with lean-focused and responsive traits. We train staff to provide clear and concise management in sufficient detail to clearly focus on submittal timing, the content of the work packages, and coordination with other work and stakeholder needs.

In summary, HDR understands your issues. We know you want value, effective conflict resolution, and that commitment is paramount as we work hand-in-hand with you. We know you want staff who can work harmoniously with you. We also understand that a commercial focus is important and, at the end of the day, the City must act as a business. We will commit to this tenet.



## Scheduling Methodology

Project success will be measured by the HDR Team's ability to comply with schedule and budget considerations for each project. The Operations Plan integrates tracking and monitoring of the approved scope, budget, and project schedule for each Task Order and defines requirements for invoicing, document control, and subconsultant management. An Action Item Checklist is used as a management tool to track the project Team's responsibilities and due dates.

Work Breakdown Structure (WBS) is developed to manage budget and schedule, identifying individual tasks, each of which is tracked by the Project Manager working directly with the task manager to insure timely and on-time budget completion of individual project parts.

Microsoft Project or Primavera software will be used to establish the master project schedule in accordance with the WBS so that cost, schedule, and responsibility can be integrated into each work element for budgeting and monitoring purposes. Detailed Task Breakdowns, including hours per task, provide a straightforward means of tracking the progress of the total scope and budget as well as the budget for each individual task, and also provide essential information necessary for determining the project's critical path and for reporting project status.

Below is a sample baseline schedule which we will develop in more detail when we meet with FXE personnel and stakeholders to identify and prioritize activities in order to further define overall project objectives, review existing site data, and perform a general review of the entire project site.

ACTIVITY	1	2	3	4	5	6	7	8	9	10	11	12
Notice to Proceed	★											
Survey	■											
Environmental Assessment	■											
Utility Locates	■											
*30% Design Plans	■											
30% QA/QC Review		■										
Coordination with Utility Providers		■										
*60% Design Plans		■	■	■	■							
60% QA/QC Review				■	■							
Building Code Services - Dry Run					■	■						
Utility Permit Submittals (BCWWS, Ft. Lauderdale, BCDOH, FDEP)					■	■						
*90% Design Plans					■	■	■	■				
90% QA/QC Review							■	■				
Building Code Services - Dry Run Approval								■	■			
Utility Permit Approvals (BCWWS, Ft. Lauderdale, BCDOH, FDEP)								■	■			
*100% Design Plans Submittal								■	■	■	■	
100% QA/QC Review										■	■	
Provide Bid Documents to Purchasing											■	■
Issued for Bid Documents											■	■

## Current Workload

Given the size of our firm, we have managed literally thousands of active projects within the past five (5) years. As we are proposing this project to be managed out of our Fort Lauderdale and other South Florida offices, the following section will focus on our active and future projects in the South Florida area.

During the past (5) years, our South Florida practice has managed a diverse group of projects from various industries including, but not limited to Aviation, Roadway, Water Resources, Architecture, and

Transportation Planning. Our clients include Broward County Aviation Department, Broward County Highways and Traffic Department, Florida Department of Transportation, Miami-Dade County, and The South Florida Regional Transit Authority. As such, our South Florida Offices have multiple projects that occur concurrently.

Under the direction of the Project Manager, we typically assign Task Leaders to manage individual Work Authorizations. These Task Leaders are assigned based on their ability to manage the technical aspects and become the HDR primary manager for the project. Based on the size, complexity and schedule – task leaders may be assigned

multiple Work Authorizations working concurrently. The Task Leaders have the support of the Project Manager and are assigned resources necessary to efficiently and responsibly advance the project. In the rare case that an issue was to develop with assigned staff, HDR has stepped in quickly to make the personnel adjustments necessary to get the project back on track and insure the Client that we are dedicated to serve and meet their expectations as a trusted advisor. In the instance that we were to need additional technical support from within HDR, we have a large network of available resources that are able to contribute immediately. If the project support is best served by local resources, HDR has a team of trusted and professional subconsultants that in addition to our in house staff that are available at a moment's notice. Our well-established history of working together allows for quick adjustments when negotiating additional scope. Being a large firm allows us to allocate the necessary resources to complete concurrent project(s) in a timely manner while maintaining of high level of quality and customer service that our clients expect. Below is a table depicting our current South Florida workload:

**HDR South Florida Current Workload**

CLIENT	PROJECT NAME
City of Fort Lauderdale	<ul style="list-style-type: none"> <li>Master Plan Update</li> <li>General Engineering Aviation Consultant</li> <li>Stormwater Master Plan (Sub to Hazen and Sawyer)</li> </ul>
City of Pompano Beach	Pompano Beach Airpark General Engineering Aviation Consultant
Palm Beach County Department of Airports	PBIA Airfields Design Services
Miami-Dade Aviation Department	General Engineering Consultant
Broward County Port Everglades	Slip 1 Expansion
Florida Department of Transportation District 4	<ul style="list-style-type: none"> <li>82nd Ave Route Construction</li> <li>DW Bridge Design Services</li> <li>I-95 at Broward Blvd PDE</li> <li>Wave Modern Streetcar</li> <li>Districtwide Plans Review</li> <li>I-95 Phase 3 Corridor Design Consultant</li> <li>Districtwide Minor Projects</li> </ul>
Florida Department of Transportation District 6	<ul style="list-style-type: none"> <li>General Engineering Consultant</li> <li>SW 1st Street Bridge Replacement</li> <li>DW Bridge Design Services</li> </ul>

The HDR team of seasoned experts identified in this proposal were hand-picked to serve you—and they will remain fully committed to you and this program throughout its duration. We are very excited to continue our effective partnership.

## Our Facilities, Technological Capabilities, and Available Resources

For your projects, HDR's Fort Lauderdale Office, located at 3250 West Commercial Blvd.--a few short minutes from FXE--will serve as the principal production center supporting this contract. This growing, full-service HDR office, equipped with state-of-the-art industry technological capabilities—including videoconferencing and computer workstations and mobile tablets equipped with sophisticated geospatial, 3D & 4D modeling and simulation software--also serves as HDR's Southeast Aviation Center of Excellence, and will provide you a deep reservoir of Aviation talent combined with front-line access to a very large network of professionals ready to support your projects as-needed.

Over ninety-five (95) percent of the work on this contract will be performed in Fort Lauderdale. Nevertheless, we will access other HDR resources as may be required to best execute the different project assignments. HDR's presence in South Florida has afforded us many years' experience satisfying the unique and specific requirements of our clients. Our key and support staff, a vast majority of whom reside in South Florida, truly understand the local needs of the City. For many years, we have been fortunate to have participated in the ongoing development throughout Fort Lauderdale and South Florida (including the last four years as your General Engineering Aviation Consultant) and we're very excited about the opportunity to assist you with your future plans for FXE.

HDR's Program Principal, Tim Fish, is committed to ensuring our Program Manager, Joe Sawmiller, has the resources available to complete your projects and provide superior service to you. Tim will also keep in contact with you to ensure you are receiving the high quality service expected of us. Joe will be the chief point of contact for this on-call contract and he'll be responsible for ensuring the successful completion of each work order task. He will work with the City to determine work/efforts needed to be accomplished and develop scopes and fees for each ensuing work order. Once this is approved by the City, Joe will manage the project--keeping each task order on schedule and within budget. Our QC/QA team, led by Joe Grubbs, will provide input on airport issues using decades of national and international airport experience.

With more than 400 professionals located throughout Florida and 100 in South Florida, we will provide local professional talent for your projects. We will respond quickly and foster relationships to be further developed between our staff and City / FXE staff. We will serve you as a small local firm with personalized service--but with much greater talent and bench depth.

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## References

HDR is proud of the repeat work on our aviation and GEC contracts. Our goal is to exceed all requirements for every task in a way that is responsive, quality, and meets client goals. Below are client references, we encourage you to contact them and discuss our performance.

REFERENCES			
<b>Project Name</b>	Broward County Aviation Department General Engineering Consultant	Palm Beach Department of Airports Airfield Design & Engineering Services	GOAA On-Call Transportation Services
<b>Client Name</b>	Marc Gambrell Broward County Aviation Department 115 S. Andrews Ave. Ft. Lauderdale, FL 33301 Tel: 954.259.2343 mgambrell@broward.org	Gary Sypek Palm Beach County Department of Airports 846 Palm Beach International Airport West Palm Beach, FL 33406 Tel: 561.471.7474 gsypek@pbia.org	Brad Friel Greater Orlando Aviation Authority One Jeff Fuqua Blvd Orlando, Florida 32827-4392 Tel: 407.825.3139 bfriel@goaa.org
<b>Description of Work</b>	HDR provided General Engineering Consultant Services for the Broward County Aviation Department  The range of projects included environmental engineering services; airside infrastructure studies and improvements; safety, security and communication projects; tenant improvements; airport facility refurbishments and improvements; terminal development improvements; landside infrastructure studies; airport development; and airport capital project support.	HDR is providing professional design and engineering services for the rehabilitation of primary parallel Taxiways B and F for Runway 14-32. The project also includes the rehabilitation of the Runway 14-32 shoulders, hot spot mitigation, stormwater, permitting, and upgrades to NAVAIDs.  Our scope of services include program validation, schematic design, design development, contract documents, project management, bidding assistance, and construction administration.	HDR has served GOAA since 1996 as its primary Transportation Planning Consultant. During the past 20 years and four General Service contracts, HDR has served as an extension of staff, addressing on-site and off-site transportation issues, working with GOAA and other consultants, and providing coordination among the numerous local governments and agencies that participate in their decision-making process.
<b>Year the Project was Completed</b>	2018	2018	On-going
<b>Construction Cost</b>	Varies per project (\$5M to \$40M per project)	\$20M (Anticipated)	N/A

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## Minority / Women Business Enterprise Participation

Effectively engaging and utilizing the local talent available in the community is crucial to HDR and our project success. We have assembled our team with local small businesses that we have successfully worked with on past projects.

For our current FXE GEC contract, we've exceeded the 12% DBE goal with a 20% participation from our small business teaming partners. We were able to meet this goal through an aggressive outreach program and by tailoring work packages to match the capability and capacity of our small business partners. We share your goal of creating opportunities for these companies and we will continue to do so.





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# Subconsultants

Our hand-picked specialty subconsultants complement our experience delivering aviation related projects and services. We have enjoyed successful partnerships with ALL of our subconsultants for the past several years. In fact, we have worked with ALL of these subconsultants at FXE and they also bring a multitude of additional relevant experience to you, both at FXE and other airports throughout South Florida.



**AVCON, INC. (AVCON)** is a full-service engineering and planning firm specializing in airports, transportation facilities, and site development projects. With more than 30 years of airport general consulting, on-call services, design and planning experience at more than 80 Florida airports, AVCON's staff of engineers and planners has completed essentially every type of airport project. These projects range from airport master plans and condition assessments to airfield pavement designs, lighting and NAVAIDs, hangar developments, security projects, roadway designs, and utility and storm water improvements. Among a variety of other services, AVCON also provides special services related to airfield lighting evaluation, lightning protection and electrical vault arc-flash and capacity studies utilizing in-house testing equipment and fully-trained staff.

## RELEVANT PROJECT EXPERIENCE AND REFERENCES

<b>Project Name</b>	Continuing Civil Engineering Services at Orlando International and Executive Airports	General Consulting Services - Wauchula Municipal Airport
<b>Client Name</b>	Mark Birkebak Greater Orlando Aviation Authority One Jeff Fuqua Blvd Orlando, Florida Tel: 407.825.4058 mbirkebak@goaa.org	Olivia Minshew City of Wauchula 126 South 7th Avenue Wauchula, FL Tel: 863.773.9193 ominshew@cityofwauchula.com
<b>Description of Work</b>	<ul style="list-style-type: none"> <li>Airfield Pavement Rehab</li> <li>Airfield Lighting</li> <li>GSE Inventory and Management Plan</li> <li>General Electrical Engineering Design</li> </ul>	<ul style="list-style-type: none"> <li>AVCON has provided on-call General Consulting Services to this client since 1996.</li> <li>Services include grant coordination with FDOT and FAA, and other project specific work orders as required by the City.</li> <li>Recent projects include: Rehabilitate, Mark and Light Runway 18-36, PAPI-4, and Obstruction Removal; Extend Hangar Access Road and Modify Retention Ponds; Master Plan Update; Airport Security Fencing</li> </ul>
<b>Year Project Completed</b>	On-going	On-going
<b>Construction Cost</b>	Varies per project (\$5M to \$40M per project)	Varies per project

## Other Relevant Experience:

### Orlando Executive Airport:

- Rehabilitation of Taxiways, Phase 1
- Airfield Miscellaneous Improvements, Phase 1
- Sheltair Aviation Hangars 15 and 16 and FBO

### Zephyrhills Municipal Airport:

- Taxiway B Reconstruction
- Runway 1-19 Improvements
- Rehabilitate Runway 4-22

### Okeechobee County Airport:

- Upgrade Airport Security and Access Control
- Master Drainage Plan Update
- Taxiway A Extension

### Kissimmee Gateway Airport:

- Rehabilitation of Runway 6-24
- SunState FBO Group III Aircraft Storage Hangar and Office
- Taxiway Echo Extension



**Chen Moore and Associates (CMA)** is a multi-discipline consulting firm with offices in Broward, Miami-Dade, Palm Beach, Orange and Alachua Counties. Founded in 1986, CMA specializes in civil and environmental engineering; landscape architecture; planning; GIS analysis and mapping; transportation, streetscaping and traffic improvements; construction administration; wastewater collection, transmission, treatment, reuse and disposal; pump station design and rehabilitation; water supply, treatment, and distribution; stormwater system design and master plans; and modeling and permitting of drainage, water distribution, and sewer collection.

CMA has been providing stormwater engineering services to the Broward County Aviation Department at Fort Lauderdale-Hollywood International Airport since 2008. They have reviewed and verified previous consultants's work, converted the previous SWMM stormwater model to ICPR model; and prepare a stormwater master plan update. In addition, CMA has provided design for a new force main, water main, and gravity sewer at Pompano Air Park and was responsible for all planning, design, and permitting of all stormwater improvements required for the North Airfield Pavements Rehabilitation Project at Fort Lauderdale-Hollywood International Airport.

## RELEVANT PROJECT EXPERIENCE AND REFERENCES

<b>Project Name</b>	FLL Stormwater Master Plan Update Phase 2	FLL North Runway Pavement Rehabilitation
<b>Client Name</b>	Carlos Hernandez Broward County Aviation Department 2200 SW 45th St Dania Beach, FL 33312 Tel: 954.359.2255 chernandez@broward.org	Mike Carey Kimley-Horn and Assoc. 600 North Pine Island Road Ft. Lauderdale, FL 33324 Tel: 954.535.5108 mike.cary@kimley-horn.com
<b>Description of Work</b>	<ul style="list-style-type: none"> <li>• Prepare a Stormwater Capital Improvement Plan for FLL</li> <li>• Certify existing permits at FLL</li> <li>• On-going stormwater permitting assistance to BCAD</li> <li>• Drainage review of various developments throughout FLL</li> <li>• Develop drainage design standards manual</li> <li>• Prepare application package for stormwater conceptual permit</li> </ul>	CMA was responsible for determining the additional drainage improvements that were necessary to handle the additional stormwater runoff from any new impervious pavement areas.
<b>Year Project Completed</b>	2014	2015
<b>Construction Cost</b>	N/A	\$30M



Headquartered in Miami Lakes, Florida, **Cherokee Enterprises** is a privately held firm founded in 1999, by a group of individuals that worked together for over 10 years for a large multinational firm. CEI's founders saw a niche in the market for smaller regional firms that could respond with agility to the needs of local clients while harnessing the breadth of services of larger firms. They work to provide solutions for Clients' environmental needs by filling the gap in the environmental engineering and construction services market. We specialize in tackling some of the most demanding infrastructure improvements offering civil, mechanical and environmental engineering and construction services.

## RELEVANT PROJECT EXPERIENCE AND REFERENCES

<b>Project Name</b>	Miami International Airport Emergency Response	FLL Former National Car Rental Center Remediation
<b>Client Name</b>	Thomas E. Doherty General Manager, Allied Aviation Miami International Airport Fuel Facility 4450 NW 20th Street Miami, FL 33299 305.871.7001	Michael Pacitto Broward County Aviation Department 2200 SW 45th St Dania Beach, FL 33312 Tel: 954.359.6103 mpacitto@broward.org
<b>Description of Work</b>	CEI conducted excavation activities for installation of a new underground double-walled fuel lines, ranging from 12-inch to 30-inch in diameter.	CEI provided remediation services for the former National Car Rental Center at FLL.
<b>Year Project Completed</b>	2016	7/2013
<b>Construction Cost</b>	N/A	N/A

### Other Relevant Experience:

- Pelican Airways Phase I Environmental Site Assessment
- Broward County Aviation Department, Former Budget Rent-A-Car Site Assessment
- Broward County Aviation Department, Phase II Environmental Site Assessment Report at Former Taylor Road, Gulfstream International Airlines and Westside Marina
- Miami International Airport/Allied Aviation Inspections and Reporting of Hydrant Compliance Wells
- Miami International Airport Hazardous Material Removal Contract
- Miami International Airport Emergency Response
- Miami International Airport, Concourse B-C (now D) Remediation and Sewer Line Installation
- MIA Concourse E-Satellite Hydrant Fuel System Modification & Environmental Services
- Fort Lauderdale-Hollywood International Airport, Trails End Remediation
- Fort Lauderdale-Hollywood International Airport Terminal 4 Expansion - Contaminated Soil Removal
- Fort Lauderdale-Hollywood International Airport Terminal 4 Remediation





**Keith and Associates, Inc. (KAI)** was incorporated as a Florida corporation in 1998. As a mid-size closely-knit firm, they provide civil engineering, traffic engineering, surveying and mapping, subsurface utility engineering, planning, landscape architecture, construction management and virtual design and construction services. KAI has completed an array of landside and airside projects at aviation facilities and has provided services including water/wastewater engineering, surveying and mapping, utility coordination, contract administration, Resident Project Representative (RPR) services, construction management, document control, schedule and cost controls and contract close-out certifications. This aviation specific expertise allows our staff to contribute to the successful execution of a variety of projects.

## RELEVANT PROJECT EXPERIENCE AND REFERENCES

<b>Project Name</b>	BCAD General Engineering Consultant	Merritt Island Airport Hangar Improvements
<b>Client Name</b>	Marc Gambrell Broward County Aviation Department 2200 SW 45th St, Dania Beach, FL 33312 Tel: 954.359.2343 mgambrell@broward.org	Michael Powell Titusville-Cocoa Airport Authority 355 Gold Knights Blvd, Titusville, FL 32780 Tel: 321.267.8780 mpowell@flairport.com
<b>Description of Work</b>	As part of the Environmental Remediation Scope of Work CEI conducted excavation activities for installation of a new underground double-walled fuel lines, ranging from 12-inch to 30-inch in diameter.	Keith and Associates provided surveying services for the design of a modern hangar system to replace the last section of small and outdated individual hangars located at the southwest corner of Merritt Island Airport.
<b>Year Project Completed</b>	2016	2017
<b>Construction Cost</b>	Varies	Varies

### Other Relevant Experience:

- Central Base Apron and Utilities Modification and Expansion at Miami International Airport
- Master Drainage Plan at Pompano Beach Air Park
- Hangar Survey at Merritt Island Airport
- Multiple survey assignments at Fort Lauderdale Executive Airport
- GPR for Utility Clearance at Palm Beach International Airport



**Ricondo & Associates, Inc. (Ricondo)** is a full-service aviation consultancy specializing in airport planning and business management services in support of airport owners and operators, airlines, and federal and state agencies. Since its inception in 1989, they have been dedicated to solving the challenging problems facing the airport and airline industries. The firm is owned and operated by its senior officers and has no other business interest except airport and aviation consulting. Ricondo is headquartered in Chicago and has established U.S. offices in Atlanta, Cincinnati, Dallas/Fort Worth, Denver, Honolulu, Miami, Orlando, Phoenix, Seattle, Southern California, Washington, D.C., and also has international offices in Abu Dhabi, U.A.E., and London, England

## RELEVANT PROJECT EXPERIENCE AND REFERENCES

<b>Project Name</b>	General Consultant Services for Boca Raton Airport	Runway and Parallel Taxiway Separation Improvements Environmental Assessment for Florida Keys Marathon Airport
<b>Client Name</b>	Clara Bennett Boca Raton Airport Authority 903 NW 35th St, Boca Raton, FL 33431 Tel: 561.391.2202 clara@bocaairport.com	Donald DeGraw Monroe County 1100 Simonton Street, Key West, FL 33040 Tel: 305.809.5200 Degraw-Donald@monroecounty-fl.gov
<b>Description of Work</b>	Ricondo's role was to update the airport master plan and manage all design services for improvements to this corporate/general aviation airport.	Environmental Assessment (EA) for the proposed improvements to Runway 7-25 and Taxiway A to comply with the FAA Advisory Circular 150/5300-13A.
<b>Year Project Completed</b>	Ongoing	Ongoing
<b>Construction Cost</b>	Varies	Varies



**Tierra South Florida, Inc. (TSF)** is a full-service consulting geotechnical and construction materials testing engineering firm with capabilities to provide test borings, engineering analyses and reports, AutoCAD and Microstation plan sheets, laboratory soils testing, and construction materials testing. TSF's professional team has been working together since 2000 and is committed to providing quality, responsive service establishing a reputation for sound approaches and professional competence in a wide range of technically demanding areas. Their services also include threshold/special inspection and roofing inspection services. TSF is a certified Disadvantaged Business Enterprise (DBE) with the Florida Department of Transportation. TSF is also a certified Minority Business Enterprise (MBE) with the State of Florida's Office of Supplier Diversity. Their main office is in West Palm Beach, Florida with branch offices in Miami Lakes and Altamonte Springs, Florida.

### RELEVANT PROJECT EXPERIENCE AND REFERENCES

<b>Project Name</b>	Taxiway Echo Rehabilitation Project	PBI Runway 10L-28R Rehabilitation
<b>Client Name</b>	Tom O'Donnell Kimley-Horn and Assoc. 600 North Pine Island Road Ft. Lauderdale, FL 33324 Tel: 561.845.0665 tom.odonnell@kimley-horn.com	Dan Tompkins CH2M Hill 14701 St Marys Ln, Houston, TX 77079 Tel: 281.721.8400 daniel.tompkins@ch2m.com
<b>Description of Work</b>	Performed geotechnical exploration, pavement cores and laboratory testing for the rehabilitation which included reconstruction or milling and resurfacing of Taxiway Echo and connectors.	TSF performed a geotechnical study, quality assurance material testing (QAMT), and inspection services.
<b>Year Project Completed</b>	2013	2013
<b>Construction Cost</b>	\$35M	\$42M



**Hilliers Electrical Engineering, Inc.** has been in business since February 1994 and is located in Boca Raton, FL. Our staff offers unsurpassed experience, expertise and personalized service in electrical engineering design and control application programming. Our electrical design services include power, control, instrumentation, telemetry for major air carrier and general aviation airports terminals & airfield electrical & lighting systems, DOT roadway systems, water and wastewater treatment facilities, multi-sports complexes, storm water pumping and control structures, fueling systems and seaport storage and handling facilities for federal, state, county and municipal agencies.

### RELEVANT PROJECT EXPERIENCE AND REFERENCES

<b>Project Name</b>	FLL WP-304/305 Runway, Crossfield Taxiways & Holdpad Paving, Lighting and Signage
<b>Client Name</b>	David Roepnack Broward County Aviation Department 2200 SW 45th St, Dania Beach, FL 33312 Tel: 954.359.1025 droepnack@broward.org
<b>Description of Work</b>	Designed for new Runway 9R-27L (8,000 ft.), (6) taxiways and (19) connectors electrical & lighting systems, included (250) in pavement lighting fixtures and (700) elevated lighting fixtures, guidance signage, (2) FAA MALSF systems, airfield lighting vault electrical and airfield lighting computer control monitoring system modifications, (2) BCAD PAPI systems, (3) wind cones, and power and control distribution ductbank systems for (6) FAA NAVAIDS systems.
<b>Year Project Completed</b>	2016
<b>Construction Cost</b>	\$12M

### Other Relevant Experience:

- PBI Rehabilitation of Taxiway C, Palm Beach International Airport
- PBI Taxiway Alpha Rehabilitation, Palm Beach International Airport
- PBI Construct Taxiway W, Palm Beach International Airport
- Palm Beach County Department of Airports - Runway Signage and Marking Re-Designation Project





City of Fort Lauderdale

Bid 12120-986  
City of Fort Lauderdale  
General Engineering Aviation Consultant  
12120-986

### STATEMENT OF QUALIFICATION CERTIFICATION

**Please Note:** All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit <http://www.dos.state.fl.us/> ).

Company: (Legal Registration) HDR Engineering, Inc.

Address: 3250 West Commercial Blvd, Suite 304

City: Ft. Lauderdale State: FL Zip: 33309

Telephone No. 954.531.7848 FAX No. 954.233.4953 Email: tim.fish@hdrinc.com

Does your firm qualify for MBE or WBE status: MBE        WBE       

**ADDENDUM ACKNOWLEDGEMENT** - Proposer acknowledges that the following addenda have been received and are included in the proposal:

<u>Addendum No.</u>	<u>Date Issued</u>	<u>Addendum No.</u>	<u>Date Issued</u>
<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>

**VARIANCES:** State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. If this section does not apply to your bid, simply mark N/A. **If submitting your response electronically through BIDSYNC you must click the exception link if any variation or exception is taken to the specifications, terms and conditions.**

The below signatory hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid/proposal. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this bid/proposal. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a response, hereby agrees that in no event shall the City's liability for respondent's indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of five hundred dollars (\$500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Tim Fish, PE  
Name (printed)

April 2nd, 2018  
Date:

Signature

Associate Vice President  
Title



City of Fort Lauderdale

Bid 12120-986

City of Fort Lauderdale  
General Engineering Aviation Consultant  
12120-986

**NON-COLLUSION STATEMENT**

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

**Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.**

<u>NAME</u>	<u>RELATIONSHIPS</u>
Not Applicable	

**In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.**



City of Fort Lauderdale

Bid 12120-986

City of Fort Lauderdale  
General Engineering Aviation Consultant  
12120-986

### LOCAL BUSINESS PREFERENCE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the local BUSINESS preference classification as indicated herein, and further certifies and agrees that it will re-affirm its local preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this ITB. Violation of the foregoing provision may result in contract termination.

- (1) \_\_\_\_\_  
Business Name is a **Class A** Business as defined in City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the City of Fort Lauderdale current year Business Tax Receipt and a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.
- (2) \_\_\_\_\_  
Business Name is a **Class B** Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Business Tax Receipt or a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.
- (3) HDR Engineering, Inc.  
Business Name is a **Class C** Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Broward County Business Tax Receipt shall be provided within 10 calendar days of a formal request by the City.
- (4) \_\_\_\_\_  
Business Name requests a **Conditional Class A** classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
- (5) \_\_\_\_\_  
Business Name requests a **Conditional Class B** classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
- (6) \_\_\_\_\_  
Business Name is considered a **Class D** Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. and does not qualify for Local Preference consideration.

BIDDER'S COMPANY: HDR Engineering, Inc.

AUTHORIZED COMPANY PERSON: Tim Fish, PE  
NAME

Tim Fish  
SIGNATURE

April 2, 2018  
DATE

## BROWARD COUNTY LOCAL BUSINESS TAX RECEIPT

115 S. Andrews Ave., Rm. A-100, Ft. Lauderdale, FL 33301-1895 – 954-831-4000

**VALID OCTOBER 1, 2017 THROUGH SEPTEMBER 30, 2018**

**DBA:**  
**Business Name:** TIMOTHY FISH PE

**Receipt #:** 315-782  
**Business Type:** ENGINEER (ENGINEERING FIRM)

**Owner Name:** HDR ENGINEERING INC  
**Business Location:** 3250 W COMMERCIAL BLVD STE 100  
FT LAUDERDALE  
**Business Phone:** 954-647-4542

**Business Opened:** 10/01/2008  
**State/County/Cert/Reg:** 55293  
**Exemption Code:**

**Rooms                      Seats                      Employees                      Machines                      Professionals**

15

For Vending Business Only						
Number of Machines:				Vending Type:		
Tax Amount	Transfer Fee	NSF Fee	Penalty	Prior Years	Collection Cost	Total Paid
45.00	4.50	0.00	0.00	0.00	0.00	49.50

**THIS RECEIPT MUST BE POSTED CONSPICUOUSLY IN YOUR PLACE OF BUSINESS**

**THIS BECOMES A TAX RECEIPT**

**WHEN VALIDATED**

This tax is levied for the privilege of doing business within Broward County and is non-regulatory in nature. You must meet all County and/or Municipality planning and zoning requirements. This Business Tax Receipt must be transferred when the business is sold, business name has changed or you have moved the business location. This receipt does not indicate that the business is legal or that it is in compliance with State or local laws and regulations.

**Mailing Address:**  
HDR ENGINEERING INC  
3250 W COMMERCIAL BLVD STE  
100  
FORT LAUDERDALE, FL 33309

**Receipt #** WWW-16-00156336  
**Paid** 09/26/2017 4.50

**2017 - 2018**



City of Fort Lauderdale

Bid 12120-986  
City of Fort Lauderdale  
General Engineering Aviation Consultant  
12120-986

### CONTRACT PAYMENT METHOD BY P-CARD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to payment by credit card via MasterCard or Visa. This allows you as a vendor of the City of Fort Lauderdale to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

In accordance with Article 7, item 7.4.3 of the consultant agreement attached herein, payments for all services will be made utilizing the City's P-Card program (MasterCard or Visa). Accordingly, firms must presently have the ability to accept credit card payment or take whatever steps necessary to implement acceptance of a credit card before the commencement of the agreement.


Please indicate with which credit card you prefer to be paid:

\_\_\_\_\_ MasterCard

  x   Visa Card

Company Name: HDR Engineering, Inc.

Tim Fish, PE  
Name (printed)

  
Signature

April 2, 2018  
Date:

Associate Vice President  
Title





# CERTIFICATE OF LIABILITY INSURANCE

 DATE (MM/DD/YYYY)  
05/24/2017

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 Willis of Minnesota, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA		CONTACT NAME: PHONE (A/C, No, Ext): 1-877-945-7378 FAX (A/C, No): 1-888-467-2378 E-MAIL ADDRESS: certificates@willis.com	
INSURED HDR Engineering, Inc. 8404 Indian Hills Drive Omaha, NE 68114		INSURER(S) AFFORDING COVERAGE INSURER A: Liberty Mutual Insurance Company NAIC # 23043 INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	

## COVERAGES

CERTIFICATE NUMBER: W2314174

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR VWD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	N	N	TB2-641-444950-037	06/01/2017	06/01/2018	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COM/POP AGG \$ 4,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY	N	N	AS2-641-444950-047	06/01/2017	06/01/2018	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	No	WA7-64D-444950-017	06/01/2017	06/01/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Workers Compensation Statutory - WI	N	N	WC7-641-444950-027	06/01/2017	06/01/2018	Each Accident: 1,000,000 Disease - Pol Limit: 1,000,000 Disease - Ea. Empl: 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Employers Liability for the Monopolistic States of ND, OH, WA, &amp; WY is provided in the Worker's Compensation policy.

## CERTIFICATE HOLDER

## CANCELLATION

For Informational Purposes Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

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ACORD 25 (2016/03)

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SR ID: 14623380

BATCH: 329722

City of Fort Lauderdale

Bid 12120-986

**CONTRACTOR'S CERTIFICATE OF COMPLIANCE WITH  
NON-DISCRIMINATION PROVISIONS OF THE CONTRACT**

The completed and signed form should be returned with the Contractor's submittal. If not provided with submittal, the Contractor must submit within three business days of City's request. Contractor may be deemed non-responsive for failure to fully comply within stated timeframes.

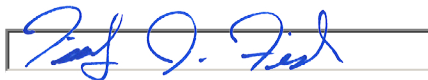
Pursuant to City Ordinance Sec. 2-17(a)(i)(ii), bidders must certify compliance with the Non-Discrimination provision of the ordinance.

- (a) Contractors doing business with the City shall not discriminate against their employees based on the employee's race, color, religion, gender (including identity or expression), marital status, sexual orientation, national origin, age, disability or any other protected classification as defined by applicable law.

**Contracts.** Every Contract exceeding \$100,000, or otherwise exempt from this section shall contain language that obligates the Contractor to comply with the applicable provisions of this section.

The Contract shall include provisions for the following:

- (i) The Contractor certifies and represents that it will comply with this section during the entire term of the contract.
- (ii) The failure of the Contractor to comply with this section shall be deemed to be a material breach of the contract, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.



Authorized Signature

Timothy Fish, PE

Print Name and Title

4/2/2018

Date

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3250 West Commercial Blvd.  
Suite 100  
Ft. Lauderdale, FL. 33014

**hdrinc.com**

We practice increased use of sustainable  
materials and reduction of material use.

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