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February 13, 2014

Ronald Archey, Procurement Specialist
City of Fort Lauderdale City Hall
100 North Andrews Avenue, 6th Floor
Fort Lauderdale, FL 33301

RE: RFQ Number: 946-11333
General Engineering Aviation Consultant Services

Dear Mr. Archey:

Ongoing improvements and expansion to Fort Lauderdale Executive Airport (FXE) are necessary to keep pace with The City of Fort Lauderdale's current and future growth projections. **HDR Engineering, Inc. (HDR)** and our partner firms are understand the importance of not only maintaining this state-of-the-art facility, as it continues to grow, but also understand the importance of studying, analyzing, planning and testing factors that can affect the operations of facility of this size and function.

We have assembled a highly qualified team with unsurpassed technical expertise and experience with Aviation facilities. The HDR Team is fully capable of performing all services identified in the Request for Qualifications (RFQ), as well as any additional elements that may arise throughout the duration of this contract.

The HDR Team is prepared to **Provide the Most Cost-Effective and Sustainable Solutions for General Engineering Aviation Consultant Services delivered on Time and Within Budget** for FXE through:

- Industry leadership in Aviation Engineering and Design
- Proven, responsive, Ft. Lauderdale based project management
- Substantial depth of Aviation expertise
- Excellent working relationship with FXE Staff
- Technical expertise and support from over 180 HDR offices and 8,000 staff

Focused on the successful delivery of this project, 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 selected for this important project.

The City of Ft. Lauderdale and FXE are key clients for HDR and we are grateful for this opportunity to be of service. HDR and our teaming partners are committed to this project and we look forward to helping FXE set the standard for project delivery and technical excellence.

Respectfully Submitted,

Charles T. Sinclair, PE
Senior Vice President, HDR Engineering, Inc.
chuck.sinclair@hdrinc.com
(954) 647-4542

PROPOSAL SIGNATURE PAGE

How to submit proposals: Proposals must be submitted by hard copy only. It will be the sole responsibility of the Proposer to ensure that the proposal reaches the City of Fort Lauderdale, City Hall, Procurement Services Division, Suite 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, prior to the proposal due date and time listed. Proposals submitted by fax or email will not be accepted.

The below signed individual hereby agrees to furnish services subject to all instructions, terms, conditions, specifications, and addenda contained in the Request For Qualifications (RFQ). I have read the RFQ and all attachments including the specifications and fully understand what is required. By submitting this signed Proposal I understand any resulting City contract will be subject to RFQ instructions, terms, conditions, specifications, and addenda.

Submitted by: _____ 02/13/2014
(Signature) (Date)

Name (Printed) Charles T. Sinclair, PE Title: Senior Vice President

Company: (Legal Registration) HDR Engineering, Inc.

FOREIGN CORPORATIONS 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/).

Address: 3250 West Commercial Blve, Suite 100

City Ft. Lauderdale State: FL Zip 33309

Telephone No. 954-647-4542 FAX No. N/A Email: chuck.sinclair@hdrinc.com

Does your firm qualify for MBE or WBE status (General Conditions Section 1.09)? MBE _____ WBE _____

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

Addendum No.	Date Issued
Addendum 1	01/20/2014
Addendum 2	01/20/2014
Addendum 3	01/23/2014

Payment by P-CARD: Will your firm accept the City's Credit Card as payment for services performed under a resulting contract?

YES _____ NO x

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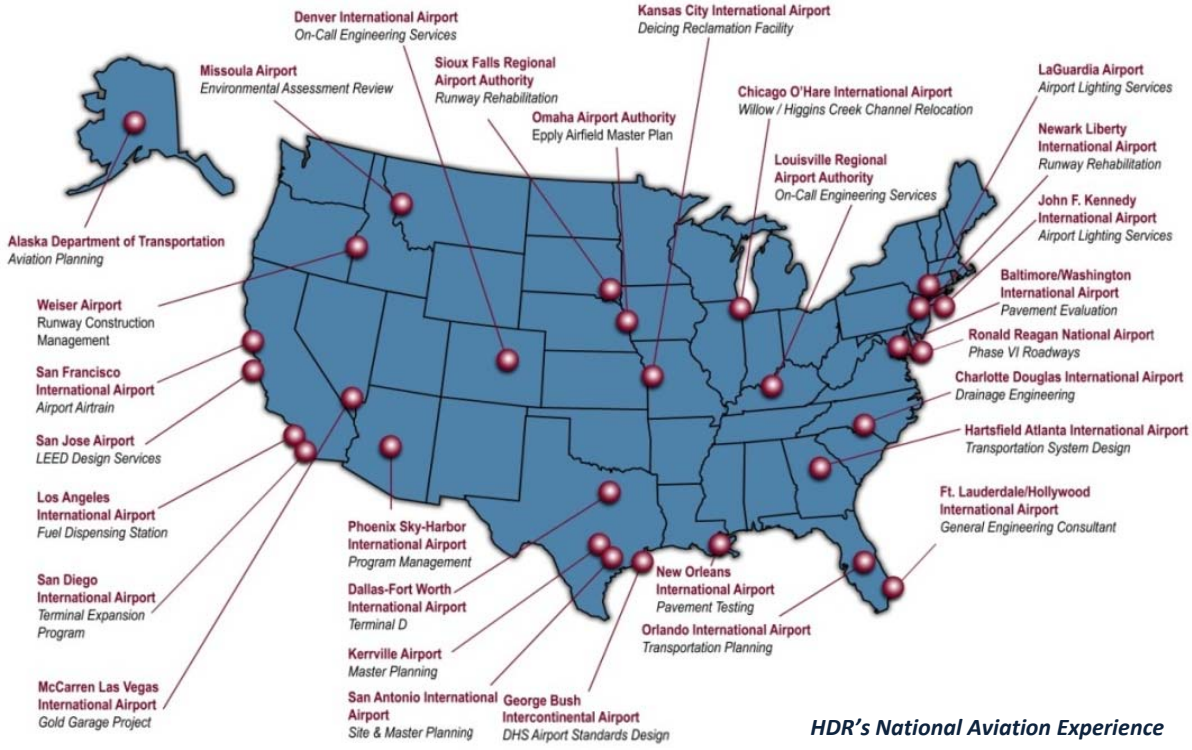
Qualifications of Firm

History and Size
- Founded in 1917
- More than 8,600 Employee Owners
- More than 185 locations worldwide
- Serving Florida for 40 years
- Serving the South Florida communities for over 20 years with nearly 100 local professionals

Established in 1917, HDR is an architecture, engineering, planning and consulting firm that excels at helping clients manage complex projects and make sound decisions.

With more than 8,600 full-time technical employee-owners, HDR is a full service engineering and architectural firm with an international footprint. ***Engineering News Record most recently ranked HDR #11 among the Top 500 Engineer Design Firms.*** A leading Aviation planning and design firm, HDR employs nearly 50 full-time, aviation engineering professionals, nationally. This includes one of HDR's Regional Aviation Design Centers in our Fort Lauderdale office which consists of 25 full service professionals who will be dedicated to delivering projects for the Fort Lauderdale Executive Airport. This group, in combination with HDR's local and statewide planning, intermodal and logistics, highway, economics, and environmental experts, routinely deliver a wide variety of aviation related General Engineering services.

As a local Ft. Lauderdale firm, HDR has provided consulting services in Florida for over 40 years, and nearly 20 years in the South Florida area. HDR employs nearly 100 employee-owners in South Florida, who collectively service clients in nearly every sector of civil, transportation, and facility engineering, including for Broward County Aviation Department on a similar General Engineering Contract for 5 years. The HDR Team is fully capable of performing all services identified in the Request for Qualifications (RFQ) as well as any additional elements of work that may arise throughout the duration of this General Engineering Aviation Consultant Services contract.



HDR's National Aviation Experience

Our Company's Culture Drives Our Business

Our Mission

To support activities aligning with our values and areas of expertise to benefit the communities where we live and work.

Our Vision

Shaping the future through creative solutions and visionary leadership.

Corporate Responsibility

Corporate responsibility means being accountable to our employees, clients, communities and the environment, in our personal as well as professional lives. We strongly believe that giving back is not only a civic duty, but a privilege.

HDR offers world class expertise delivered through a strong local practice

HDR provides a full spectrum of services for our clients. Our staff of professionals represents hundreds of disciplines that partner on blended teams worldwide to provide solutions beyond the scope of traditional A/E/C firms.

HDR's operating philosophy is to be an expertise-driven firm that delivers tailored solutions through a strong local presence. HDR's ability to draw upon companywide resources and expertise is a great strength in meeting and exceeding your expectations.

HDR is one of the premier engineering firms in the country. Engineering News Record (ENR) consistently ranks HDR among the top firms in almost every category related to infrastructure and environment.

HDR's Internal Sustainable Business Practices...How We Walk the Talk on Sustainability

HDR puts 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. HDR's Sustainability Vision guides our decisions related to sustainability. As part of our company's strategic planning process the vision is updated to ensure that the company is at the forefront of sustainable business practices. HDR 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.

Currently, the dominant sustainability metric in our industry is the amount of carbon dioxide emitted to the atmosphere. To that end, we specifically have stated a goal of reducing our own GHG emission levels 20% by 2020 from our 2011 baseline, adjusted for growth. HDR is committed to delivering sustainable projects solutions for our clients, as well as promoting sustainable business practices that benefit our employees, clients and communities for generations to come.

HDR offers a comprehensive sustainability planning services for public and private sector clients to meet voluntary goals or regulatory requirements. Our services include sustainability visioning and goal-setting, development of a sustainability baseline, identification of strategies to meet sustainability goals, prioritization of strategies based on sustainable benefits using HDR's SROI methodology, development of implementation plans, monitoring and reporting progress towards meeting goals, and development of corporate sustainability reports based on the Global Reporting Initiative (GRI) framework. We have

created an approach to sustainability planning based on best practices and experience, and that is always catered to the specific needs of the facilities.

Below is a summary of HDR's Sustainable Design Portfolio, which is one of the most comprehensive of any A/E firm Nationally.

LEED PROJECTS		
Certified Project Stats		
Product	**Number**	**Square Feet**
LEED-NC	64	10,985,859
LEED-CS	2	256,000
LEED-EB	4	1,236,000
LEED-Homes	2	4,186
LEED-CI	6	92,100
TOTAL CERTIFIED	**78**	**12,574,145**

Summary of LEED Certified Projects and Ratings						
Rating/Product	**LEED-NC**	**LEED-CS**	**LEED-EB**	**LEED-CI**	**LEED-Home**	**TOTAL**
Platinum	2	2	0	1	2	7
Gold	25	0	0	1	0	26
Silver	20	0	2	4	0	26
Certified	17	0	2	0	0	19
TOTAL	**64**	**2**	**4**	**6**	**2**	**78**

Envision™ Sustainable Infrastructure Rating System

HDR was one of the first firms to have participated in the development of the newly released Envision™ Sustainable Infrastructure Rating System. Envision was developed to help project teams improve the performance and viability of infrastructure through the application of more sustainable technologies and methodologies. In fact HDR is the first company to register and certify a project with ISI – the William Jack Hernandez Sport Fish Hatchery project – which recently obtained the first Envision Gold Certification in the country. HDR has over 130 Envision Sustainability Professionals (ENV SPs) and 7 credentialed Envision Verifiers. There are only 700 ENV SPs throughout the country, and HDR makes up 20% of the total. More information about Envision can be found in Section 6.

HDR's involvement with ISI & Envision™

- Charter Member of ISI
- First company to register a project with ISI, in December 2012
- First company to complete an Envision™ project verification: Gold Level Award in July 2013
- Developed comprehensive training module to prepare staff to take the Envision™ SP exam
- Exceeded our goal of credentialing more than 100 professionals in 2013
- Dedicated to helping clients understand and implement the rating system on their projects, so getting our professionals credentialed is a priority

Understanding of the Project and Approach to Scope of Work

The HDR Team has an excellent understanding of all anticipated Aviation Engineering aspects of the projects proposed at FXE, based on over twenty-five years of recent and relevant experience in identical work elsewhere across Florida and beyond. It is important that the City consider the experience gained on other local, performed by local Aviation Design Experts, projects as proof-positive that this team has what it takes to accomplish every aspect of the General Aviation Consultant Services Role at FXE.

Our core team has extensive experience in working with airport operators and owners, who must administer, maintain and operate commercial service and general aviation facilities. This requires a variety of professional knowledge to ensure that projects do not have a "one size-fits-all" mentality. The HDR Team understands the varied requirements in operational requirements, fleet mix and tenant base that can be expected, and will work closely with FXE to ensure that project scopes and expectations are well aligned. Our approach to General Consulting Service's contract is as an opportunity to build a relationship as a trusted advisor to our clients. Our main goal is to be there for FXE for the long run by serving as an extension of your staff. This mean not only being available for project related items but to become an integral part of your team by assisting in evaluating your Capital Improvement Program, helping to generate additional business for FXE and by serving as a trusted advisor to your Aviation Advisory Board and City Commission.

We understand the importance of your GEC to be responsive, dedicated and flexible, providing a range of professional airport consulting and design services based upon your operational and capital improvement requirements and business objectives.

Our proximity to FXE allows HDR to responsive, dedicated, and flexible

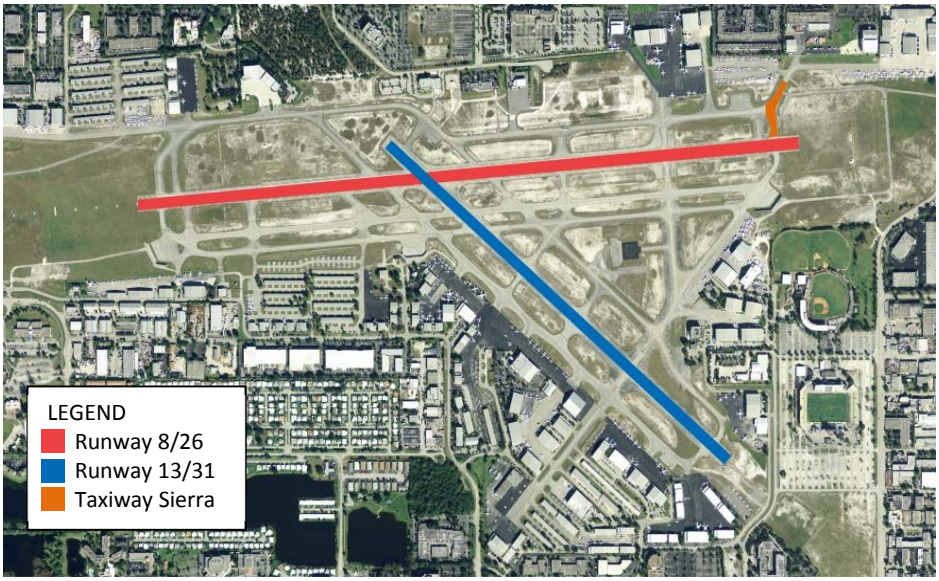
Specialized Approach to Deliver FXE Program

To provide a more project specific look at our TEAMS project approach, we have provided brief approach write ups for the projects provided in Section III – Scope of Services of the Request for Qualifications. The following paragraphs provide our preliminary assessment of each of the project elements set forth in the RFQ document, and offer some initial insights on how the HDR Team proposes to address these projects. We have also woven our detailed approach to each assignment in this overall section. Based on the work tasks at hand, our understanding and approach are one and the same.

- Taxiway Sierra Pavement Rehabilitation
- Runways 8/26 & 13/31 Pavement Rehabilitation
- Administration Building Expansion
- Airfield Lighting Rehabilitation
- Pedestrian Bike Path
- Airport Master Plan

Taxiway Sierra and Runways 8/26 & 13/31 Pavement Rehabilitation

Understanding of Detailed Design Activities



Successful projects are the result of strong, experienced and knowledgeable project teams, as well as the development and implementation of clear, but detailed work plans. For the Rehabilitation of Airfield Pavement and Related Work at FXE, the HDR Team approach includes a multi-step approach which provides an organized process to understand all of the nuances of the project environment, and continuing on to the detailed design analysis, final design, bidding and finally construction phase services and project closeout:

PHASE I - DATA COLLECTION, PROJECT INITIATION AND PRE-DESIGN INVESTIGATIONS: Once the work plan as described above is complete, this initial phase of the project will include the collection, compilation and review of existing project related data and documents, including items such as planning and environmental reports, technical memoranda, record plans, geotechnical reports, existing utility data and documentation, existing mapping and survey control information, FXE operational characteristics, data and constraints (including fleet mix, operations, RW end utilization), construction phasing and sequencing concerns, and other similar information.

PHASE II - PROJECT PLANNING AND CONCEPTUAL ALTERNATIVES EVALUATION PHASE: Airfield planning is an essential component for the orderly and cost effective development of an airport, and of airport systems. A critical element of the planning process is the identification, investigation, analysis and evaluation of project alternatives that meet the intent of the project and achieve the goals and objectives established for the project. From this exercise, the best alternative is selected and advanced forward into design and construction. Just as important in this phase of the project is the communication and coordination with the FAA, FDOT, airlines and airport tenants as it relates to alternatives evaluations, impacts to lighting systems, NAVAIDS and current and future airfield operations.

Airport Staff and the HDR Team will identify the most feasible alternatives for evaluation depending on a myriad of factors. Those factors include such elements as cost, airfield operational requirements (i.e. minimum desired runway length and width during and following construction), aircraft taxiing movements, work adjacent to crosswind runways such as the use of partial closures and declared distances, alternate taxi routes, construction schedule and associated temporary impacts (to runway length, aircraft movements, ILS downtimes, if any), runway lighting and signage layouts, and other project aspects to maintain the current level of service throughout the project.

Various analyses, reports, alternatives, investigations, workshops, and meetings will be used to provide Airport Staff with options, reconstruction alternatives and improvements, and "lessons learned", which will be considered prior to preparation of contract documents. An opinion will be provided regarding the benefits and costs associated with each of the possible alternatives. It is recognized that the results of the analysis and evaluation phase will not fully define the project, but will have an impact on the scope and approach to the construction document design phase.

Issues that may be evaluated during the project planning and conceptual alternatives evaluation phase include:

- Pavement Analysis and Construction/Reconstruction Alternatives
- Runway and Taxiway Outage Requirements and Impacts
- Construction Safety and Phasing Alternatives Analysis
- Runway Lighting Systems Analysis
- Contractor Information Meetings
- Asphalt Plant Location Analysis and Construction Impacts

Runway and Taxiway Pavement Analysis

Background: The HDR Team will establish all background data for each project assignment based on preliminary visual inspections of the pavement sections, drainage characteristics, and lighting systems. The historic Construction Plans will be evaluated to identify the previous rehabilitation work consisting of variable thickness P-401 layers over the overall pavement areas.

Pavement Condition: Performance of the pavements will be evaluated and discussed with the airport maintenance staff and management. During the visual inspection, the overall general condition of the of pavements will be observed and the distress types, as defined by ASTM D 5304, will be identified, such as block cracking, longitudinal cracking **(Figure 1)**, raveling and weathering, corrugation [or ripple] **(Figure 2),** and depression. Figures #1 and #2 show typical longitudinal working cracks; loss of most surface fine aggregate, plus evidence of loss of coarse aggregate; and the corrugation, or ripple distress type, in the longitudinal direction in a parallel pattern transversely across a Runway pavement. The latter ripple distress type is a moisture related distress type caused by moisture vapor trapped beneath the asphalt surface and high temperatures causing the vapor to expand, pushing up on the pavement surface layer. The rehabilitation strategy should address this ripple distress type.

Figure 1 - Longitudinal Crack Distress

Figure 2 - Corrugation (Ripple) Distress

The review will also include evaluation of any evidence of structural and/or load associated distress types. The overall condition of the pavement will be rated (in conjunction with the FDOT Pavement Management Report) from excellent to poor, including concern from the high potential FOD levels. Sample FOD potential is evident in Figure #2 which shows where large aggregate particles have been dislodged from the pavement surface from the severe raveling and weathering. Additional FOD potential can result from ragged spalling at the edges of the numerous working cracks depicted in Figure #1. The requirement for an immediate rehabilitation strategy is evident from the severity of the distress types annotated above.

Geotechnical Study: The HDR Team will develop parameters for a geotechnical study to define in clear engineering terms the soil information and representative layer thickness of the various sections that comprise Runway 4-22 and the associated scope to involve the Taxiway Connectors to the hold lines, and Taxiway K. The information contained in the United States Geological Survey (USGS) topographic maps and the United States Department of Agricultural (USDA) Soil Conversation Service (SCS) Soil Survey of Pinellas City will be reviewed. The more important part is comprised of a geotechnical investigation to include approximately 30 cores of which 50 percent will require bore holes [split-spoon sampling and standard penetration test (SPT) in accordance with ASTM D 1586], water content, and water table data to a depth of 5.0-ft. In addition, approximately six to eight subgrade samples will be required to conduct laboratory CBR tests to determine representative design subgrade strengths in accordance with ASTM D 1883 and FAA 150/5320-6E guidelines.

Aircraft Fleet and Traffic Analysis: The HDR Team will accomplish a thorough analysis of the 2009 (or updated) Master Plan projected aircraft traffic fleet and annual departures over the forthcoming 20 years. This step has increased importance when using the FAA mechanistic design procedures that have been implemented in the new FAA Rigid and Flexible Iterative Elastic Layered Design [FAARFIELD] software under the AC 150/5320-6E.

A wide variety of aircraft gear types and configurations are cataloged in the new FAARFIELD software and have a significant impact on load distribution and calculation of cumulative damage factor (CDF) leading to fatigue life of a pavement. Since the existing pavement have a design based on empirical "Design Aircraft" concepts, the analysis and methodology of transforming to the new mechanistic procedures should produce greater economic benefits, but will require comparative engineering judgment based on the methodologies and section requirements attributed to the more precise thickness calculations produced by the FAARFIELD procedures.

Pavement Design Sections: The HDR Team will employ engineering judgment in exercising the FAARFIELD software to determine the pavement sections required for rehabilitation of Runways and Taxiways, based on the following:

- **Geotechnical Investigation:** determine layer thickness and layer modulus values from geotechnical investigation, material testing results, and available historical engineering data.
- **CBR Laboratory Tests:** estimate subgrade strength values ≤87.5 percent of all CBR test values correlated with in-situ parameters and water content determinations.
- **20-Year Pavement Life:** establish/coordinate aircraft fleet and forecast annual departures with 2009 Master Plan or updated Master Plan if requested, and using agency requirements.

Rehabilitation Strategy: The HDR Team will evaluate and develop a rehabilitation strategy through state-of-the-practice alternatives and methodologies applicable to airport runway construction techniques and climatic environment, including as examples, but not limited to the following:

- Conventional Cold Mill, Crack Seal and Overlay **[Figure #3]**
- Full Depth Reclamation (FDR) and Overlay **[Figure #4]**
- Cold Mill, Asphalt Rubber Membrane Interlayer (ARMI), and Overlay **[Figures #5 and #6]**
- Superpave HMA System with Modified Performance Grade (PG) Asphalt Binder

Cold Milling, Crack Seal and Overlay – The conventional mill, crack seal and overlay technique in rehabilitation have been used throughout Florida for decades in maintaining the state's airfield pavements. One of the advantages of this practice is the ability to mill only a small portion of the oxidized surface followed by placement of the new HMA overlay. This process has the advantage of maintaining the maximum amount of underlying pavement as part of the overall pavement structure. Crack sealing and filling followed by placement of new technology geotextile fabrics prior to the overlay can serve to mitigate the propagation of cracks into the surface layer. However, the cracks remain and will eventually propagate into the finished surface over the life of the pavement. A typical cold mill and overlay construction procedure is depicted in Figure #3.

Figure 3 - Conventional Cold Mill & Overlay Construction

FDR – The FDR technique in rehabilitation has the advantage to eliminate the potential for propagation of cracks into the surface layer as well as eliminating the other environmental distress types annotated as depressions and corrugations, or ripple distress types. An alternative in this same family is the Partial Depth Reclamation, where only the asphalt is reclaimed. A typical FDR construction procedure is depicted in Figure #4.

Figure 4 - Full Depth Reclamation (FDR) Base

Asphalt Rubber Membrane Interlayer (ARMI) – Another potential rehabilitation technique could incorporate a mill and overlay plan designed to meet the forecast annual aircraft departures over the period 2014-2034. Because of the cracking distresses and the potential propagation of substantial cracks into the surface layer and the proximity of the ground water table, an ARMI technique is a highly acceptable candidate. The ARMI would be constructed as a crack relief layer and as a moisture barrier from surface water and subsurface water sources. Figures #5, and #6, show the ARMI being utilized on a Taxiway prior to placement of the P-401 (Superpave). These pavements have performed well under heavy traffic.

Figure 5 - Completed ARMI at Time of Test Section Construction

Figure 6 - Completed ARMI/Rubber Modified

Superpave Technology – For these projects, Engineering Brief No. 59 Item P-401 Plant Mix Bituminous Pavements (Superpave) is recommended in lieu of the conventional Item P-401 Plant Mix Bituminous Pavement based on the state-of-the-practice in placing HMA by the Florida Department of Transportation (FDOT). In 1996 the FDOT began implementing the Superpave asphalt mix design system into the state highway specifications. The FDOT Superpave implementation by the number of tons of Superpave HMA has grown from 6700 tons to over 5 million tons annually since 2003.

Since 2004, the Superpave design methods have been used on pavement projects at major airports throughout the State of Florida with outstanding success, including Orlando International Airport, Orlando Sanford International Airport, Jacksonville Aviation Authority's Herlong and Cecil Field Airports, Bay City-Panama City International Airport, Miami International Airport, and others. AVCON has led the Superpave state-of-the-practice for implementation of HMA applications for five of these airports.

- ***FAARFIELD:*** FAARFIELD (for FAA Rigid and Flexible Iterative Elastic Layered Design) design procedure is the current FAA standard per Advisory Circular 150/5320-6E, Airport Pavement Design and Evaluation. HDR and AVCON have extensive experience utilizing FAARFIELD as a design tool, and are familiar with its requirements and output, and will use this software as required by FAA. The HDR Team also proposes to consult with the City and Airport Staff on strategies to upgrade the pavement to accommodate the larger aircraft already operating at the airfield in conjunction with our Master Planning Update and inter-governmental outreach to address statutory limitations on aircraft pavements. The only real effect of this historical agreement is to require more frequent pavement programs to operate the quieter but larger aircraft already in service at FXE.
- ***Rehabilitation Systematic Selection Process:*** The investigation process to this point has been focused primarily on obtaining project information to perform the engineering analysis, including design data, traffic data, soil subgrade and layer material characteristics, visual distress types and pavement condition, performance data, drainage survey reports, etc. As noted above, there are promising alternatives, however, the overall major rehabilitation categories of restoration, recycling, resurfacing, and reconstruction will be considered as various alternatives for consideration in the selection process. Thus, with the technically feasible alternatives defined at this point, it is necessary to include all decision criteria, both monetary and non-monetary, that will be used in selecting the preferred alternative. Engineering factors such as pavement closures and air-traffic control options, time of closure, material and equipment availability, and prevailing climatic conditions must be considered, and, of course, the identifiable costs to the owner and user must be a consideration. Therefore, a life-cycle cost analysis of each alternative will be conducted that considers all relevant costs to provide the information for economic analysis along with the engineering analysis. Selection of the preferred rehabilitation alternative will evaluate each alternative with respect to selected decision criteria which is jointly determined by the Owner and Engineer. The best way to compile and illustrate the information is through the use of a detailed matrix tabulating each alternative with its specific impacts.
- ***Engineers Report:*** The HDR Team will provide a formal Preliminary Engineering Report for the Rehabilitation Projects generally including, but not limited to, technical and economic analysis covering the following topical areas:
    - Background information/historical data;
    - Pavement condition assessment;
    - Geotechnical study for selection of subgrade strength and material characterization of existing pavement layers;

- Aircraft traffic fleet/average annual departures;
- Structural design analysis to develop alternative pavement sections using FAARFIELD software and FAA AC 150/5320-6E guidelines;
- Develop state-of-the-practice rehabilitation strategies/potential alternatives;
- Implement systematic selection process using both engineering and economic models to provide the most feasible, cost effective strategy for final design and construction phases for the Rehabilitation of the pavements; and
- Summarize conclusions and recommendations to support development of plans, specifications and cost estimate package.

PHASE III - PRELIMINARY DESIGN PHASE: This phase of the project will establish the approach to the technical issues identified in the Planning and Alternatives Phase (II), and will serve as the basis for the development of preliminary design documents for the selected alternative. Preliminary construction plans (representing approximately 30% design) will be prepared to a level consistent with the verification of design assumptions, initial project budget, schedule, and program goals and objectives. A comprehensive peer review and constructability review of the preliminary documents will be conducted prior to their submittal, and as a supplemental check to HDR's QA/QC review.

Following the submittal, and as a key element of the review and validation of the design parameters of the project, a complete walk through of the project site with the plans will be organized with the airport staff and design team, and others that may have an interest in a specific portion of the work (i.e. utilities, FAA trunk lines, airfield maintenance), etc. This walk through is intended to provide a verification of the existing conditions as defined by surveys and shown on the plans, identify any missing items, identify a need for additional investigations as may be warranted, and otherwise ensure that the project moving forward into final design achieves the complete design intent of the overall project, including any final requirements identified by the Airport.

PHASE IV - FINAL DESIGN PHASE: This phase of the project completes the design and details supporting the decision making process for specific work elements of the project. Construction plans will be prepared meeting FAA, local and affected agency standards, specifications, and other applicable requirements and guidelines.

As with the preliminary design phase, a peer review and constructability review of the final construction documents prior to their submittal will be conducted as a supplemental check to HDR's QA/QC review. The final Engineer's Design Report will be prepared documenting all design rationale and findings, including any Modifications to Standards, as well as justifications and pertinent design calculations for the various elements of the project.

The final construction cost estimate with detailed items and quantities will be included in the Engineer's Report. To help assure quality control of materials and the constructed project a Construction Management Plan will be prepared for FXE, the FAA and field construction staff. This CMP will be incorporated as a removable appendix to the Engineer's Report.

State-of-the-practice construction criteria will be incorporated in the technical specifications in conjunction with FAA guidelines contained in FAA AC 150/5370-10C, Standards for Specifying Construction of airports, including specific instructions for the quality of all work as well as phased construction schedules. Unit price cost estimates will be predicated on detailed quantities and latest area analysis of bid data.

PHASE V - BID PHASE: The HDR Team will assist Airport Staff during the bid phase as follows:

- Prepare the notice to bidders for advertising the project;
- Coordinate the distribution of bid documents to firms and agencies requesting them;
- Assist with a Contractor/Bidder outreach program;
- Respond to bidders' questions and prepare addenda, as required;
- Attend and conduct a pre-bid meeting with potential bidders and affected agencies;
- Attend and participate in the bid opening, and review and tabulate bids received;
- Review bids for conformance with bid documents and qualifications of the bidders; and
- Prepare recommendation for awarding the project to the lowest responsive bidder.

PHASE VI - CONSTRUCTION PHASE SERVICES: The continuation of the HDR Team effort will be provided through the Construction Administration and Resident Observation Services of the project at PIE. These services will allow the design professionals to interface with the field staff and contractor to provide additional interpretation of plan or specification requirements. This service is considered a part of the "partnering" approach to the project wherein the design professional and the field construction representatives can work to provide the highest quality project within budget and on schedule. Participation during construction is a corporate requirement of AVCON-designed projects. The following are representative of the many tasks associated with actual field coordination and construction phase services:

- Attend and conduct the pre-construction conference;
- Review, catalog and approve shop drawings, samples and other submissions;
- Make periodic visits to the site to review progress and quality of the work, and provide full-time resident observation services if requested;
- Review contractor's applications for payment and recommend to PIE for processing;
- Provide consultation and advice to PIE staff during construction;
- Attend bi-weekly construction coordination meetings;
- Review change orders as required;
- Participate in construction review to determine partial beneficial occupancy;
- Participate in the final checklist for the acceptance inspection;
- Prepare as-constructed reproducible drawings and AutoCAD files;
- Receive and review written guarantees and other documents; and
- Provide continuous interface with PIE Staff and the FAA regarding the work.

As part of the HDR Team, we have partnered with **AVCON**. AVCON is very familiar and knowledgeable with all requirements of working with Contractors. Throughout the construction process, AVCON consistently provides priority attention to all projects under construction. AVCON routinely provides rapid turnaround of Contractor Submittals, RFI's, Applications for Payment and other features to support the needs of the construction in the field. Further, with a dedicated Owner's Resident Project Representative (RPR) team, AVCON is committed to ensure that the quality and timeliness of the constructed project are complete and consistent with the Contract Requirements previously approved by the Owner and included in the performance criteria set forth on the plans and in the project manual.

AVCON is also very well-versed at all applications of unit price construction at airports, including limited but anticipated conservancy in estimated quantities; very specific details on methods of measurement and basis of payment for each and every item of construction throughout the documents; attention to all permitting and regulatory compliance issues and inter-governmental agreements; and national, state

and local codes, policies and procedures as they relate to all aspects of the proposed project such as FAA, FDOT, UL, NEPA, ASTM, etc. With AVCON, you can be assured of immediate, complete, and continuous interface with the Contractor.

Administration Building Expansion

As part of the HDR Team, we have partnered with **ACAI Associates** to lead the Administration Building Expansion. ACAI is recognized for design excellence and dedication to client service.

ACAI believes that excellence in architecture is the physical manifestation of our clients' ideas and goals. This philosophy – combined with strong technical expertise and proficient budget control at all stages through project completion – allows ACAI to produce successful projects and earn the respect of our clients, resulting in many long-term professional relationships and referrals in both the public and private sectors.

As evidence, ACAI has a ten-year working relationship with FXE during which time we have been part of the General Consulting team for multiple phase projects for the FXE Administration Complex and the Emergency Operations Center as well as having provided architectural services under a General Engineering Aviation Consultant Services contract. Most recently, ACAI provided pre-design programming services for interior and exterior renovation of the FXE Administration Building with the intent of achieving LEED certification.

Through our experience working on these projects, ACAI is very familiar with the City's needs, goals and objectives for expansion of its Administration Building and understands that resourcefulness, innovative design, fiscal and environmental responsibility plus consistent communication and collaboration amongst owner, building users and the design team ensures a winning project.

Overall Approach and Methodology

When working on projects ACAI follows three key principles to ensure good design:

- First, the project must be designed to meet the User's needs. Understanding the occupant's needs and how these needs affect physical design is critical in the design process. As Architects it is our responsibility to balance user needs with programming flexibility to allow for changes in use over time.

- Secondly, good design understands and responds to context and imagery and positively impacts the project and users. We believe good design will energize support for the project and gives visitors and staff a place for which they can be proud. ACAI's QA/QC Program is part of the Firm's Total Quality Management approach to its projects and entails the review of documents at pre-established phases of development to ensure that all plans and documents conform to Client Standards and Criteria, and are void of errors and omissions, within the bounds of Standard of Care established for the industry.

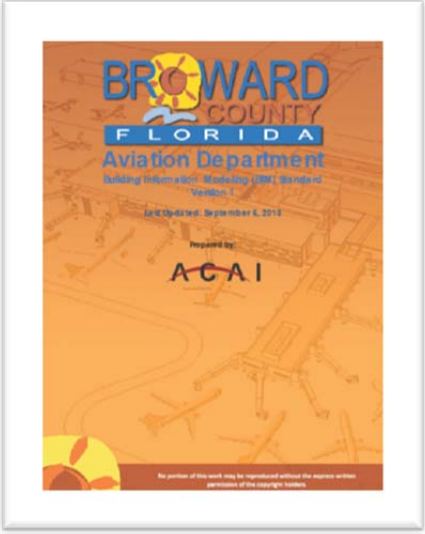
- Lastly, the project must be built to last. As members of the US Green Building Council and a LEED certified team, ACAI is committed to "green design", also referred to as Leadership in Environmental & Energy Design.

ACAI's Building Information Modeling (BIM) experience is extensive as we are leaders in the industry. ACAI uses BIM during design to explore and help coordinate a project's key physical and functional characteristics digitally before it's built, greatly reducing conflicts and streamlining the design and construction process. Our experienced staff members are all trained in the latest software and hold bachelor's degrees or licenses in the design and construction industry. With teams including architects, engineers, general contractors and VDC modelers in-house we create more sophisticated, professional models and work together to identify clashes, conflicts and design problems virtually in pre-design and construction before they become problems and costs in the field. We also work with Clients to develop

and implement BIM Standards which enables Owners to leverage the benefits of BIM for Facilities Management through Construction Operations Building Information Exchange (COBie).

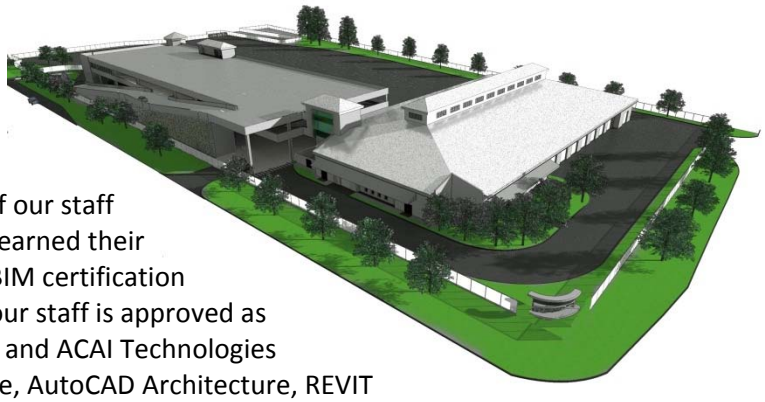
ACAI provided Planning and Design services for Broward County Aviation Department (BCAD) that included development of Design Guidelines for the Terminal Areas of Fort Lauderdale – Hollywood International Airport (FLL) as well as full service design and construction administration for the BCAD Air Cargo Facility for airside and landside operations. We have been engaged by BCAD to create the FLL BIM Standards and BIM Execution Plan for implementation at their facilities. Our involvement in these efforts creates an opportunity to take and adapt the BIM standards that were developed for FLL for application at FXE in line with this project's scope and objectives.

Building Information Modeling (BIM) Experience



Our BIM experience at ACAI and ACAI Technologies is extensive and includes work as designers, modelers, model managers and BIM Coordinators. Starting in 2008, ACAI began offering third party Virtual Design and Construction services (VDC) including design, drawing and support services for Architecture, Engineering and Construction Firms including the trade and sub markets, as well as Owners, Developers and Building Product Manufacturers and ACAI Technologies was born. Our workable VDC solutions optimize how projects flow and improve communication and collaboration enhancing overall productivity for Owners and the entire design team.

ACAI uses BIM during design to explore and help coordinate a project's key physical and functional characteristics digitally before it's built, greatly reducing conflicts and streamlining the design and construction process. Our experienced staff members are all trained in the latest software and hold bachelor's degrees or licenses in the design and construction industry. With teams including architects, engineers, general contractors and VDC modelers in-house we create more sophisticated, professional models and work together to identify clashes, conflicts and design problems virtually in pre-design and construction before they become problems and costs in the field.



Critical to this process is an experienced staff. Our experienced staff members are all trained in the latest software and hold bachelor's degrees or licenses in the design and construction industry. In addition, two of our staff members are the first in Florida to have earned their CM-BIM certifications which is the first BIM certification program. In addition to being certified, our staff is approved as instructors for all four courses. The ACAI and ACAI Technologies Team is well-versed in REVIT Architecture, AutoCAD Architecture, REVIT MEP, REVIT Structures, NAVISWORKS, Archicad, Rhino and Microstation. We work within a multitude of BIM Platforms and work with the team to ensure interoperability with the tools being used on a project. As the National Sponsor of the Construction Operations Building Information Exchange (COBie) Educational programs with the bSa, ACAI can work with BIM from design to operations and gives priority to information planning and data management for useful operations. We understand the

importance of open BIM and promote interoperability and support IFC, COBie, SPie, and the buildingSMART data dictionary development (bsDD). At ACAI, we are constantly examining the structure of the "Information" within the BIM model to ensure its organization, usefulness and eventual migration to Facilities Management. The ACAI Team focuses on the Life Cycle of the BIM model in order to bring maximum client value.

Airfield Lighting Rehabilitation

Along with all elements of the airfield paving described above, the projects will also specify a substantial makeover of the airfield lighting system. All work will be conducted in accordance with the latest FAA design guidelines and Advisory Circulars. There are a number of important features that will be upgraded as part of the overall work so that conformance with design standards will be achieved in all areas. The following is a preliminary outline of the proposed electrical work required to upgrade the runway:

- Replace the REIL units on both runways and upgrade electrical with a new in-duct homerun feeder;
- Replace the Supplemental Wind Cones with LED units. LED units are more efficient and reliable, having eliminated the troublesome Brightness Power Adapter;
- Replace Runway or Taxiway Edge Lights with properly color coded MIRL (or HIRL) (or MITL) with new in-duct homerun feeder. In-pavement fixture shall be used at taxiway/runway crossings. The CCR shall be replaced and re-fed;
- Consider installation of Semi-flush fixtures to ensure proper spacing if HIRL is selected;
- Replace all older signage (5 years old or as directed by the Airport) and upgrade panels as necessary in the Runway Safety areas to come into full compliance. Some of the current mandatory signs do not have the required black outline around white letters. Review reliability of individual signs (including parts availability) with FXE maintenance, and consider stand-alone sign circuits to eliminate printed circuit card technology currently used to maintain sign brightness and variable edge light brightness steps;
- Review / Replace existing L-821 ALCS to eliminate spare parts and service concerns from current vendor and renew all alarm functions, reuse existing fiber optic cables, and consider mimic panels in ATCT Cab, Vault and possibly the FSS; (this may already be part of the new ATCT program)
- Revalidate re-use of all duct crossings under the runway, and ensure separation of high and low voltage wiring;
- Specific attention to be provided for taxiway connectors to runways. If the radii are increased due to ARC-III changes, it is recommended that the L-861T fixtures and transformers be turned over to maintenance as parts;
- Taxiway edge lights that are LED and under five years old shall be maintained. The design documents will specify protection during pavement work. The design will also check for a need to adjust base can elevations for any grade changes during paving;
- Replace the PAPI units at both ends with updated siting and new in-duct homerun cables (not specifically mentioned in the RFQ but by FXE maintenance staff);
- Verification of condition and reusability of existing ductwork under the pavement. New ducts may be installed with directional drilling;
- The HDR Team will propose a series of numbered conductors to separate circuits in common ducts or manholes; and
- The HDR Team will also modify or relocate or otherwise protect FAA and other utility cables located on the site in separate raceway systems.

Pedestrian Bike Path

The addition of a pedestrian bike path at FXE is a great opportunity to continue strengthening the outstanding relationship with surrounding neighborhoods and airport users while connecting FXE to the regional multi-modal transportation network and local businesses. This will also continue building upon the initiative of connecting the Uptown Fort Lauderdale with the Downtown Ft. Lauderdale Urban Core. During the planning and design phases for a pedestrian bike path near an active airport, there are a number of specific components that the HDR Team will consider, including the following:

- ***Environmental Impacts*** **-** The goal of any project is to minimize the impacts to the environmental community, which includes not only the natural features but physical, social and economic features. This is especially true when implementing pedestrian or bicycle projects such as a multi-use trail. The natural state of the adjacent lands can be a main attractor for people to use a particular facility. HDR will identify locations which may have potential environmental impacts. Mitigation or avoidance alternatives will be recommended to aid in the completion of the project.

- ***Permitting*** **-** HDR has significant experience in obtaining the required environmental permitting for all levels of transportation projects, and fully understands the requirements of trail projects. HDR has also completed several final sidewalk design projects that have not required any environmental permitting. The state environmental agencies recognize the benefits of pedestrian accommodations. Unless there are major impacts to sensitive areas, environmental permitting is typically not required. However, if construction is within state owned right-of-way, additional permits may need to be obtained. FDOT District Four utilizes a special use permit for the construction / connection of pedestrian facilities to the state system. This is a simplified permitting process due to the limited impacts to the roadway network.

- ***Landscaping*** **-** HDR will coordinate with the City and any adjacent municipalities (if applicable) to determine the vision for the improvements to determine the magnitude and types of appropriate landscaping for each project. We will also consider the existing landscaping along the trail routes and work to minimize the impacts. HDR understands that a significant commitment to landscaping is required in order to make a trail a great place and the City desires to build a network of great trails. We also understand the maintenance cost associated with various types of landscaping and would work with the City to provide a cost effective and maintenance friendly landscaping plan.

- ***Drainage.*** HDR understands the importance of the effects of stormwater drainage on both roadway and pedestrian users. The construction of trails, especially for open drainage systems, could reduce the capacity of swales/ditches. Additionally, flooding or ponding on a roadway or trail can present a safety hazard. Through field visits and discussions with maintenance personnel, HDR will provide recommendations for the proposed improvements which will minimize impacts to the existing drainage patterns.

- ***Utility Impacts/Coordination.*** In some cases, utility or light poles may need to be relocated in order to maximize space for a trail corridor without causing width constraints. HDR will coordinate with the appropriate utility company to facilitate these discussions and determine the feasibility of such changes. We will also consider methods to avoid impacting the utilities, such as the potential to construct a narrower trail parallel to an existing sidewalk.

- ***Constructability Issues***. If a particular trail corridor or area has significant obstacles that will likely impede its constructability, HDR will work with the City to help identify potential alternative solutions or alignments.

Our team will work closely with airport staff, city staff and the community to address all these issues and ensure the path meets all expectations so that it is a community friendly and usable addition to FXE. We will meet with other local airports who have implemented a pedestrian bike path, such as Pompano Beach, to build upon lessons learned so that FXE can set a new standard.

Master Plan Update

The HDR Team has looked at both the current Airport Layout Plan (ALP) and the 2009 Airport Master Plan. These documents reinforce the knowledge that the Airport is very constrained and that its overall mission of supporting corporate aeronautical growth is very critical. Judicious planning must ensure that along with other development objectives, the Airport's acreage must also be preserved to meet future aeronautical needs.

To ensure a complete understanding of the protected acreage for aeronautical use, we initially looked at the status of the existing Runway Protection Zones (RPZ) for Runway 8/26 and Runway 13-31. Recently, the FAA issued a memorandum stating that once a runway came under any sort of construction, including periodic maintenance that it would no longer allow the RPZ's to have public roadways traversing through them, subject to detailed site studies. This means that runways across the country would either have to be shortened to allow the RPZs to be accommodated on airport property, or the roadways themselves would either have to be re-routed, closed, or suppressed. None of these "solutions" are acceptable at most airports across the country, including Fort Lauderdale Executive. Currently, the Runway 8 RPZ crosses NW 31st Avenue and NW 56th Street. The RPZ for Runway 26 crosses NW 10th Avenue. The RPZ for Runway 31 crosses NW 15th Avenue, NW 52nd Street, and Striker Blvd. As this issue affects a very large number of the airports in the United States and remains under injunction, it is advised that the city consider its contingency plans for a number of outcomes that could include "grandfathering" existing configurations as opposed to any alternative mitigation measures up to and including full compliance. The HDR Team stands ready to assist the City to evaluate the options.

Notwithstanding the above, the existing length of 6,002 feet appears adequate to accommodate the existing and planned future aircraft at the Airport. Runway 8-26 is designed to be able to accommodate aircraft with approach speeds up to but not including 166 knots and wingspans of up to but not including 118 feet in width. Such aircraft could include the Gulfstream G650, one of the largest corporate aircraft. Forecasts indicate that the primary runway will be able to accommodate these types of aircraft for at least the next 20 years. Based on these types of aircraft, the Federal Aviation Administration (FAA) has developed airfield design standards. One of these indicates that the separation distance between Runway 8/26 and the full-length parallel taxiway, Taxiway A should be 400 feet, while it currently measures 340 feet centerline to centerline. The Airport applied for and received a modification to the standard to allow Taxiway A to remain in its current configuration.

Despite the adequate runway length available at the airport, it is our understanding that the runway pavement weight bearing capacity at the Airport is statutorily restricted to 30,000 pounds for a single-wheel landing and 60,000 pounds for a dual-wheel loading. The design aircraft, the Gulfstream G550 has a Maximum Take-off Weight of 91,000 pounds. Of this, approximately 35,000 pounds is attributable to fuel. Conceivably, if the aircraft were to land with less than a full load of fuel, the runway would still accommodate the aircraft. Realistically, aircraft of over 30,000 pounds single wheel and over 60,000 pounds double wheel will continue to land at the Airport. The pavement will not fail catastrophically. However, it will deteriorate at an accelerated rate and continual observation and monitoring of the pavement is necessary. Discussions among the parties to the statutory limitations should be explored with the objective to upgrade the primary runway and parallel taxiway pavement strengths based on the other limiting factors. It should be noted that since this legislation was originally enacted, aircraft have continually become quieter and the larger aircraft are both quieter and generally represent a much higher level of operator proficiency than previous generation aircraft. The only present restriction on the pavement is that it is under strength for the aircraft that routinely operate at FXE.

An additional planning opportunity can be enhanced noise compatibility around the airport. FXE has long been a proponent of being a good neighbor to those communities and residences that surround the

Airport, most notably the City of Tamarac. It has an extensive Noise Abatement Program and continuously seeks new and innovative ways to make the community a better place to live. A future consideration to be explored could be additional or enhanced sound walls between the airport/City property and the City of Tamarac line south of NW 55th Court. An FDOT style sound wall could separate the residential community of Tamarac Lakes from the airport and industrial development immediately east and north both from a noise and a visual perspective.

Based on a preliminary review of the remainder of the airport properties, it is essential that the City and Airport consider appropriate planning to preserve and enhance the remaining development site on and surrounding the airport. The development around the peripheral of the airport is a major economic generator for the airport, and each available portion of development land should be continually evaluated for potential upgrades based on the prospective tenants and the maximization of income from these properties to best support the airport's financial needs. These future land uses should also include a program to upgrade the visual impacts of the airport as a part of each generational development program. Master signage guidelines, landscaping requirements and other features can be brought into the overall development scheme for the airport for years to come.

Design Approach

We see that a main goal for FXE under this contract is to expeditiously complete project design while providing a quality product that leads to minimal requests for additional information during the bidding and construction phases. The HDR Team will implement the following design deliverable submittals to achieve adequate coordination between FXE staff, project stake holders and our project team can be performed and that all required permits are obtained prior to beginning the bidding phase. If due to schedule constraint the design needs to be expedited our team will be flexible on this approach understanding again that one size does not fit all.

Preliminary Design (30% Design Documents)

The primary goals of the schematic design phase are to develop site investigation plans, meet with project stakeholders and present schematic design alternatives. Additionally, for pavement projects, various pavement rehabilitation alternatives will be developed and presented in a Project Alternatives Report for the Airport staff to review and determine which of the recommended alternatives it wishes 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 typically have the potential to severely 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 further design. In addition, a preliminary construction cost estimate will be prepared to determine relative conformance with the anticipated project budget.

Design Development (60% Design Documents)

The primary goal of the Design Development phase are to demonstrate our Team's understanding of the design requirements, incorporate information gathered from the site investigation and perform an initial budget and schedule validation for the project. During this design phase, key coordination meetings will be scheduled and facilitated by the TEAM with all required regulatory agencies. The 60% Design Documents will provide sufficient detail to be utilized for initial permit submittals to each agency so that required revisions can be included as the design progresses.

Our expertise in cost estimating brings value to FXE through establishing a reliable budget at project start for proper financial planning, to allow FXE to maximize their funding and maintain a stable Capital Program.

Permit Documents (90% Design Documents)

The primary goal of this design phase will be to advanced the design based on comments generated from project stakeholders and regulatory agencies after review of the 60% Design Submittal. During this phase all details necessary to clearly provide resolution to comments provided and to support decisions reached regarding specific aspects of work to be completed will be incorporated. 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 re-submitted to each regulatory agency in order to obtain final permit approvals.

Final Contract Documents (100% Design Documents)

During this phase the design documents will be further refined to ensure that the overall design intent is clearly depicted and described to potential bidders. The final bid item list will be created, reviewed for conformance with Technical Specification and Contract Documents and provided to the City of Ft.

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 Documents

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. The HDR Team will also ensure that required permit documentation and any other supporting information (i.e. site investigation reports) are provided to Purchasing for inclusion into the bidding documents.

Project Management Approach

Our Approach is geared towards the successful implementation and completion of tasks that are anticipated to be requested by 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.

HDR's Four-Part Project Management Plan			
Operations Plan	**Communications Plan**	**Production Plan**	**QA/QC Plan**
Scope, budget, schedule controls; invoicing and project reporting; document control; subconsultant management	**Roles and responsibilities; web-based management tools**	**Staffing; design; CADD standards; reports; and studies**	**Independent reviews; structured, continuous process**

Operations Plan

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.

Communication Plan

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

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 stand alone deliverable for client review, comment, and approval, and will serve as a living document for the duration of the design phase of the project.

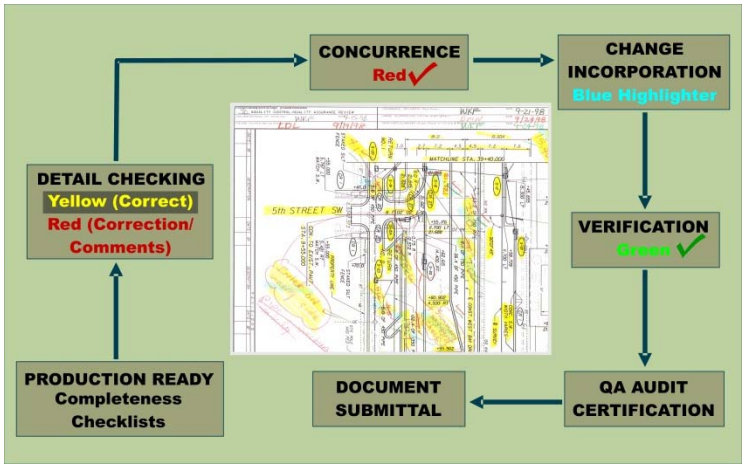
Quality Assurance/Quality Control (QA/QC) Plan

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.

As part of our Project 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.

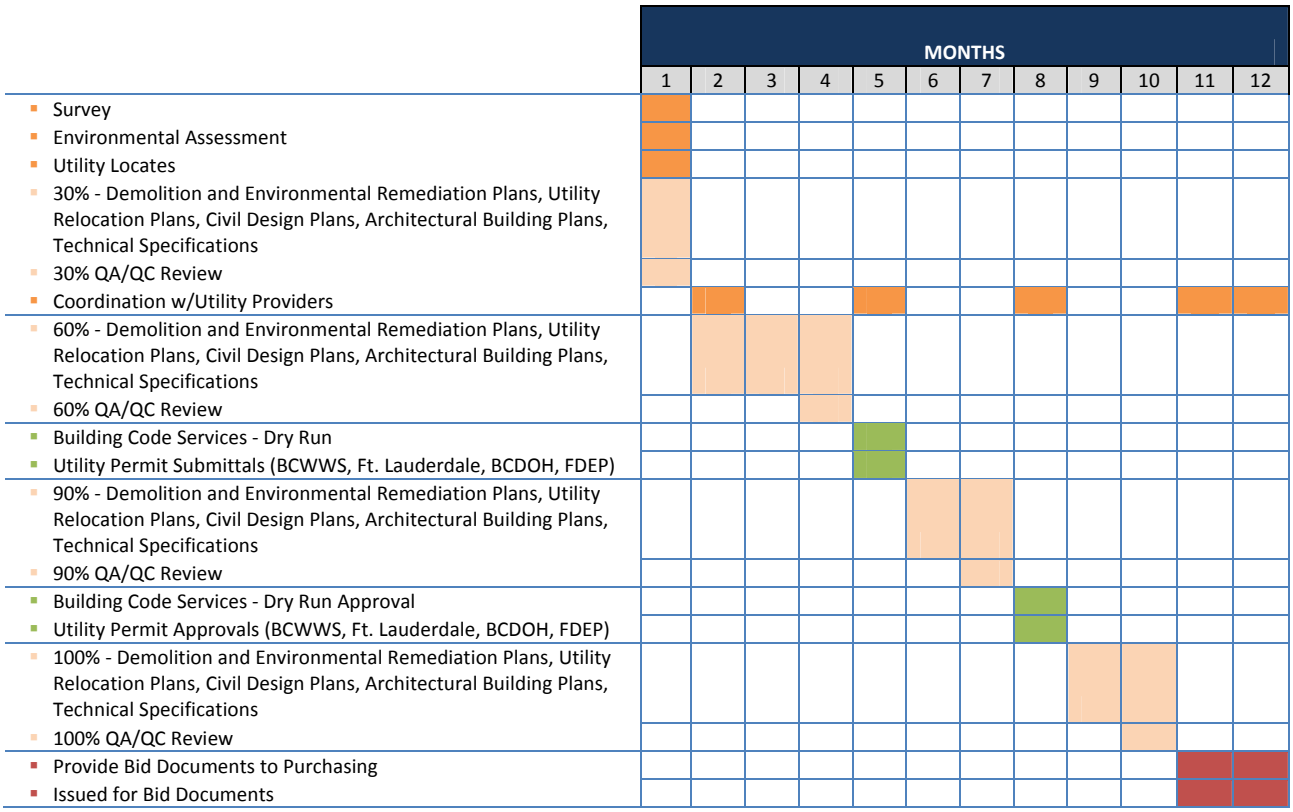
Scheduling Methodology

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 the overall project objectives, review existing site data, and perform a general review of the entire project site.



Task leaders monitor the progress of Team members on a regular basis including daily updates on hours charged and weekly updates on overall project cost. Completion is tracked and compared to the baseline schedule; and corrective actions are taken to manage the schedule requirements, when the need arises.

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 Ft. 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 engineering, 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 sub-consultants that in addition to our in house staff that are available at a moment's notice. An 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.***

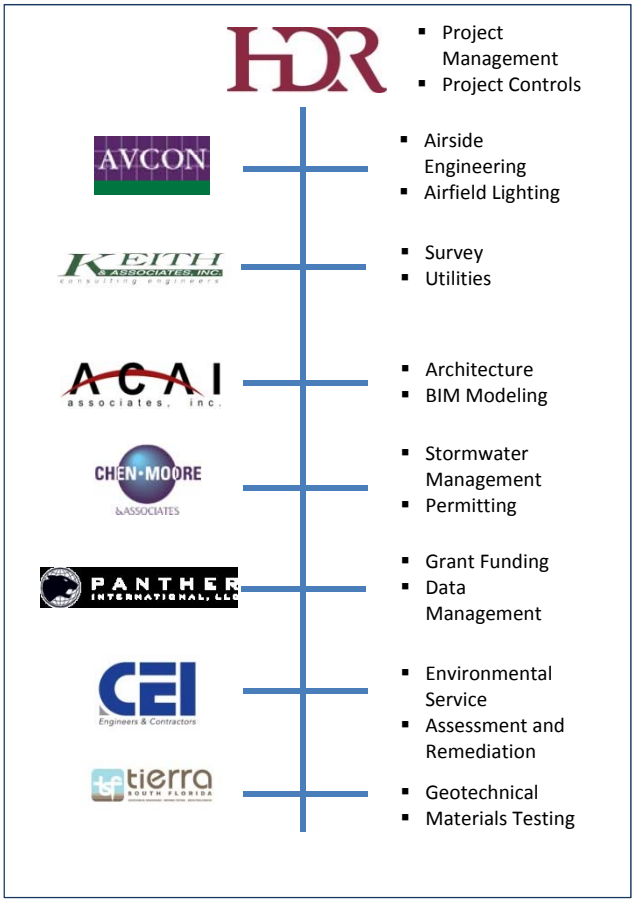
Below is a sample list of our active projects for our South Florida Clients:

Client	Project Name
Broward County Aviation Department	General Engineering Consultant
Broward County Highways and Traffic Department	General Professional Architectural and Engineering Consultant Services
Miami-Dade County-Port Miami	Wharfs Strengthening Program
Florida Department of Transportation District 4	I-75 Managed Lanes Procurement I-95 Phase 3 Corridor Design Consultant District-wide Plans Review
Florida Department of Transportation District 6	General Engineering Consultant District-wide Scoping Reports
South Florida Regional Transportation Authority	General Planning Consultant General Engineering Consultant WAVE Modern Streetcar

Qualifications of the Project Team

HDR has assembled a team of firms that specialize in planning, design and re-construction of Aviation facilities. Collectively this team possesses the full range of expertise needed to address all aspects of the contract. Our proposed project manager, John Neff, PE has worked with every firm on our team in the past on airport and other municipal projects. Each firm will play a specific role on the team and offers unique benefits to this project.

The FXE Team illustrates the primary roles and benefits of each firm on the HDR team, the reason each team member was chosen, and how we complement each other to bring forward the full range of services required for this contract. The HDR Team's aviation engineers have earned a national reputation for quality work and dedicated, multidisciplinary expertise, making us the ideal partner for The City of Ft. Lauderdale and FXE.



The FXE Team

HDR Engineering Inc. will provide overall contract administration, project controls and project management. HDR's strong local staff, over 20 in Ft. Lauderdale alone, will become an extension of FXE Staff and will provide expertise in every area that an airport requires.

AVCON is recognized as a leading expert in the design of airfield pavements and airfield lighting systems. FXE will benefit from the expertise and cutting edge thinking that the dedicated professionals at AVCON will bring.

Keith and Associates will provide FXE will unparalleled survey, subsurface utility exploration and construction administration services. Keith & Associates strong local staff with experience providing these services both airside and landside has made them the consultant of choice for HDR.

ACAI Associates is recognized for design excellence and dedication to client service. With a local staff of professionals in the architecture, planning, interior design and construction management industries, the ACAI team will directly aligns itself with FXE's goals. ACAI prides itself in consistently delivering services that exceed even the most rigorous of design and construction standards, maintaining high-quality deliverables while meeting completion schedules and cost objectives.

Chen Moore and Associates will provide FXE with local professionals focusing on civil engineering, surface water management, regulatory permitting, landscape architecture, GIS and construction observation services. Founded in 1986 in Ft. Lauderdale, Chen Moore will strive to become FXE's Trusted Advisor and serve as extension of your staff.

Panther International will support FXE in the pursuit and management of aviation grant funds. Panther's staff, being intimately familiar with JACIP, can provide assistance in populating the JACIP system with the airport's Capital Improvement Plan in a strategic manner in order to maximize both state and federal funding based on their respective priorities. Panther can also suggest and add workflow improvements to the entire grant management lifecycle as well as implement best practices to maximize state and federal funding.

Tierra South Florida is a full service consulting geotechnical and construction material testing engineering firm, which also provides threshold/special inspection and roofing inspection services. Their strong local experience performing geotechnical investigation for major airfield projects is unmatched. Tierra SF will bring this experience and knowledge of local conditions to FXE.

Cherokee Engineers and Contractor's strong local environmental experts will be standing at the ready to provide turnkey engineering and construction solutions to FXE to support infrastructure improvements and environmental compliance. FXE will not only benefit from the invaluable input that Cherokee will provide during the design phase of a project but also from their ability to respond quickly to any environmental issues that may arise during construction minimizing any potential impact to project schedule and budget.

Standard Form 330s for HDR and our subconsultants can be found in the following section which further illustrates our teams past experience and qualifications.

Project Manager's Experience

- 40 years PM experience
- 16 years managing GEC's at airports
- Familiar with FXE on paving and lighting projects
- Active in many professional groups including FAC

John F. Neff, PE brings 40 years of project management experience both national and international. He has successfully managed over 80 aviation projects in South Florida with many of which were located in Broward County. John has experience at FXE in the past on pavement and airfield lighting projects as well as owl and turtle studies. John has also completed a number of utility projects for the City of Ft. Lauderdale including an extensive I&I study for the basins in the area of Andrews and north of Sunrise. He has called Broward County home since 1989 when he was the Chief Engineer for Design/Build of the Broward County Resource Recovery Facilities. During his 25 years in South Florida, he has excelled at bringing together teams of highly qualified professionals to create and manage diverse projects that cover a large range of engineering/planning/construction encountered by full service engineering firms. After successfully managing the last 4 years of the General Engineering Contract at FLL and HWO, he served 4 tours in Afghanistan as the Engineering Site Manager for Northern and Western Afghanistan creating Forward Operating Bases, Major Operation Centers and Airfields. He designed and oversaw the development of three (3) fixed wing and seven (7) rotary wing runways while assigned to the 877th EPBS. He transferred to Hanscom AFB as Engineering Manager before returning to Broward County as a Senior Project Manager in Aviation.

John has dedicated the past year to reviewing the current projects and expectations of staff at FXE. Success is a measure of the HDR TEAM's ability to work in harmony with the Airport to meet and exceed expectations as a trusted advisor with dedicated professionals performing their work in an efficient process and achieving a quality deliverable on schedule. John has a history of excellence in leading teams on projects with a couple to over 20 sub-consultants. John is unquestionably the perfect type of manager for a GEC function at an airport. His extensive project list at both airports and local municipalities along with access to exceptional talent is unequaled in Broward County. He is active in FAC, ASCE, AWWA and FPE and is a member of the Broward County Advisory Board for Individuals with Disabilities. He has experience in the City and has worked with the Federal/State/County Agencies that oversee airports. John was a key member of the team that designed Broward County's Greenways and has over 40 miles of bike path experience. He has also designed overseas facilities for over 100 military rotary wing assets as well as several civilian facilities in South Florida. John also was PM for the design and oversight for the administration and maintenance facilities at HWO and SLCIA. Security, utilities, airspace, pavement analysis and rehabilitation, parking, wayfinding – etc. If it's at an airport – John has likely worked or managed it during his distinguished career.

- More than 40 years in airports
- Airport Owner
- Airport Management
- General Contractor
- Airport Pavements
- Airfield Lighting

Our Deputy Project Manager is **Mr. James A. Kriss, P.E.** Mr. Kriss is a principal and founder of AVCON, INC., and has been serving the airport and construction industry for more than 40 years. As a principal and senior project manager with AVCON, he is responsible for technical design issues associated with all aspects of studies, designs and project management tasks for airport and aviation related projects, Mr. Kriss and AVCON have been involved with over one hundred different clients in the U.S. and abroad over the past 25 years. His experience includes all facets of aviation, pavements, utilities, lighting and NAVAID systems, construction, cost estimating, and project management.

Among his more prominent roles, he has served as Project Manager for a Continuing Planning and/or Civil Engineering Role for the Greater Orlando Aviation Authority, serving Orlando International and Orlando Executive Airports. During more than 25 years of service, his continuing association with the Authority has involved on-call services in support of the Authority Planning and Engineering Staff in the performance of miscellaneous services of every type and requirement. The work involves planning assignments, studies, airfield and roadway pavements, lighting and NAVAIDS, building systems, security and fire alarm enhancements, specialty consulting through various subconsultants, and all related work necessary to prepare and produce bidding documents for a wide array of projects Over two hundred fifty assignments have been completed to date.

Mr. Kriss has been a 28 year member of the Florida Airports Council, 25-year member of the Airport Consultants Council, and a nearly 40-year participant in the Illuminating Engineering Society's Aviation Lighting Committee. He previously served as Deputy Director of Airports for the Tulsa Airport Authority (OK) which provides him additional perspectives of public airport ownership and strategic planning. Further he is an airport owner of a small private airport in upstate New York, where he learned to fly now surpassing 40-years as a commercially-rated pilot. Along with the above, he brings forth his previous experience as a General Contractor to provide commons sense designs, constructability reviews and support throughout the construction phases of his projects. This expertise has assisted the firm and their Clients in monitoring and re-buffing groundless change order claims. He has always sought means to resolve construction issues and changed conditions in the field with the Contractor.

Collectively, his background is firmly rooted in aviation and airports; it is his life's blood. He understands the full spectrum of the owner, pilot, contractor and engineer perspectives, and brings this background to all of his airport projects. One of the trademarks of AVCON and Mr. Kriss is the desire to listen to clients, focusing on a safe work environment with minimal construction impacts on airfield operation, all geared toward quality and responsible airport development. Mr. Kriss is fully committed to bringing this experience and background to all aspects of his involvement at FXE.

Below is a sample list of projects that highlight our Mr. Neff's and Mr. Kriss' extensive experience in Aviation Planning and Engineering.

	Aviation Planning	Airfield Pavement Design	Airfield Lighting and Signage	FAR Part 77 Evaluation	Construction Management/Services	Stormwater Management	Environmental	NAVAIDS/Facilities	Bidding and Award Support	Architectural Design
BCAD General Engineering Consultant	✈	✈	✈	✈	✈	✈	✈	✈	✈	✈
Rehabilitation of 9L/27R at FLL	✈	✈	✈		✈	✈	✈	✈	✈	✈
Redesign of Terminal 4 Apron/Taxiways at FLL	✈	✈	✈		✈	✈	✈		✈	
General Consultant Services, Okeechobee County Airport	✈	✈	✈	✈	✈	✈	✈	✈	✈	✈
Continuing Civil Engineering, Orlando International Airport	✈	✈	✈	✈	✈	✈	✈	✈	✈	✈

References

References, Full Description of Work, and Project Details for our projects are included on our Standard Form 330s included in this proposal. The below table provides a few key projects which we would like to highlight due to the similarities between those projects specifically listed in this Request for Qualifications.

Project	Description	Reference
Broward County Aviation Department General Engineering Consultant Services Construction Cost: $100M (est.) Completed: Ongoing	HDR is one of three firms currently serving the Broward County Aviation Department (BCAD) as its General Engineering Consultant. Since being awarded the contract in 2009, the HDR team has been assigned over 30 task orders totaling over $11M in fees. These projects have been very diverse in scope and size, and have included design, studies and investigations on both the airside and landside. HDR has worked closely with the FAA as well as numerous state and local regulatory and resource agencies having jurisdiction over the BCAD aviation facilities.	Marc Gambrill Broward County Aviation Department 954-259-2343
Greater Orlando Aviation Authority Transportation Engineering Consultant Services Construction Cost: N/A Completed: Ongoing	HDR has served the GOAA since 1995 as the primary Transportation Planning Consultant. During the past Thirteen (13) years and two (2) General Services contracts, HDR has served as an extension of staff, addressing on-site and off-site transportation issues, working with other GOAA consultants, and providing coordination among the numerous local governments and agencies that participate in their decision-making process.	Brad Friel, AICP Greater Orlando Aviation Authority 407-825-3139
FLL Terminal 4 Apron Civil Works Construction Cost: $40M (est.) Completed: Ongoing	The Terminal 4 (T-4) Apron Civil Works project is part of the overall Airport Expansion Program (AEP) currently underway at the Fort	Marc Gambril Broward County Aviation Department 954-259-2343

	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 Taxilane Tango and the existing Terminal 4 Apron.	
Greater Orlando Aviation Authority, Continuing Civil Engineering Consultant Construction Cost: $200M (est.) Completed: Ongoing	Over the past 24 years, AVCON has provided continuing services to Orlando International Airport and Orlando Executive airport on over 300 different project tasks. These have ranged from minor terminal and support facility engineering to major airfield improvements and terminal renovations.	Mark Birkebak, AIA Greater Orlando Aviation Authority 407-825-4058
Zephyrhills Municipal Airport Construction Cost: $4.7M (est.) Completed: Ongoing	AVCON is presently serving as General Consultant for Zephyrhills Municipal Airport. Among a variety of recent projects, AVCON has just completed an Airport Layout Plan Update and is currently in construction on the Rehabilitation of Runway 4-22, the airport's primary runway. This work includes complete in-place recycling, new P-401 SuperPave asphalt, and all new edge lighting systems, signs and PAPI's.	Mike Handrahan City of Zephyrhills 813-780-0030

Minority/Women (M/WBE) Participation

HDR is committed to achieving the M/WBE procurement goals established for each project awarded under this contract. We understand the desire for this goal to be no less than 10% for each individual project and have built a team which will be more than capable of meeting the established goals. HDR has a strong relationship with each of the M/WBE firms which we have partnered with for this contract and would select these firms as partners regardless of participation goals. We have the upmost respect and confidence in their ability to deliver any task requested. To show the breadth of services that our partner firms are available to provide please refer to the below chart.

AVCON – MBE/DBE will be providing Airfield Pavement Design, Airfield Lighting and Airport Master Planning

ACAI – MBE, DBE will serve as the lead architect for the expansion of the Administration Building

Keith & Associates – MBE, WBE, DBE will provide all site survey, obstruction surveys, resident project representatives and underground utility locates.

Tierra SF – MBE, DBE will perform all geotechnical site investigations and provide Quality Assurance and Materials Testing during construction.

Cherokee- MBE, DBE will be available to consult on any environmental concerns and on-call for remediation activities as required.

As you can see, with abilities of each of these firms, the HDR team will have no issues achieving any goals that may be set during the life of this contract. All of these firms are also certified DBE firms in the event that any FAA Grant requirements need to be achieved during design or construction.

Sample Insurance

ACORD®

CERTIFICATE OF LIABILITY INSURANCE 6/1/2014

DATE (MM/DD/YYYY) 5/24/2013

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 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
Lockton Companies, LLC-1 Kansas City
444 W. 47th Street, Suite 900
Kansas City MO 64112-1906
(816) 960-9000

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Hartford Fire Insurance Company	19682
INSURER B : St. Paul Fire and Marine Insurance Company	24767
INSURER C : Sentinel Insurance Company, Ltd.	11000
INSURER D : Zurich American Insurance Company	16535
INSURER E :	
INSURER F :	

INSURED
1013472 HDR ENGINEERING, INC.
8404 INDIAN HILLS DRIVE
OMAHA, NE 68114-4049

COVERAGES HDRIN01 **CERTIFICATE NUMBER:** 312366 **REVISION NUMBER:** XXXXXXX

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 INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X Contractual Liab. GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC	N	N	37CSEQU0950	6/1/2013	6/1/2014	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$ 1,000,000 $ 1,000,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
A A A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS	N	N	37CSEQU0951 (AOS) 37CSEQU0952 (HI) 37MCPQU1160 (MA)	6/1/2013 6/1/2013 6/1/2013	6/1/2014 6/1/2014 6/1/2014	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$ 2,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ $0	N	N	ZUP-10R64084-13-NF (EXCLUDES PROF. LIAB)	6/1/2013	6/1/2014	EACH OCCURRENCE AGGREGATE $	$ 1,000,000 $ 1,000,000 $ XXXXXXX
C C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	N	91WEOH1000 (AOS) 91WBOH1760 (HI)	7/1/2013 7/1/2013	7/1/2014 7/1/2014	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
D	ARCHS & ENGS PROFESSIONAL LIABILITY	N	N	EOC9260026-06	6/1/2013	6/1/2014	PER CLAIM: $1,000,000. AGG: $1,000,000.	

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

CERTIFICATE HOLDER

312366
FOR INFORMATION PURPOSES ONLY

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Ronald J Foster

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Joint Ventures

Not Applicable

Subconsultants

AVCON Inc. is recognized as a leading expert in the design of airfield pavements and airfield lighting systems. FXE will benefit from the expertise and cutting edge thinking that the dedicated professionals at AVCON will bring.

KEITH & ASSOCIATES will provide FXE will unparalleled survey, subsurface utility exploration and construction administration services. Keith & Associates strong local staff with experience providing these services both airside and landside has made them the consultant of choice for HDR.

ACAI ASSOCIATES, Inc. is recognized for design excellence and dedication to client service. With a local staff of professionals in the architecture, planning, interior design and construction management industries, the ACAI team will directly aligns itself with FXE's goals. ACAI prides itself in consistently delivering services that exceed even the most rigorous of design and construction standards, maintaining high-quality deliverables while meeting completion schedules and cost objectives.

CHEN MOORE & ASSOCIATES will provide FXE with local professionals focusing on civil engineering, surface water management, regulatory permitting, landscape architecture, GIS and construction observation services. Founded in 1986 in Ft. Lauderdale, Chen Moore will strive to become FXE's Trusted Advisor and serve as extension of your staff.

PANTHER INTERNATIONAL, LLC, will support FXE in the pursuit and management of aviation grant funds. Panther's staff, being intimately familiar with JACIP, can provide assistance in populating the JACIP system with the airport's Capital Improvement Plan in a strategic manner in order to maximize both state and federal funding based on their respective priorities. Panther can also suggest and add workflow improvements to the entire grant management lifecycle as well as implement best practices to maximize state and federal funding.

TIERRA SOUTH FLORIDA is a full service consulting geotechnical and construction material testing engineering firm, which also provides threshold/special inspection and roofing inspection services. Their strong local experience performing geotechnical investigation for major airfield projects is unmatched. Tierra SF will bring this experience and knowledge of local conditions to FXE.

CHEROKEE Engineers and Contractor's strong local environmental experts will be standing at the ready to provide turnkey engineering and construction solutions to FXE to support infrastructure improvements and environmental compliance. FXE will not only benefit from the invaluable input that Cherokee will provide during the design phase of a project but also from their ability to respond quickly to any environmental issues that may arise during construction minimizing any potential impact to project schedule and budget.

ARCHITECT – ENGINEER QUALIFICATIONS

PART I – CONTRACT SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION *(City and State)*
HDR Engineering, Inc. (*Ft. Lauderdale, Florida)*

2. PUBLIC NOTICE DATE	3. SOLICITATION OR PROJECT NUMBER
01/21/2014	946-11333

B. ARCHITECT – ENGINEER POINT OF CONTACT

4. NAME AND TITLE
Charles T. Sinclair, PE

5. NAME OF FIRM
HDR Engineering, Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
954.647.4542	N/A	chuck.sinclair@hdrinc.com

C. PROPOSED TEAM

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

	(Check) PRIME	(Check) J-V PARTNER	(Check) SUBCON-TRACTOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
a.	✓			HDR Engineering, Inc. ✓ CHECK IF BRANCH OFFICE	3250 West Commercial Blvd, Suite 100 Ft. Lauderdale, FL 33309	Prime Consultant
b.			✓	AVCON, Inc. ✓ CHECK IF BRANCH OFFICE	101 NE 3rd Avenue, Suite 300A Ft. Lauderdale, FL 33301	Aviation Planning and Engineering
c.			✓	Keith and Associates, Inc. ☐CHECK IF BRANCH OFFICE	301 East Atlantic Boulevard Pompano Beach, FL 33060	Surveying
d.			✓	Chen Moore and Associates ☐CHECK IF BRANCH OFFICE	500 West Cypress Creek Road Suite 630 Fort Lauderdale, FL 33309	Permitting
e.			✓	Tierra South Florida ☐CHECK IF BRANCH OFFICE	2765 Vista Parkway, Suite 10 West Palm Beach, FL 33411	Geotechnical Engineering & Material Testing
f.			✓	ACAI Associates, Inc. ✓ CHECK IF BRANCH OFFICE	2937 W. Cypress Creek Road Suite 200 Fort Lauderdale, Florida 33309	Architecture, BIM Services
g			✓	Panther International, LLC ✓ CHECK IF BRANCH OFFICE	2841 Executive Drive, Second Floor Clearwater, FL 33762	Grant Support
h			✓	Cherokee Enterprises, Inc. ☐CHECK IF BRANCH OFFICE	14474 Commerce Way Miami Lakes, FL 33016	Environmental Services

D. ORGANIZATIONAL CHART OF PROPOSED TEAM ✓ (Attached)

General Engineering Aviation Consultant Services

Organizational Chart

Project Manager
John Neff, PE[1]

Deputy Project Manager
Jim Kriss, PE[2]

Project Principal
Chuck Sinclair, PE[1]

Quality Control Program
Melanie Fowler, PE[1]

AVIATION PLANNING
Tim Fish, PE[1]

Airport Master Planning
John McPherson, PE[1]
Mary Soderstrum, AIA, LEED AP[2]

Airspace Analysis
Eric Cleveland[1]
Mary Soderstrum, AIA, LEED AP[2]

Aviation Planning
Daryl Schneider, PE[1]
Mary Soderstrum, AIA, LEED AP[2]

FAA Coordination
John Neff, PE[1]
Jim Kriss, PE[2]

Grant Funding and Data Management
Becky Mainardi[6]
Chase Stockton[6]
Scott Entin[6]

AIRSIDE ENGINEERING
Russ Holliday, PE[2]

Airfield Pavement
Russ Holliday, PE[2]
Robert Boyer, PhD, PE[2]
BJ Skar, PE[1]
Tim Fish, PE[1]

Construction Safety and Phasing
Tim Fish, PE[1]
Jim Kriss, PE[2]

Airside Lighting & Signage
Carl Johnson, EC, ACE[2]
Mark Goodacre, ACE[2]
Mark Dikun[1]

NAVAIDS/Facilities
Carl Johnson, EC, ACE[2]

Stormwater Management
Jennifer Smith, PE[5]

LANDSIDE ENGINEERING
Peter Moore, PE[5]

Utilities & Infrastructure
Daniel Checchia[3]
Heather Manganiello, PE[1]

Stormwater Management
Jennifer Smith, PE[5]
Jason McClair, PE
Abbie Wilson, PE[1]

Landscape Architecture
Cristobal Betancourt, RLA[5]
Eric Harrison, RLA[5]

Land Planning
Joey Brownsey[5]

Roadway/Signals/Lighting/Parking
Will Suero, PE[1]
Josh Salazar, PE[1]

Transportation Planning/Bike Path Studies/Wayfinding
Jaime Krzmenski, PE, PTOE[1]
Clint Pletzer, PE[2]

ARCHITECTURAL
Adolfo Cotilla, AIA[4]

Architectural Facilities Design
Adolfo Cotilla, AIA[4]
Donald Wilkin, AIA[4]
Steve Lewis, AIA[1]
Steve Tozer, AIA[1]

Structural
Pedro Loureiro, PE[1]

BIM Modeling
Sakomvat Sukphisit[4]
Harvey Loiseau[4]

MEP
Bill Zavatkay, PE, LEED AP[1]
Zemp Pepper, PE[2]

CONSTRUCTION ADMINISTRATION
James Theile[3]

Construction Admin - Civil
James Theile[3]
Rit Ky, PE[1]

Construction Admin - Facilities
Rit Ky, PE[1]

Resident Project Representatives
Alex Lazowick[3]
Rit Ky, PE[1]
Rocky Dovicji[2]

SUPPORT SERVICES

Geotechnical
Raj Krishnasamy, PE[8]
Francis Thomas, PE[8]

Environmental Assessment and Remediation
Jeff Northrup, PG[7]
Amanuel Worku, PE[7]

SUE
Michael Mossey, PSM[3]
Daniel Checchia[3]

Public Involvement
Will Suero, PE[1]
Joshua Salazar, PE[1]

Project Controls/Schedule/Estimating
Melanie Fowler, PE[1]

Regulatory Permitting
Jennifer Smith, PE[5]
Abbie Wilson, PE[1]

FIRM LEGEND
1 - HDR Engineering
2 - AVCON
3 - Keith and Associates
4 - ACAI
5 - Chen Moore
6 - PantherInternational
7 - Cherokee
8 - Tierra SF

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
John Neff, PE	**Project Manager**	23	3

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Miami Lakes, Florida)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer, Florida, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Rehabilitation of the North Runway and EMAS at Fort Lauderdale-Hollywood International Airport , Ft. Lauderdale, FL	2004	2004
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	Check if project performed with current firm	

Project Manager. Served in a number of roles from design, planning, construction administration, and final analysis of the completed project for certification and Final Acceptance. The project was completed with minimal Change Orders and was within the original budget. Created a significant inventory of lessons learned by dissecting all phases of design and construction to evaluate where procedures or directives impacted quality. Oversaw installation of one of the original EMAS systems used at a commercial airport. Helped to minimize impacts to the air carriers throughout the duration of the construction effort in the midst of an operational movement area. Was the key staff position that provided continuity from planning through Final Acceptance.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Terminal 4 Apron Design at Fort Lauderdale-Hollywood International Airport, Ft. Lauderdale, FL	2014	2014
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Transitioned into the Project Manager role for designing new airside surfaces supporting the new terminal work for FLL. The project sits between two extensive ongoing reconstruction projects (Terminal 4 and the new South Runway) requiring close coordination and flexibility. The project involves precise planning and phasing to allow reconstruction while maintaining operational gates for air carriers. Many years of airport experience at BCAD facilitated understanding the scope and immediately assuming a leadership role with no impact to the schedule.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Airfield Electrical Improvements, Ft. Lauderdale International Airport, Ft. Lauderdale International Airport, Ft. Lauderdale, FL	2007	2007
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	Check if project performed with current firm	

Fort Lauderdale-Hollywood International Airport - Resident Project Engineer for replacement of aged airfield lighting circuitry. Work valued over $1,000,000 and included recircuitry for 2 of the 3 runways at the airport and 6 taxiways, contractor installed new circuits, conduit and light fixtures. Responsible for coordination with BCAD operations regarding closing airside areas.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Taxilane Tango and Apron Rehabilitation, Ft. Lauderdale International Airport, Ft. Lauderdale International Airport, Ft. Lauderdale, FL	2007	2007
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	Check if project performed with current firm	

Fort Lauderdale-Hollywood International Airport - Resident Project Engineer for the design/reconstruction of the inner taxilane requiring extensive planning and flexibility to support the ongoing air carrier needs. Project was completed without delays for the tenants and a half million dollars under the projected $7 million dollar budget.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Task 1 West Side Redevelopment, Fort Lauderdale-Hollywood International Airport, Ft. Lauderdale, FL	2007	2007
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	Check if project performed with current firm	

Developed final civil plans and obtained permits for the west side redevelopment of the airport including roads, drainage, water, sewer, FAA, power and communication duct banks. Assumed leadership role and redesigned the U/G utilities to more effectively align with the new roadway. Provided post design services throughout construction. The project included FAA work beneath the western EMAS on 9L..

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
Timothy Fish, PE	**Aviation Planning Lead**	11	3

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Fort Lauderdale, Florida)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil / Environmental Engineering	Professional Engineer, Florida

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

American Society of Civil Engineers (ASCE), Broward County Branch, Secretary, 2011-2012, Treasurer, 2010-2011

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department (BCAD), Fort Lauderdale/Hollywood International Airport Terminal 4 Apron Civil Works, Broward County, FL	ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. Mr. Fish served as project engineer for the replacement and expansion of the existing Terminal 4 Apron at the Fort Lauderdale/Hollywood International Airport. In this role, Mr. Fish was responsible for developing apron layout options, review and analysis of geotechnical investigation data, design of apron pavement, developing construction access and phasing plans which minimize the impacts on airport operations, design of stormwater system, design of water and sewer infrastructure to server the proposed Terminal Expansion, regulatory permitting, coordination with abutting projects, ensuring all aspects of project design met Federal Aviation Administration (FAA) Advisory Circular (AC) requirements and assisting BCAD with meeting the FAA Airport Improvement Program grant requirements.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
I-10 Emergency Bridge Repair, Pensacola, FL	2004	2004
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	Check if project performed with current firm	

Field Engineer. Due to the wrath of Hurricane Ivan on September 16, 2004, nearly a quarter mile of the two-lane double span I-10 concrete bridge spanning Escambia Bay was torn apart. The destruction halted the bridge's nearly 42,000 daily vehicles, and forced truck traffic to take an inconvenient detour north of I-10. Mr. Fish served as a field engineer on a team which quickly responded to the $33.7 million design-build reconstruction effort by reopening the westbound span to two-way traffic in just 17 days – 7 days ahead of schedule. Exceeding expectations, the project team reopened the eastbound span 26 days ahead of the original 90-day completion schedule.

The 2.5-mi.-long spans suffered extensive damage amid one of Florida's hardest hit areas. Forty-six eastbound concrete sections were knocked out or misplaced by the 10-ft.-high storm surge, and approximately 28 westbound sections were damaged or misaligned. To get traffic moving again, crews repaired the less-damaged westbound span using eastbound sections. Crews either used barge-mounted cranes to lift the 235-ton sections into position, or employed barges with hydraulic jack trailers to lift up sections and then float them into place. The majority of eastbound reconstruction comprised more than 3,400 lineal ft. of temporary steel bridge sections.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Washington Dulles International Airport AeroTrain System, Chantilly, VA	2004	2005 - 2007
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	Check if project performed with current firm	

Project Engineer. Mr. Fish served as project engineer on a team responsible for cost estimating, construction phasing, review and analysis of geotechnical investigation data, project scheduling utilizing Primavera P3 software, and plan review for the construction of a future Underground AeroTrain System at Dulles International Airport. Responsibilities included coordination of Tunnel Boring Machines (TBM's), selecting open cut locations, and scheduling project while keeping day to day airport activities functioning. Team analyzed many different phasing options to determine which would be most cost efficient and provide for shortest total schedule length while having no adverse effects on airport activities.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Miami International Airport H-J Apron, Miami FL:	2006	2006 - 2007
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	Check if project performed with current firm	

Field Engineer. Mr. Fish served as field engineer on a team responsible for construction of the $47 million H-J Apron and Utilities project at Miami International Airport which was part of the Miami Dade Aviation Department's South Terminal Expansion Program. The project was divided into 12 phases and included construction of an 80,000-square-yard Portland Cement Concrete apron around the proposed Concourse J, as well as a remote concrete aircraft parking apron and new asphalt pavement for the adjacent taxi lanes throughout the South Terminal program area.

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
Chuck Sinclair, PE	**Project Principal**	22	22

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Miami Lakes, Florida)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer, Florida, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department - General Engineering Consulting Services, Broward County, FL	ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. Mr. Sinclair is serving as the program manager for an open-ended engineering consulting services contract for the Broward County Aviation Department in Broward County, Florida. HDR is leading 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 the HDR Team includes 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. As program manager, Mr. Sinclair is responsible for all administrative, financial, and staffing needs of the projects, as well as planning and scheduling future projects as needed by the Department. In addition, Mr. Sinclair is acting as the project manager for several assignments in the program.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Capital Region Airport Commission, ARFF Concrete Vault Remediation, Richmond, Virginia.	1993	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Provided technical oversight and subcontractor coordination for remediation of a concrete vault used for treatment of floor drain discharge at the Airport Rescue and Firefighting Facility at the Richmond International Airport, Richmond, Virginia. The project included removal of contaminated liquid, and preparing an assessment report of the findings with a recommendation of how to return the unit to service.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Charlotte/Douglas International Airport, Stormwater Projects, Charlotte, NC	1996	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Engineer. Mr. Sinclair evaluated alternative locations for a 40-acre in-stream stormwater detention pond at the Charlotte-Douglas International Airport. Activities included on-site study and computation of area and volume of proposed pond sites and the environmental impacts of each site. Mr. Sinclair assisted with final design of the 130 acre-foot in-stream stormwater detention pond at the Charlotte Douglas International Airport. The HEC-1 model was used to size the facility to comply with local city stormwater ordinances and provide optimum credit towards the airports stormwater fee.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Charlotte-Douglas International Airport, Design of Stormwater Detention Pond, Charlotte, North Carolina	1996	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Evaluated alternative locations for a 40-acre in-stream stormwater detention pond at the Charlotte-Douglas International Airport. Activities included on-site study and computation of area and volume of proposed pond sites and the environmental impacts of each site. Mr. Sinclair assisted with final design of the 130 acre-foot in-stream stormwater detention pond at the Charlotte Douglas International Airport. The HEC-1 model was used to size the facility to comply with local city stormwater ordinances and provide optimum credit towards the airport's stormwater fee.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Mark Dikun	**Airfield Electrical**	41	20

15. FIRM NAME AND LOCATION *(City and State)*

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

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Degree not complete	**N/A**

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

Mr. Dikun possesses 41 years of experience in electrical, mechanical and structural design. His electrical experience includes power studies inspections, loading studies, lighting design and photo metrics, cabling, conduit layouts and schedules, control panels, panel boards and Motor Control Center design, instrumentation, airport lighting for runways and approaches and taxiways and switch houses, PLC programming (Programmable Logic Controllers) and CAD, design and layouts of printed circuit boards, thick and thin film substrates, custom I.C.'s wiring harnesses, schematics, flow diagrams, packaging, loop diagrams, simulation, fabrication process..

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Forrest Sherman Field, Pensacola, FL	2011	
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Electrical QA/QC. Project focused behind taxiway rehabilitation and hold bar sign modifications. This effort was jointly worked on between staff members from Omaha and Newark.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
PANYNJ, Present Taxiway A and B Bridges at John F. Kennedy International Airport, Queens, NY.	2007	
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. Field survey of existing taxiway, bridge and highway conditions and electrical rooms, highway and taxiway lighting, flood and weather sensors, temporary power requirements based on construction staging, guidance sign and revised according to new civil taxiway layout and paving plans in conjunction with the structural bridge plans according to FAA requirements, electrical calculations of regulator distribution, switch house equipment replacement and construction support with final 'As Built' documentation.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
PANYNJ, Rehabilitation of Taxiway AA and BB at La Guardia Airport, Queens, NY.	2003	
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. Field survey of existing taxiway and runway conditions and electrical rooms, lighting and guidance signs. Project entailed the design of the airside navigational lighting aides for the taxiway and runway areas including centerline and runway guard bars on the Rehabilitation of Taxiways AA and BB for 4,500 feet of taxiway area along with a Helipad. Work efforts were demolition of existing taxiway centerline lighting system on secondary wiring and design of new taxiway centerline lighting system using primary wiring according to new civil paving plans using the FAA approved spacing for clearance bars for a Group III rating of the airfield. Design efforts also included installing new duct bank systems in the area of work and continued modification to the switch houses for recircuiting all power feed for the taxiway lights to establish a uniform grid, upgrading the required regulators according to electrical calculations and construction support with final 'As Built' documentation.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
PANYNJ, Runway 11-29 Rehabilitation at Newark Liberty International Airport, Newark, NJ.	2007	
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. Field survey of existing taxiway and runway conditions and electrical rooms, lighting and guidance signs. Project entailed the design of the airside navigational lighting aides for the taxiway and runway areas including centerline and runway guard bars on the Rehabilitation of Runway 11-29 for 29,000 feet of runway and taxiway area. Work efforts were demolition of existing taxiway centerline lighting system and complete demolition of all runway lights and design of new taxiway centerline lighting system using primary wiring according to new civil paving plans using the FAA approved spacing for clearance bars for a Group IV rating of the airfield. Runway lighting consisted of center and edge lighting, runway end identification lights, touch down zone, land and hold short, threshold and displaced threshold, distance to go signage and guidance signs. Work efforts also included installing new duct bank systems in the area of work to the switch house and modifications to the switch house for recircuiting all power feed for the runway and taxiway lighting circuits and for upgrades to overloaded regulators and construction support with final 'As Built' documentation.

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
Will Suero, PE	**Roadway and Public Involvement**	22	12

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Miami Lakes, Florida)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer, Florida

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Taxiway C Pavement Evaluation and Repair, Broward County, FL	Ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. The Team was assigned the task of evaluating the apparent failure of new pavement on a Taxiway C at FLL. Significant rutting was observed after the new pavement was installed and the HDR Team was called in evaluate the pavement and determine the cause of the problem. HDR conducted a thorough review of the pavement and mix design, the quality of materials used, and workmanship performed, and issued a report as to the probable cause of the failure. HDR also developed a range of repair alternatives and solutions with cost estimates for BCAD to consider.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SR 924 / Gratigny Parkway PD&E Study, Miami-Dade Expressway Authority, Miami-Dade County, FL	Ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. The Miami-Dade Expressway Authority has contracted with HDR to perform a 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).

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
I-75 PD&E Study FDOT District 4, Broward / Miami-Dade Counties, FL	2012	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager for multi-modal Project Development and Environment (PD&E) Study in Broward and Miami Dade Counties. The Broward County I-75 roadway improvements extend from the Broward County line north of the interchange with the Florida Turnpike to the I-595/Sawgrass Expressway interchange. These improvements consist of widening I-75 to accommodate the travel demand, potentially with reversible or special use lanes in the median, the addition of auxiliary lanes, interchange modifications and bridge widening or replacements. The PD&E Study also includes an evaluation of up to 10 transit corridors to connect a future transit guideway within the I-75 Right of Way in Broward County to one of several existing of planned Miami-Dade Transit system in Miami-Dade County. The systems include the existing mainline Metrorail, the I-95 express BRT System of the planned North Corridor Metrorail extension. Work effort culminated in the development of a Transit Corridors Evaluation Report that le to a preferred alternative that was included in the Miami-Dade County 2035 LRTP.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
I- 95 Phase 3 Corridor Design Consultant, FDOT District 4, Broward County, FL	Ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. 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). 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.

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
Daryl Schneider, PE	**Aviation Planning**	5	5

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Ft. Lauderdale, FL)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering, University of Florida, 2008	Professional Engineer, Florida, No. 76164

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department - General Engineering Consulting Services. Terminal 4 Apron Civil Works at FLL	2013	2015
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Designer. BCAD is implementing an Airport Expansion Program (AEP) which includes the Expansion of Runway 9R/27L, Terminal 4 Gate Replacement, and Enabling Projects. The T-4 Apron Civil Works project will modify 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. The project will also replace the Terminal 4 Apron and expand the apron to the east. All proposed work will be completed while maintaining operations to the existing Terminal and Concourse. HDR provided preliminary engineering and final design services and is 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. Services include existing infrastructure evaluations, design, construction cost estimating, construction phasing and sequencing, permitting services, and design coordination. In addition, HDR is overseeing multiple subconsultants who are performing specialized services such as Environmental restoration, Pavement analysis and design, and Stormwater and Drainage Design.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
WAVE Modern Streetcar, South Florida Regional Transit Authority	Ongoing	
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. The Wave Modern Streetcar (Project) is currently comprised of approximately 2.7 miles of circulating track, stations, and a vehicle maintenance and storage facility. The project will be located in Broward County, Florida and is the first of what is expected to be several phases of streetcar construction. Stakeholders in the project include: Federal Transit Administration (FTA), Florida Department of Transportation (FDOT), Fort Lauderdale Downtown Development Authority (DDA), City of Fort Lauderdale, Broward County (BC), Broward County Metropolitan Planning Organization (MPO), and the project sponsor South Florida Regional Transit Authority (SFRTA).

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
FDOT District 4, I-75 PD&E Study, FDOT District 4, Broward County, FL	2012	
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Designer assisted the project team with preparation of Long Range Estimates (LRE) for the entire project corridor. Specific responsibilities included creation of theoretical, project specific LREs for Park and Ride facilities, updating intersection improvement LREs and updating the main line LREs using District 4 criteria. Additionally, created graphics, flyers, and presentation materials for use during public outreach activities.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
82nd Ave/CR 609 (Ranch Road) New Facility, FDOT District 4, Indian River County, FL.	2011	
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Designer responsible for aiding in preparing the estimates for required Right of Way plans for the construction of a new 7.2-mile, 2-lane undivided roadway, parallel to the east side of Lateral Canal C. The rural typical section consists of two 12' lanes, and 8' shoulders (5' paved) in each direction. The highway will begin with a transition from west to east at the south end of the project, to transition from the existing dirt roadway parallel to the canal to a new a new alignment to the east, through existing pastures and citrus groves. The proposed improvements include the 4 new bridges over sub-lateral canals, 25 cross drains and 10 wet detention ponds. Specific responsibilities include signing and pavement and signalization design.

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
James Krzeminski, PE, PTOE	**Transportation Planning**	17	17

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Orlando, FL

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
ME, Transportation BS, Civil Engineering	Professional Engineer, Florida Professional Traffic Operations Engineer

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

James Krzeminski is a transportation engineer in the Planning Section of HDR's Orlando office with fifteen years of experience in transportation planning and traffic engineering. He has successfully served in the roles of Project Manager and Project Engineer on numerous key projects for both public and private clients.

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
GOAA Transportation Planning Consultant Services Orlando, FL	2011	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	X Check if project performed with current firm	

Project Manager since 2006 for this continuing services contract that includes transportation planning, traffic engineering, conceptual design, travel demand forecasting, data collection and analysis and agency coordination.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Orlando International Airport Roadway Master Plan, Orlando, FL	2004	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	X Check if project performed with current firm	

Task Manager responsible for establishment of the airport trip generation model, airport subarea modeling, and the completion of an airport roadway "decision tree" analysis tool for evaluating on-site roadways and access points, as well as potential changes in passenger or employee vehicle routing. The final decision tree product, continues to serve as a go-to document for the Airport Authority planning staff.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Phoenix Sky Harbor International Airport West Terminal EIS Traffic Study, Phoenix, AZ	2009	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	X Check if project performed with current firm	

Project Engineer responsible for the analysis of existing and projected future traffic conditions at Sky Harbor in support of an EIS Study for a proposed new terminal building. Responsible for the development of a TRANPLAN-based subarea travel demand model specific to Sky Harbor which estimates future traffic volumes on the roadway network through a four-step process that converts passenger loadings and employee forecasts to ground vehicle trips. Also managed the development of a terminal curb analysis model and simulation (using VISSIM) to better project future operating conditions at the curbs.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Pensacola Regional Airport Off-Site Wayfinding Signage: Inventory, Evaluation, and Recommendations	2007	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	X Check if project performed with current firm	

QC Reviewer for this project to improve wayfinding signage to the airport. The project included a GIS inventory of all existing Pensacola-area airport guide signs, evaluation of existing and projection of future 2025 roadway and traffic conditions, and recommendations for new or improved airport wayfinding signage.

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
Bernard Skar, PE	**Airfield Pavement Design**	41	7

15. FIRM NAME AND LOCATION *(City and State)*

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

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MS, Civil Engineering BS, Civil Engineering	Professional Engineer, Nebraska, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway C Pavement Evaluation and Repair, Broward County, FL	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2011	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Pavement Specialist. The Team was assigned the task of evaluating the apparent failure of new pavement on a Taxiway C at FLL. Significant rutting was observed after the new pavement was installed and the HDR Team was called in evaluate the pavement and determine the cause of the problem. HDR conducted a thorough review of the pavement and mix design, the quality of materials used, and workmanship performed, and issued a report as to the probable cause of the failure. HDR also developed a range of repair alternatives and solutions with cost estimates for BCAD to consider.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
USACE - Omaha District, Coleman AAF and Grafenwoehr AAF Obstruction Surveys. Omaha, NE	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2008	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager and Tecnical Lead. Conducted two airfield obstruction surveys, one at Coleman Army Airfield and one at Grafenwoehr Army Airfield, Germany. The surveys consisted of locating the existing runway, navigation aids and any OIS obstructions within the OIS limits.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
MD 45 Transprt OB, LLC, Eppley Corporate Hangar. Omaha, NE	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2008	2009
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Technical Lead. HDR provided design of a new hangar to support the operations and maintenance of multiple corporate aircraft located at Eppley Airfield in Omaha, Nebraska. The aircraft hangar is approximately 12,720 SF and there is an additional area of 9,406 SF for administration, operations, and support areas. A new concrete apron will be added and designed to tie into the existing concrete apron at the site. The design will also include a new parking lot to the north of the hangar that will provide for 23 vehicles.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
F-35 Joint Strike Fighter Beddown Area Development Plan, Eglin AFB, Florida	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2007	2007
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

The objective of the ADP was to provide a framework for future facilities and changes to existing facilities in conjunction with the 46th TW, 96th Civil Engineering Group (CEG), 796th Civil Engineering Squadron (CES), 33rd FW, HQ AFMC and HQ AETC requirements. The plan provides an updated and highly focused land use, facility use, concept designs, and capital costs, traffic flow analysis (arterial road), associated force protection issues, and proposed associated alternatives. This effort is to assist the 33rd FW, 96th CES and 46th Test Wing further the support mission statement and develop a reasonable mitigation strategy where land use and facility use conflicts exist.

The ADP provides advance planning for BRAC redevelopment of a 300-acre site for new airfield/parking ramp, infrastructure improvements, POL facilities, dormitories, dining hall, fitness center, and academic training complex. Also included were explosives safety, airfield criteria and AT/FP standards.

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
Steve Lewis, RA	**Architectural**	**26**	**3**

15. FIRM NAME AND LOCATION *(City and State)*

HDR | Pensacola, FL

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MA, Architecture \ BA, History	**Registered Architect (FL)**

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

Mr. Lewis is a registered architect with 25 years experience as a project architect, consultant and manager providing design and security services at aviation, maritime and government facilities. He has been responsible for nationwide implementation of the Department of Homeland Security Technical requirements in over 50 airports and seaports in the United States, Canada and the Caribbean in which he insured compliance with current design and physical security requirements.

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Signage Program, Palm Beach International Airport; West Palm Beach, FL	2006	2008
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☐ Check if project performed with current firm	

Coordinated design development and installation of a three million dollar signage project.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Skylight Replacement, Palm Beach International Airport; West Palm Beach, FL	2006	2008
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☐ Check if project performed with current firm	

Coordinated design development and installation of a two million dollar, 25,000sqf terminal skylight.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
USACE Mobile District, Joint Task Force Bravo (JTFB) Soto Cano Air Base, Honduras, FY 11 Barracks Design	2010	Ongoing
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Project Manager. Mr. Lewis provided management and planning for the HDR team which prepared design-bid-build full design for the FY11 enlisted personnel barracks at Soto Cano AB. HDR also conducted a needs assessment project definition report and design charrette.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
USACE Mobile District, Joint Task Force Bravo (JTFB), Soto Cano Air Base, Honduras: FY-12 Barracks Survey	2011	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Project Architect. HDR prepared planning documents: included project definition reports, design charrettes, site analysis, and a Master Plan for both FY11 and FY12 Enlisted Barracks. Responsible for the complete design of the facility: included plans and specifications and Ready to Advertise documents for the construction contract solicitation. The facility was designed using International Building Code standards.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
NAVFAC Southeast, Minimart / Gas Station, NCBC Gulfport, MS	2011	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Project Architect. HDR was responsible for the design of plans and specifications for a new 7,500 SF minimart with gas station and provisions for a future carwash. The building was designed to conform to USGBC LEED Silver, DoD ATFP, ABA, EPACT 2005, LID requirements, Navy Exchange Command requirements and NCBC Gulfport Planning and Development Guidelines.

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
John McPherson, AICP	**Airport Master Panning**	26	20

15. FIRM NAME AND LOCATION *(City and State)*

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

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MA, Plan Sciences BA, Mathemetics	American Institute of Certified Planners, US National Registration., No. 11580, 07/1995, Does Not Expire

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Apalachicola Municipal Airport Master Plan, Apalachicola Municipal Airport, Florida.	2005	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Airport Planner. John prepared and wrote all aspects of the airport master plan including the background and inventory, aviation forecasts, demand and capacity analysis, and alternatives development sections.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Alaska Dept of Trans & Public Facilities, Iliamna Airport Master Plan, Iliamna Airport, AK.	2008	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. HDR identified the following issues to be resolved through this master plan: reconcile airspace conflicts and procedures; address line-of-sight vis-a-vis the Iliamna Hotel, and between the runways and the waterways on Pike Lake; upgrade blast pad dimensions; determine ATIS location; acquire airport property; improve seaplane facilities; lack of parallel taxiways; access problems perimeter road too near the runway causes Part 77 Airspace problems, and fishermen use the perimeter road and park on the apron, need to shift a runway to develop RSA; length, and address Part 77 penetrations that would result in the need for PAPIs.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Alaska Dept of Trans & Public Facilities, Birchwood Airport Master Plan, Birchwood, AK.	2008	2011
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. The runway at the King Salmon Airport was congested during the busy summer season while other airport infrastructure needed upgrades to meet Federal Aviation Agency (FAA) standards. HDR's responsibilities included developing a draft AMP that identified airport issues), holding community meetings, outlining airport facilities and transportation trends, and preparing airport layout plans. HDR also conducted and environmental assessment (EA) and prepared a final AMP.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Alaska Dept of Trans & Public Facilities, Alaska DOT, King Salmon Airport Master Plan, King Salmon, AK.	2004	2011
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. The runway at the King Salmon Airport was congested during the busy summer season while other airport infrastructure needed upgrades to meet Federal Aviation Agency (FAA) standards. HDR's responsibilities included developing a draft AMP that identified airport issues), holding community meetings, outlining airport facilities and transportation trends, and preparing airport layout plans. HDR also conducted and environmental assessment (EA) and prepared a final AMP.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Alaska Dept of Trans & Public Facilities, Alaska DOT, Wrangell Airport Master Plan, Wrangell Airport, AK.	2004	2011
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. To identify improvements needed at this airport in southeast Alaska, this master plan evaluated issues like substandard runway and taxiway safety areas, the airport's proximity to the local landfill, and adding improvements like more lease lot areas and a public seaplane facility improvement. In addition to managing HDR's team, John prepared the project's condition and needs assessment.

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
Eric Cleveland	**Airspace Analysis**	17	2

15. FIRM NAME AND LOCATION *(City and State)*

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

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
M.S., Military Operational Art and Science, 2005 M.A., Management/Human Resources, 1993 B.S., Criminal Justice, University of AL, 1990	

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Pacific Air Force (PACAF) Aeronautical Study for the Commonwealth of the Northern Mariana Islands (CNMI)	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Served as Project Manager and Airspace/Airfield Analyst while conducting an Aeronautical Study to support the development of the on-going Environmental Impact Statement (EIS) for an additional airfield in United States territory in proximity to the Philippine Sea designed to increase joint military exercise and humanitarian assistance/disaster relief capability for Northeast Asia.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
US Marine Corps Forces Pacific (MARFORPAC) Airspace Mitigation Plan for Guam and Commonwealth of the Northern Mariana Islands (CNMI)	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Served as Deputy Program Manager and Airspace Analyst for all work necessary for planning, coordinating, and conducting an airspace mitigation plan including site visit and coordination meetings with Federal Aviation Administration (FAA) officials supporting the establishment of special use airspace (SUA) overlying proposed Marine Corps aviation activities and live fire ranges on the islands of Guam, Tinian, and Pagan that are required to support future force structure, beyond that currently associated with the realignment of Marine Corps forces relocation from Okinawa to Guam.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Natural Infrastructure Assessment (NIA) Update for Cannon Air Force Base (CAFB), New Mexico	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Served as Airspace and Frequency Spectrum Analyst for CAFB and Melrose Training Range NIA. This assessment is an implementation of the NIA tool to evaluate and quantify the capabilities of Cannon AFB and Melrose Range to achieve short- and long-term mission sustainability. The natural infrastructure assets evaluated by this assessment included airspace, air quality, frequency spectrum, surface land (including military training land, nonmilitary land, and Air Installation Compatible Use Zones [AICUZ]), water supply, and water discharge.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Headquarters Pacific Air Forces Divert Activities and Exercises Environmental Impact Statement (EIS) for the Island of Guam and Commonwealth of the Northern Mariniana Island (CNMI)	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Serve as Air Traffic, Airspace , and Airfield Analyst to obtain, analyze, and summarize available airspace planning data to determine the effect of proposals on current and projected air traffic and air space utilization, including the feasibility of proposals to use installations, range, and low-level-route related airspace for stand alone and joint-use commercial or general aviation activities. Conduct inventory of objects within or in close proximity to airfield and airspace clearance zones and imaginary airfield/airspace obstruction control surfaces, Thermal Instrument Procedures (TERPS), existing airways, and navigation aids.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Black Hills Corporation, FAR Part 77 Obstacle Evaluation, Pueblo, CO	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2011	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Served as Airspace/Airfield Analyst and Project Manager to determine the affect 94 structures will pose to nearby Pueblo Memorial Airport. Provided a detail analysis in compliance with Federal Aviation Regulation (FAR) Part 77. Presented possible mitigations to ensure successful project completion.

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
Melanie Fowler, PE	**Project Controls**	18	6

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc. (Ft. Lauderdale, FL)

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer, Florida, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department, General Engineering Consultant, Ft. Lauderdale, FL	Ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. HDR is leading 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 the HDR Team includes 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. Melanie also serves as the Project Control specialist. She is responsible for all administrative and financial needs of the projects.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ft. Lauderdale - Hollywood International Airport, Terminal 4 Apron Civil Works, Ft. Lauderdale, Florida	2013	2010
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. BCAD is implementing an Airport Expansion Program (AEP) which includes the Expansion of Runway 9R/27L, Terminal 4 Gate Replacement, and Enabling Projects. The T-4 Apron Civil Works project will modify 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. The project will also replace the Terminal 4 Apron and expand the apron to the east. All proposed work will be completed while maintaining operations to the existing Terminal and Concourse. HDR provided preliminary engineering and final design services and is 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. Services include existing infrastructure evaluations, design, construction cost estimating, construction phasing and sequencing, permitting services, and design coordination. In addition, HDR is overseeing multiple subconsultants who are performing specialized services such as Environmental restoration, Pavement analysis and design, and Stormwater and Drainage Design.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Engineering Services for Solid Waste Northwest Transfer Station, Orlando, FL.	2010	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Task Manager. Ms. Fowler serves as a Task Manager for site selection of a new solid waste transfer station in Orange County, Florida. She has assisted with the development of selection criteria including federal, state and local regulations. Additionally, criteria were developed for other elements including proximity to residential and school uses. Ms. Fowler is also helping to develop a public participation program to involve the stakeholders.

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
Steven Tozer, AIA, LEED AP BD+C	**Architecture Task Manager**	29	6

15. FIRM NAME AND LOCATION *(City and State)*

HDR Architecture, Inc.*(Tampa, Florida)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Architecture MS, Architecture	Registered Architect, Florida, Georgia

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Broward County Aviation Department - General Engineering Consulting Services, Soffit Replacement and Terminal 4 Curbside Canopy, Broward County, FL	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2011	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. The HDR Team developed the design documents for two separate projects procured under one 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 is scheduled to finish on time and within budget.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Broward County Aviation Department - General Engineering Consulting Services, Pedestrian Bridge Rehabilitation, Broward County, FL	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. A Task Order from HDR's FLL General Engineering Contract, HDR is developing 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 is the Demolition and Cleaning of the bridge structure to remove rust damage and lead-based paint. The second phase will be the Repair and Redesign of the bridges. Structural damage to the steel truss frame will be repaired and the bridges' architectural treatment will be 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 will include Construction Contract Administration and onsite Resident Project Representation during construction. Demolition and Cleaning construction contract award is planned for November, 2012, with award of the Repair and Redesign planned for Spring 2013.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Fort Belvoir Community Hospital, Ft. Belvoir, VA	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2010	2011
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. This DOD project is 1,100,000 gsf, with a $650m budgeted construction cost. The project includes a 128 -bed replacement hospital (to house inpatient and outpatient services), central utility plant, medical office building, ambulance shelter, helipad and vehicle parking garages. HDR is providing full A/E services including consulting, equipment planning, AT FP security planning and design, and full environmental services (including storm water retention, environmental impact analysis, site improvements and landscape design).

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Fort Bliss Hospital Replacement, Administration & Education Building, El Paso, TX	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
	2010	2011
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Manager. 1.2 million SF replacement hospital campus at Ft. Bliss, Texas comprised of Critical Care Hospital, Outpatient Clinic Buildings, Administration & Education Building, Research Building and Central Utility Plant.

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
Joshua Salazar	**Roadway and Public Involvement**	9	3

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Ft. Lauderdale, FL)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Masters of Public Administration (MPA), Florida Atlantic University, 2009 Bachelor of Science, Civil Engineering, University of Michigan, 2004	Professional Engineer, Florida, No. 69976

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
I-75 Managed Lanes Procurement, FDOT District 4, Broward County, FL.	Ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

HDR is helping to evaluate the feasibility of developing and procuring a contract to implement Managed Lanes on I-75 in northwest Miami-Dade County and southwest Broward County Florida. The limits and project improvements are a by-product of a NEPA (PD&E) Study led by HDR for the I-75 corridor, working for FDOT District 4, along with FDOT District Six and the Florida Turnpike Enterprise. Specific activities to be undertaken by HDR during this Managed Lanes development project include preparation of Preliminary Plans (30% Plans including Line and Grade, Cross Sections, drainage swales/ponds, etc) for the section of I-75 from NW 170th Street in Miami-Dade County, to north of Miramar Parkway in Broward County. Work within these limits include the reconstruction of the I-75 at Miami Gardens Drive/NW 186th Street interchange, as well as the full build-out of the system to system interchange of I-75 at the Florida Turnpike (Homestead Extension of the Florida Turnpike, HEFT). The primary I-75 mainline typical section consists of widening I-75 from 8 to 12 lanes, with the addition of a 4-lane managed lanes system in the existing median. HDR will also lead the preparation of the Request for Proposal (RFP) document that will be the basis for multiple stand-alone projects (each Bid as some form of Alternative Delivery, such as Design-Build). HDR Task Lead to reevaluate the PD&E Study's ultimate recommended alternative to obtain FHWA authorization on rapid implementation of the I-75 Express Lanes within the median of I-75. Evaluated the feasibility of developing and procuring a contract to implement Managed Lanes on I-75 in northwest Miami-Dade County and southwest Broward County Florida in coordination with FDOT District 6. Feasibility assignments included preliminary traffic and revenue forecasts in support of ingress/egress point placement, tolling and construction segmentation scenarios, and coordination with investment grade analysis lead by Florida's Turnpike Enterprise. Coordinated with FDOT Central Office on FHWA applications and state legislative authority to operate tolled lanes on the interstate. Led incident management coordination with FDOT and local emergency response stakeholders to implement innovative strategies for incident response on the express lane system exclusive of the existing general purpose lanes.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
I- 95 Phase 3 Corridor Design Consultant, FDOT District 4	Ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. 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). 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. The HDR team will be responsible for serving as an extension of the Department's (FDOT District 4) Staff for analysis and documentation of the project scope, and development of RFP and associated backup information to support the procurement of anticipated Design-Build or Design-Build-Finance contracts. The work also includes providing procurement support and plans review/post design services throughout the design and construction phases.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SR 924 / Gratigny Parkway PD&E Study, Miami-Dade Expressway Authority, Miami, FL	Ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

	The Miami-Dade Expressway Authority has contracted with HDR to perform a 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. Multi-modal 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.

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
Abbie Wilson, PE	**Stormwater**	8	8

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Ft. Lauderdale, FL)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Ocean Engineering, Florida Institute, 2006	Professional Engineer, Florida, No. 39135

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department - General Engineering Consulting Services. Terminal 4 Apron Civil Works at FLL	2013	2015
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Designer. BCAD is implemented an Airport Expansion Program (AEP) which includes the Expansion of Runway 9R/27L, Terminal 4 Gate Replacement, and Enabling Projects. The T-4 Apron Civil Works project will modify 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. The project will also replace the Terminal 4 Apron and expand the apron to the east. All proposed work will be completed while maintaining operations to the existing Terminal and Concourse. HDR provided preliminary engineering and final design services and is 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. Services include existing infrastructure evaluations, design, construction cost estimating, construction phasing and sequencing, permitting services, and design coordination. In addition, HDR is overseeing multiple subconsultants who are performing specialized services such as Environmental restoration, Pavement analysis and design, and Stormwater and Drainage Design.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
I- 95 Phase 3 Corridor Design Consultant, FDOT District 4	Ongoing	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. 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). 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. The HDR team will be responsible for serving as an extension of the Department's (FDOT District 4) Staff for analysis and documentation of the project scope, and development of RFP and associated backup information to support the procurement of anticipated Design-Build or Design-Build-Finance contracts. The work also includes providing procurement support and plans review/post design services throughout the design and construction phases.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SR A1A (Flagler Memorial Bridge) DB from Olive Avenue to Cocoanut Row Palm Beach County, FDOT District 4, Palm Beach County, Florida	Ongoing	2015 (Estimate)
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Designer assisted the project team with preparation of Long Range Estimates (LRE) for the entire project corridor. Specific responsibilities included creation of theoretical, project specific LREs for Park and Ride facilities, updating intersection improvement LREs and updating the main line LREs using District 4 criteria. Additionally, created graphics, flyers, and presentation materials for use during public outreach activities.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Districtwide Stormwater Program Management, FDOT District 7	2010	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Drainage designer for this multi-task contract. HDR provides stormwater management studies, analyses and design in support of the District's work program and drainage unit. Services include preparation of drainage maps, location hydraulic report, stormwater analysis, contract plans, surfacewater management, bridge hydraulic report and recommendation sheet, FEMA "No-Rise" certification, stormwater management design, stormwater inventory and stormwater management design review.

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
Pedro Loureiro, PE	**Structures**	21	21

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Miami Lakes, Florida)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer, Florida, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department - General Engineering Consulting Services, Broward County, FL	ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. HDR is leading 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 the HDR Team includes 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.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
I- 95 Phase 3 Corridor Design Consultant, Boward County, FL	ongoing	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Structural Engineer. 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). 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. The HDR team will be responsible for serving as an extension of the Department's (FDOT District 4) Staff for analysis and documentation of the project scope, and development of RFP and associated backup information to support the procurement of anticipated Design-Build or Design-Build-Finance contracts. The work also includes providing procurement support and plans review/post design services throughout the design and construction phases.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
82nd Ave/CR 609 (Ranch Road) New Facility, FDOT District 4, Indian River County, FL.	2012	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Structural Engineer for the construction plans of a new 7.2-mile, 2-lane undivided roadway, parallel to the east side of Lateral Canal C. The rural typical section consists of two 12' lanes, and 8' shoulders (5' paved) in each direction. The highway will begin with a transition from west to east at the south end of the project, to transition from the existing dirt roadway parallel to the canal to a new a new alignment to the east, through existing pastures and citrus groves. The proposed improvements include the 4 new bridges over sub-lateral canals, 25 cross drains and 10 wet detention ponds. Project requirements also include stormwater management modeling and design, drainage and roadway plans preparation, traffic design and plans, environmental permitting, utility coordination, and public involvement. Responsibilities include design of four bridge structures over distribution canals at the Sebastian Water Management District. BDR considers Inverted-T, precast-prestress panel and Modified AASHTO Type II girder superstructures.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
FDOT District 4, SR 9 / I-95 Widening from St. Lucie/Indian River County Line (MP 0.000) to North of SR 60/Osceola Blvd. (MP 6.840)	2011	NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Senior Project Engineer responsible for reviews of miscellaneous components of structure/bridge construction plans. HDR developed a complete RFP Package including all required attachment for this Design Build project.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Bill Zavatkay, PE, LEED AP	**M.E.P**	28	13

15. FIRM NAME AND LOCATION *(City and State)*

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

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Mechanical Engineering, 1990	Professional Engineer, Florida, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
The Cleveland Clinic Foundation, Biological Resources Building, Cleveland , OH	2004	2004
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Senior Mechanical Engineer. HDR provided full architect/engineering design services for the Biological Resources Building, a 67,235 sf vivarium and lab building expansion. Vivarium includes animal holding areas for a variety of species, cage wash, procedure rooms, and surgical suite. Critical systems are provided with redundancy and failure modes of operation in compliance with Owner guidelines. A 67,000 sf building expansion that has 40,000 sf of vivarium space which includes animal holding areas for a variety of species, cage wash, procedure rooms, and a surgical suite. The Biological Resources Building is a three-story addition on top of an existing three-story research laboratory.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Georgia State University Parker H. Petit Science Center, Atlanta, GA	2010	2010
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Senior Mechanical Engineer. A ten-story 306,000 SF/ 28,400 m tower, the Center is designed for multidisciplinary science teaching and research and contains laboratories, a 100-seat auditorium as well as offices and classrooms. The facility houses one of only a few university-based Biosafety Level 4 labs as well as a "visualization wall"_a large array of computer screens used to view vast amounts of data.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
NAVFAC Southeast, Shaw Air Force Base, Medical Clinic Replacement, Sumter, South Carolina	2012	2012
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Senior Mechanical Engineer. The replacement 115,581 SF Outpatient Medical Clinic includes a 2,227 SF Ambulance Shelter as well as provides medical, ancillary, administrative and support functions.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Tulane Regional Biocontainment Laboratory, Convington, LA	2009	2009
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Senior Mechanical Engineer. A 40,000 SF/ 3,716m biocontainment laboratory funded by the NIH and focused on developing treatments, vaccines and diagnostics for emerging infectious diseases with BSL-3 non-human primate and small animal holding spaces; surgical and necropsy suites; dedicated procedure rooms; BSL-3 laboratory space; office and administration spaces; conference and training rooms; and, a cage processing facility.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
State of Maryland, Maryland New Public Health Laboratory, Baltimore, MD	2011	2011
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Senior Mechanical Engineer. This 200,000SF/18,581 m2 laboratory building uses public health as a major catalyst for urban revitalization, bringing jobs to East Baltimore while providing state-of-the-art laboratories for testing, consulting, and regulatory support of infectious disease, epidemiology, environmental, and regulatory public health support.

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
Heather Manganiello, PE	**Utilities and Infrastructure**	12	9

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Ft. Lauderdale, GA)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MS, Environmental Engineering; BS, Civil & Environmental Engineering	Professional Engineer, Florida, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department - General Engineering Consulting Services. Terminal 4 Apron Civil Works at FLL	2013	2
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Utilities Engineer. BCAD is implemented an Airport Expansion Program (AEP) which includes the Expansion of Runway 9R/27L, Terminal 4 Gate Replacement, and Enabling Projects. The T-4 Apron Civil Works project will modify 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. The project will also replace the Terminal 4 Apron and expand the apron to the east. All proposed work will be completed while maintaining operations to the existing Terminal and Concourse. HDR provided preliminary engineering and final design services and is 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. Services include existing infrastructure evaluations, design, construction cost estimating, construction phasing and sequencing, permitting services, and design coordination. In addition, HDR is overseeing multiple subconsultants who are performing specialized services such as Environmental restoration, Pavement analysis and design, and Stormwater and Drainage Design.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Turkey Point Power Plant Cooling Water Supply, Domestic Wastewater, Wetland Mitigation Engineering Services, Florida Power & Light, Miami-Dade County, FL	2003	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer. FPL has proposed to use reclaimed water from Miami Dade County's South District Wastewater Treatment Plant (SDWWTP) as the future cooling water supply for the Turkey Point Power Plant. HDR performed a reliability assessment that included a reliability model to determine the most vulnerable components of the supply system that would result in the loss of cooling water supply (reclaimed water). The information will be used to potentially correct the vulnerabilities and determine the need and quantity of back up cooling water supply. HDR provided preliminary engineering services and technical memorandum for an on-site domestic wastewater treatment plant (SWWTP) at the Turkey Point Power Plant. HDR investigated the treatment requirements and treatment technologies needed to obtain the necessary water quality for wetland hydration and provided the findings in a technical memorandum.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Wastewater Master Plan Update, Altamonte Springs, FL	2003	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer/Manager. As part of this continuing contract, HDR provided a wastewater master plan update on the City's primary sewerage conveyance system to prepare the City for upcoming CMOM and GASB34 compliance. The system consists of 73 public lift stations, force mains, and interceptors leading to 12.5 MGD City's regional water reclamation facility. Team performed inventory of primary sewerage conveyance system, flow metering studies, identification of capacity limitations and vulnerabilities through the use of MOUSE modeling, emergency bypass/response plans.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Reclaimed Water Treatment Facility Reclaimed Water Storage Improvements and Drainage Modification, Altamonte Springs, FL	2009	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Project Engineer and Assistant Project Manager. HDR evaluated the design and permitting and will provide post design services for the reclaimed water storage improvements and associated drainage system modifications at the Regional Water Reclamation Facility. Heather assisted with the basis of design report. The reclaimed water storage pond will add approximately nine million gallons of reclaimed water storage capacity. Heather evaluated permitting requirements and existing permit modification requirements.

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
Rit Ky, PE	**Construction**	9	2

15. FIRM NAME AND LOCATION *(City and State)*

HDR Engineering, Inc.*(Ft. Lauderdale, GA)*

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer, Florida, Civil

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
South Florida Water Management District, Miami-Dade, Broward and Palm Beach County, FL	ongoing	2
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☑ Check if project performed with current firm	

Mr. Ky is managing various Construction, Engineering and Inspection Task Work Orders for a South Florida Water Management contract which involves the installation of Diesel Oxidation Catalysts, support structures and monitoring devices. Mr. Ky coordinates all field inspections with the Department's and Contractor's Project Manager to ensure all field work is inspected and in accordance with contract plans, specifications and shop drawings and documents all work and non-conformance items. Mr. Ky also performs reviews all daily work reports, project pictures and submittals and also verifies stockpiled materials.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
FDOT District 4, Maintenance Production Manager, West Palm Beach, FL	2012	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	▫ Check if project performed with current firm	

Manage Maintenance activities and functions at the Palm Beach Operations Center including Permits, Roadway Characteristics Inventory (RCI), Maintenance Management System (MMS), Maintenance QA/QC, Risk/Restitution and Facilities Maintenance. Managed and supervised a staff of 13 ensuring targets and goals set in the Department's Business Plan are met.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
FDOT District 4, Construction Project Manager, Ft. Lauderdale, FL	2011	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	▫ Check if project performed with current firm	

Construction Project Manager. Managed multiple concurrent roadway and bridge construction projects to ensure coordination between the FDOT, contractor, utility companies and the public, meet the set timeline and budget and minimize safety and congestion impacts to the traveling public. Supervise and managed a team of Project Administrators, Inspectors and Consultant Staff to ensure all Projects are staffed and covered accordingly.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
FDOT District 4, Construction Project Administrator, Ft. Lauderdale, FL	2010	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	▫ Check if project performed with current firm	

Construction Project Administrator. Administered and managed roadway and bridge construction projects to ensure coordination between the FDOT, contractor, utility companies and the public, meet the set timeline and budget and minimize safety and congestion impacts to the traveling public.

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 1

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department, General Engineering Consultant, Ft. Lauderdale, FL	Ongoing	Varies by assignment

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Broward County Aviation Department	Marc Gambrill, P.E.	954-259-2343

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

The Fort Lauderdale-Hollywood International Airport (FLL) and North Perry Airport (HWO), a general aviation airport, form a diverse and dynamic airport system. This airport system serves the needs of over 23 million annual passengers and the general aviation community throughout South Florida. The two airports are monetarily self-supporting. We do not use any Broward County tax revenue to support the operations, maintenance, or capital improvements of the Airports. The Aviation Department generates funds through user fees, rentals, and other charges. Bonds, fees, and grants (state and federal) fund the capital improvement projects. Any surpluses are reinvested into the airport facilities.

FLL is ranked 21st in the U.S. in total passenger traffic and 13th in domestic origin and destination passengers. With more than 600 flights a day, FLL offers nonstop service to more than 60 U.S. cities and international service to Canada, the Bahamas, the Caribbean, Mexico, Latin American, and Europe.

The FLL Airport Improvements and Renovations Program (FLLAIR) include a new South Runway and expansion of the existing Terminal 4. The new South Runway will expand to 8,000 feet creating an estimated 11,000 construction jobs with a $1.4 billion impact to the regional economy. Terminal 4 will expand from 10 to 14 gates and increase concession choices for passengers.

HDR is 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. HDR is leading a team of seven specialty subconsultants providing a wide variety of services primarily at FLL.

The range of projects includes 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.

Since being awarded the contract in 2009, the HDR team has been assigned nearly 30 task orders totaling over $8M in fees. These projects have been very diverse in scope and size, and have included design, studies and investigations on both the airside and landside. HDR has worked closely with the FAA as well as numerous state and local regulatory and resource agencies having jurisdiction over the BCAD aviation facilities.

One of the strengths of the HDR team is its ability to take on all assignments that BCAD may need executed. With oversight from HDR's strong national aviation practice, we can provide any service or expertise from within our network of nearly 8,000 HDR professionals nationwide, or from one of the specialty subconsultant partners on our team.

In addition, HDR is very proud of its commitment to the utilization of Community and Disadvantaged Business Enterprises (CDBEs) under this contract with over 50% of the work performed in this program being subcontracted to it CDBE team members.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) Firm Name	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	HDR Engineering, Inc.	Ft. Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20, EXAMPLE PROJECT KEY NUMBER 2

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ft. Lauderdale - Hollywood International Airport, Curbside Canopy & Soffit Replacement, Ft. Lauderdale, Florida	2010	2011

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Broward County Aviation Department	Marc Gambrill, P.E.	954-259-2343

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

The HDR Team developed the design documents for two separate projects procured under one 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 is scheduled to finish on time and within budget.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) Firm Name	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	HDR Engineering, Inc.	Ft. Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20, EXAMPLE PROJECT KEY NUMBER 3

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ft. Lauderdale - Hollywood International Airport, Taxiway C Pavement Evaluation and Repair, Ft. Lauderdale, Florida	2010	2011

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Broward County Aviation Department	Marc Gambrill, P.E.	954-259-2343

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

The HDR Team was assigned the task of performing a 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.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) Firm Name	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	HDR Engineering, Inc.	Ft. Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20, EXAMPLE PROJECT KEY NUMBER 4

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ft. Lauderdale - Hollywood International Airport, Terminal 4 Apron Civil Works, Ft. Lauderdale, Florida	2010	2011

23. PROJECT OWNER'S INFORMATION

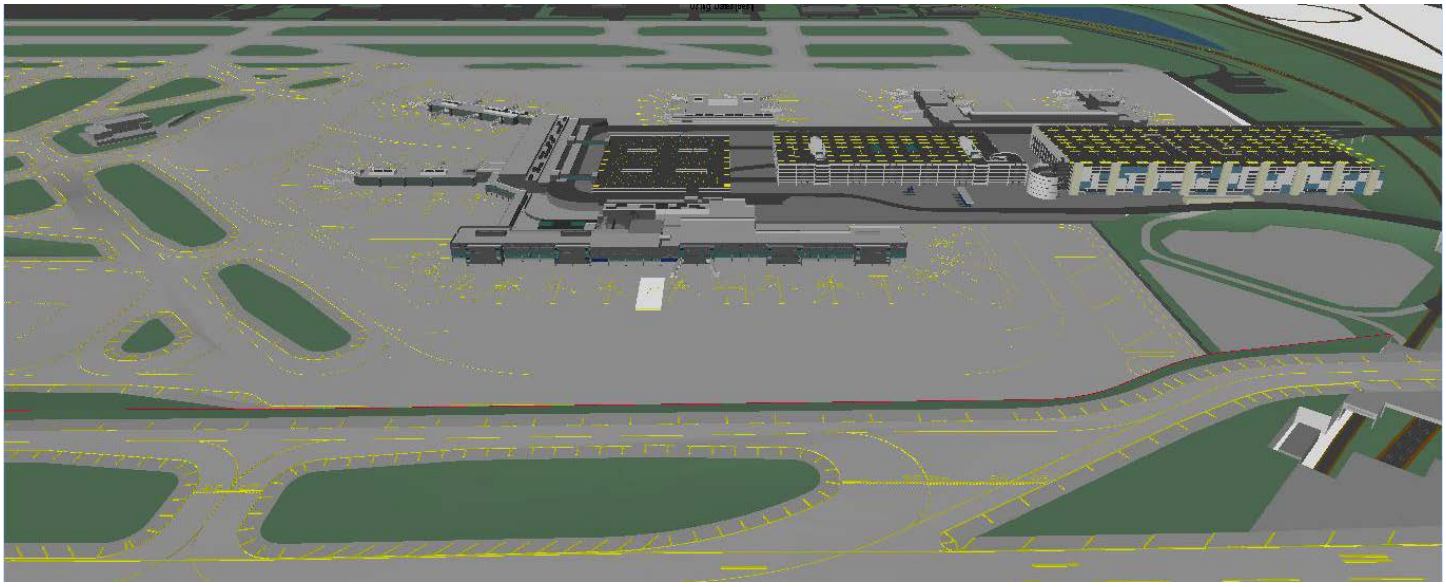
a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Broward County Aviation Department	Marc Gambrill, P.E.	954-259-2343

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

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 Taxilane 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 Resourse 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.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) Firm Name	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	HDR Engineering, Inc.	Ft. Lauderdale, FL	Prime

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

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

20, EXAMPLE PROJECT KEY NUMBER
5

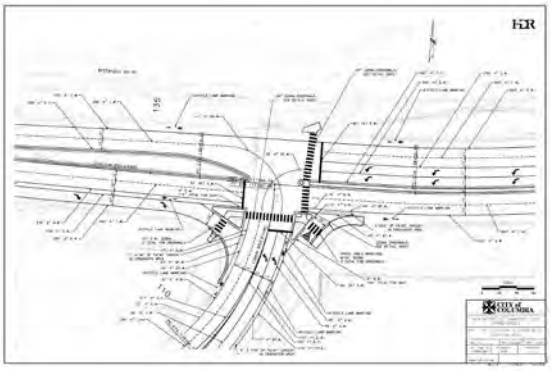
21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Non-Motorized Intersection Improvements, Trail Design and Wilson Trail Bridge Conceptual Study | Columbia, Missouri	2010	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
City of Columbia	Ted Curtis	(573) 442-7189 x.25

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

HDR is providing various services in Columbia, Missouri as part of FHWA's Non-Motorized Transportation Pilot Program. Columbia is one of only four cities in the country tapped to participate in this national program, which is aimed at improving safety and fairness for individuals engaged in non-motorized transportation.



HDR is the lead consultant on this project, which to date has involved the following tasks:

- The design of improvements at three initial intersections, considered "low-hanging fruit" where non-motorized improvements can be made fairly simply. Improvements include high-visibility crosswalks, countdown pedestrian signalization, safer low-speed right-turn channelizing islands, pedestrian tables, bicycle lanes, colored paint treatments, additional medians, landscaping and amenities for a trail head, and bicycle detection. Some of these improvements had already been considered based on stakeholder involvement.
- The conceptual design of improvements at another five intersections considered to need more complex solutions. HDR facilitated additional stakeholder involvement to assist with the design of improvements at these intersections. This effort has lead to a recent project to design two of the five intersections based on public input and available funds.

The design of eight miles of trail improvements on various segments in the southern portion of the City. Projects range from completely new trail segments, to multi-use paths adjacent to roadways, to upgrades to existing unpaved trail facilities.

Wilson Trail Bridge

As part of this project, HDR prepared a conceptual study with exhibits and recommendations for a pedestrian crossing over the Hinkson Creek in Columbia. The study included widening the existing Forum Street Roadway Bridge over Hinkson Creek for a shared use shoulder for bicycle and pedestrian traffic. In addition, several separate crossing locations near the existing Forum Street Bridge were investigated for pre-manufactured pedestrian bridge superstructures as well as the approach trails to the crossing. The structure and span lengths varied depending upon the stream crossing locations. The study also included preliminary bridge hydraulic analysis and preliminary construction cost estimates. The City of Columbia will select a preferred alternative and HDR will perform the final design.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) Firm Name	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	HDR Engineering, Inc.	Ft. Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20, EXAMPLE PROJECT KEY NUMBER 6

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
John F. Kennedy International Airport – Electrical and Engineering Design	2010	Pending

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Port Authority of New York and New Jersey	Eduard Fayfman	973-792-4428

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

HDR has performed the electrical design and engineering for over $10 million worth of rehabilitation with a large portion of this work being for the redesign of the inner geometry of the airport for the arrival of the new Airbus 380. This jet is almost 1-1/2 times the size of a 747 with four aisles, a two-deck seating capacity for 555 people, five-course meals and a sit-down bar in the lounge. To date, only 10 airports in the United States are expanding their facilities to handle this larger aircraft.

PANYNJ, Taxiway A and NC Rehabilitation at John F. Kennedy International Airport, Queens NY

This project required a field survey of existing taxiway conditions and electrical rooms, lighting and guidance signs. Project entailed the design of the airside navigational lighting aides for the taxiway areas on the Rehabilitation of Taxiway A and NC to accommodate the Airbus 380 for 1,000 feet of taxiway area. Work efforts were demolition of existing taxiway centerline lighting system on primary wiring and design of new taxiway centerline lighting system using primary wiring according to new civil paving plans using the FAA approved spacing for clearance bars for a modified Group VI rating of the airfield. Work efforts also included a continued modification to the switch house for re-circuiting all power feeds for the taxiway lights to establish a uniform grid along with upgrading the required regulators according to electrical calculations and construction support with final 'As Built' documentation.

PANYNJ, Rehabilitation of Taxiway Bridges at John F. Kennedy International Airport, Queens, NY

This project required a field survey of five existing bridges of which four were taxiway bridges. The work completed includes taxiway lighting, and guidance sign revisions according to new civil taxiway layout and bridge replacement from structural bridge plans according to FAA requirements, electrical calculations of regulator distribution, switch house equipment study, upgrade/replacement and construction support with final 'As Built' documentation.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) Firm Name	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	HDR Engineering, Inc.	Ft. Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20, EXAMPLE PROJECT KEY NUMBER 7

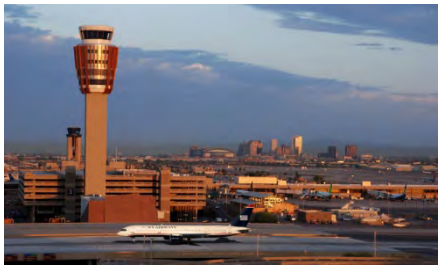
21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Sky Harbor International Airport Program Management, Phoenix, AZ	2005	2008

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
City of Phoenix Aviation Department	Jane Morris	480-988-7600

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

Phoenix Sky Harbor is one of the fastest growing airports in the nation, currently processing approximately 35 million passengers per year. Expecting that number to rise to 51 million, the City of Phoenix Aviation Department recognized the need for a new terminal. HDR provided program management services, serving as an extension of the city's aviation department. This included project leadership and engineering support in roadway, traffic modeling, utilities, drainage, environmental support and airspace planning. The team also established programming guidelines and oversaw project schedules and design and cost estimates, assisted with RFP development and took part in the design selection process.



Specific outcomes of the project will include a new 33-gate passenger terminal and new parking structures. After HDR became involved in the program management, an Automated People Mover (APM) was added to the grand vision to serve all key airport facilities and connect to the Valley Metro Light Rail Transit System. HDR continues to provide program management for the APM program. At an estimated total project cost of $1-2 billion, each of these project components, upon the estimated 2011 completion date, will result in a greater level of efficiency in Phoenix air transportation and the ability to meet projected passenger demands.

- **Sky Harbor Taxiway S Bridge.** As a major subconsultant to the Kiewit Western/Dibble & Associates team, HDR provided structural design management and engineering services for the reconstruction of Taxiway "S" from asphalt to concrete and the addition of a multi-span Taxiway "S" Bridge across Sky Harbor Boulevard at Phoenix Sky Harbor International Airport. The components of the design-build project consist of demolition of three short-span existing taxiway bridges; a new five-span taxiway bridge to accommodate Group V aircraft (wingspan between 171 and 214 feet); all roadway and on-grade under-bridge improvements and modifications to accommodate the project; and provisions to accommodate a future automated people mover to tunnel under the taxiway without disruption to the taxiway.

  Additional components addressed by the team include taxiway reconstruction; apron infill; infield pavement; lighting, signing and striping; airport service roads and traffic control; grading, drainage and utilities.

- **Automated Train/West Terminal.** HDR was the major subconsultant retained by the Aviation Department to provide program management services for a new terminal and Automated Train. We provided key personnel to serve as an extension of the Aviation staff to help lead activities, including development of a document control system, a contract management process, a program master schedule and budget, and the procurement process for the train designers. We had a leadership role in the development of consultant scopes, contracts, and fees, and were responsible for review and approval of QA/QC programs. HDR staff was a key member of a group to reassess the Automated Train program, which resulted in the current project and is projected to save the City of Phoenix over $300 million. HDR, in addition to developing project budgets and schedules, plays a major role in the management of the design teams currently working on this project.

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, FL	Prime

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

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

20, EXAMPLE PROJECT KEY NUMBER: 9

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Greater Orlando Aviation Authority, Transportation Planning Consulting Services, Orlando, FL	2016	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Greater Orlando Aviation Authority	Brad Friel, AICP	407-825-3139

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

Services Provided

- Annual Traffic Counts
- Bear Road Conceptual Alignment Alternatives
- Development Review
- Model Update and White Paper
- Cargo Road/ Hangar Blvd. Traffic Study
- Return Ramp Closure
- Cargo Road/ Hangar Blvd. Signal Warrant Analysis
- Cargo Road/ Casa Verde Rd. Signal Design
- OIA Sub-area Model
- OIA Intermodal Development
- Public Agency Technical Support
- Rental Car Planning Book
- Pre-DRI Issues
- South Terminal Traffic Analysis
- Roadway Planning Book
- Airport Route Signage
- EmployeeTDM Survey
- North & South Terminal Re-evaluation

HDR has served the GOAA since 1995 as the primary Transportation Planning Consultant. During the past Thirteen (13) years and two (2) General Services contracts, HDR has served as an extension of staff, addressing on-site and off-site transportation issues, working with other GOAA consultants, and providing coordination among the numerous local governments and agencies that participate in their decision-making process. Specific projects include:

Return Ramp Closure. Develop engineering plans for temporary closures of Terminals A and B return ramps.

Cargo Road/ Hangar Blvd. Signal Warrant Analysis. Signal warrant analysis considering existing plus projected future traffic based on land use plan at intersection.

South Terminal Traffic Analysis. Support terminal design teams by determining surface transportation access and circulation requirements.

Airport Route Signage. Prepare an inventory of signs routing drivers to Orlando International Airport, Sanford-Orlando International Airport and Orlando Executive Airport.

North & South Terminal Re-evaluation. Conduct studies to re-assess the capacities and projected demand for the surface transportation system serving the North Terminal and the proposed South Terminal.

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, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20, EXAMPLE PROJECT KEY NUMBER 10

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Master Planning for Alaska Airports, Alaska	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Alaska Department of Transportation and Public Facilities	Judy Chapman, Transportation Planner	(907) 269-0519

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

In rugged areas of Alaska, airports are lifelines to the rest of the world. Thirty percent of Alaska's citizens have no access to the road system and rely on air as their primary transportation. We provide master planning and design services for many of the 264 airports owned by the Alaska Department of Transportation and Public Facilities.

We produce airport master plans according to FAA safety standards to guide improvements at general aviation airports for 20-year planning horizons. Our services include conditions and need surveys, facility inventories, demand forecasts, airport capacity and delay analysis, environmental assessment, base mapping, Airport Layout and Property Plans (ALPs and APPs), public involvement and agency coordination.

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, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20, EXAMPLE PROJECT KEY NUMBER 10

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Pacific Air Forces (PACAF) Aeronautical Study, Commonwealth of Northern Mariana Islands	2012	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Air Force Center for Engineering and the Environment (AFCEE)	Mr. Bernard Marcos	808-448-9734

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

HDR was tasked by the Air Force Center for Engineering and Environment (AFCEE) and Pacific Air Force (PACAF) to conduct an Aeronautical Study (AS) in accordance with Federal Aviation Administration (FAA) regulation FAA JO 7400.2J. This AS determined impact of proposed construction to airport operations at Saipan International Airport and/or Tinian Airport. HDR obtained, analyzed, and summarized available airspace planning data to determine the effect of PACAF's proposal on current and projected air traffic and airfield utilization, including the feasibility of the proposal to use established installations, and related airspace for stand-alone and joint-use commercial or general aviation activities. The completed study consisted of an airspace analysis, a flight safety review and a review and determination on potential effects on air traffic control and airfield operations. The Aeronautical Study Report providing the following items: (a) An overview of the existing airspace structure, airports, and types and volume of aeronautical activities currently operating in the airspace affected by the proposal. (b) Impact on Terminal Operations which included an analysis of the arrival and departure flows; standard instrument approach procedures; and airport traffic patterns within Saipan's Class D and Tinian's Class E airspace surface areas. (c) Impact on public use and charted private airports (airports with FAA Form 5010 on file). This included the number and types of aircraft based at the airport; amount of daily operations; and the proposal's affects on airport access, capacity, and operations. (d) Impact on IFR En Route Operations which included existing airways; Average daily traffic count on affected airways; Feasibility of airway realignment; and Direct IFR routings. (e) Impact on other pending proposals such as airport development plans, airspace or airway/route proposals, or instrument procedures, currently being processed or on file. (f) FAR Part 77 Obstruction Analysis with an impact analysis of proposed infrastructure that supports air operations to ensure the safety of air navigation and efficient utilization of navigable airspace by participating and non-participating aircraft. (g) Possible alternatives/mitigations when adverse aeronautical impacts are identified. (h) FAA's air traffic control facility's assessment of the proposal's impact on aeronautical and facility operations, and the facility's concurrence or non-concurrence with the proposal. And (i) Provided recommendations for AFCEE action on the proposal.

HDR was specifically sought out for this work because of extensive knowledge of airspace management and our strong working relationships within the Department of Defense and Federal Aviation Administration. This aeronautical study was developed in response to a request from the Federal Aviation Administration 2 (FAA) to the United States Air Force (USAF) Pacific Air Forces (PACAF) as part of the ongoing 3 development of the PACAF Divert Activities and Exercises Guam and Commonwealth of the Northern 4 Mariana Islands (CNMI) planning efforts (Divert). The Aeronautical Study was utilized to support PACAF's land acquisition on Saipan International and/or Tinian Airport for the establishment of a divert airfield in the Pacific. The analysis has identified significant issues on Saipan and Tinian that had been previously overlooked by PACAF and provided alternatives/mitigations acceptable to PACAF, FAA and Commonwealth Port Authority to ensure completion. HDR's specialized understanding of air space, air traffic control, and airfield requirements, both DoD and FAA provided critical solutions required by DOD decisionmakers.

Customer Satisfaction. The success of this study to date was the result of a cooperative and team effort between AFCEE, PACAF, FAA and HDR that emphasized listening to stakeholders, an understanding and development of the mission requirements needed to support the ultimate users.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) Firm Name	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	HDR Engineering, Inc.	Ft. Lauderdale, FL	Prime

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
John Neff, PE	Project Manager	X	X	X	X						
Tim Fish, PE	Aviation Planning Lead	X	X	X	X						
Chuck Sinclair, PE	Project Principal	X	X	X	X						
Mark Dikun	Airside Lighting & Signage						X				
Will Suero, PE	Roadway and Public Involvement	X		X							
Daryl Schneider, PE	Aviation Planning	X			X						
Jamie Krzeminiski, PE, PTOE	Transportation Planning					X		X	X		
BJ Skar, PE	Airfield Pavement	X		X						X	
Steve Lewis, AIA	Architectural Facilities Design	X	X								
John McPherson	Airport Master Planning							X		X	
Eric Cleveland	Airspace Analysis										X
Melanie Fowler, PE	Quality Control Program	X	X		X						
Steve Tozer, AIA	Architectural Facilities Design	X	X		X						
Joshua Salazar, PE	Roadway and Public Involvement										
Abbie Wilson, PE	Stormwater Management	X			X						
Pedro Loureiro, PE	Structural	X									
Bill Zavatkay, PE, LEED AP	MEP										
Heather Manganiello, PE	Utilities & Infrastructure										
Rit Ky, PE	Construction										

29. EXAMPLE PROJECTS KEY

No	Title of Example Project (from Section F)	No	Title of Example Project (from Section F)
1	Broward County Aviation Department (BCAD) - General Engineering Consultant (GEC)	6	Newark Liberty International Airport Lighting Services, Newark, NJ
2	BCAD GEC – Curbside Canopy & Soffit Replacement	7	Phoenix Sky Harbor International Airport Program Management
3	BCAD GEC – Taxiway C Pavement Evaluation and Repair	8	Greater Orlando Aviation Authority, Transportation Planning Consulting Services
4	BCAD GEC – Terminal 4 Apron Civil Works	9	Alaska Department of Transportation, Master Planning for Alaska Airports
5	Non-Motorized Intersection Improvements, Trail Design and Wilson Trail Bridge Conceptual Study	10	Pacific Air Forces (PACAF) Aeronautical Study

H. ADDITIONAL INFORMATION

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

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE	32. DATE
	02/12/2014

33. NAME AND TITLE

Charles T. Sinclair, PE, Senior Vice President

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any): 946-11333

PART II – GENERAL QUALIFICATIONS

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

2a. FIRM (or branch office) NAME: HDR Engineering, Inc.	3. YEAR ESTABLISHED: 2009
	4. DUNS NUMBER: Pending
2b. STREET: 3250 West Commercial Blvd, Suite 100	5. OWNERSHIP a. TYPE: Private Corporation
2c. CITY: Ft. Lauderdale; 2d. STATE: FL; 2e. ZIP CODE: 33309	b. SMALL BUSINESS STATUS: Large Business
6a. POINT OF CONTACT NAME AND TITLE: Chuck Sinclair, Area Manager	
6b. TELEPHONE NUMBER: 305.728.7400 6c. E-MAIL ADDRESS: Chuck.Sinclair@hdrinc.com	HDR, Inc.

8a. FORMER FIRM NAME(S) (if any)		8b. YR. ESTABLISHED	8c. DUNS NUMBER
Henningson, Durham & Richardson, Inc.	1951	1985	06-866-8805
Henningson Engineering Company, Inc.	1930		
Henningson Engineering Company	1917		

9. EMPLOYEES BY DISCIPLINE

a. Function code	b. Discipline	c. No. of employees (1) FIRM	c. No. of employees (2) BRANCH
02	Administrative	820	4
08	CADD Technician	571	3
12	Civil Engineer	676	5
15	Construction Inspector	238	8
16	Construction Manager	216	3
39	Landscape Architect	38	1
44	Oceanographer	2	1
47	Planner: Urban/Regional	221	1
57	Structural Engineer	254	1
58	Technician/Analyst	1,156	8
60	Transportation Engineer	745	15
62	Water Resources Engineer	240	1
99	Public Relations	450	1
	Other Employees	2951	
	Total	8578	52

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

a. Profile Code	b. Experience	c. Revenue Index Number (see below)
A04	Air Pollution Control	3
A06	Airports; Terminals & Hangers; Freight Handling	7
B02	Bridges	10
C15	Construction Management	10
D01	Dams; (Concrete; Arch)	5
D02	Dams; (Earth; Rock); Dikes; Levees	8
E09	Enviro. Impact Studies, Assessments, or Statements	10
E12	Environmental Remediation	10
H07	Highways: Streets; Airfield Paving; Parking Lots	10
I01	Industrial Buildings; Manufacturing Plants	5
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	9
S10	Surveying; Platting; Mapping; Flood Plain Studies	6
S13	Storm Water Handling & Facilities	7
T02	Testing & Inspection Services	7
T03	Traffic & Transportation Engineering	10
W02	Water Resources; Hydrology; Ground Water	9
W03	Water Supply; Treatment and Distribution	10

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

(insert revenue index number shown at right)

a. Federal Work	6
b. Non-Federal Work	10
c. Total Work	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 

b. DATE: 02/12/2014

c. NAME AND TITLE: Charles T. Sinclair, PE, Senior Vice President

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
James A. Kriss, P.E.	**Quality Assurance / Quality Control**	**39**	**25**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC., Orlando, Florida

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MBA, 1990; B.S. Civil Engineering, 1974	**Professional Engineer – FL, SC, TN, OK, NY, NV, KY, GA, TX, NC, OH, LA**

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

Mr. Kriss is a senior principal of AVCON, INC. of Orlando, Florida. As a principal and senior project manager with AVCON, he is responsible for marketing, client management and technical design issues associated with all aspects of studies, designs and project management tasks for 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 the AVCON service sectors. Jim has been involved with dozens of different clients in the U.S. and abroad over the past thirty-eight years. His experience includes all facets of aviation, pavements, utilities, construction, cost estimating, and project management.

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*
Rehabilitation of Runway 7-25, Herlong Recreational Airport, Jacksonville, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2007** | CONSTRUCTION (If Applicable) **2008**

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

☒ Check if project performed with current firm

This work comprised the complete planning, funding and grant support, design and construction phase services for rehabilitation of the airport's primary runway. The work included evaluation of a variety of techniques including cold-in-place recycling, mill and overlay, and P-401 SuperPave™ asphalt concrete. The work also incorporated new airfield markings. Jim served as QA/QC Reviewer.

b

(1) TITLE AND LOCATION *(City and State)*
Rehabilitation of Taxiway A and C, Okeechobee County Airport, Okeechobee, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2010** | CONSTRUCTION (If Applicable) **2011**

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

☒ 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. Jim served as Principal-in-Charge.

c

(1) TITLE AND LOCATION *(City and State)*
Master Plan, Herlong Airport, Jacksonville, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **1999-2001** | CONSTRUCTION (If Applicable) **N/A**

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

☒ Check if project performed with current firm

Some of the proposed general airport improvement concepts included the development of a turf runway to complement the existing paved runways, the maximization of aviation related development north of Taxiway A, the identification of a sky-dive drop zone, the delineation of a helicopter activity area, and the development of a public observation area. Planning components included forecasts, facility requirements, and a prioritized Capital Improvement Program (CIP). Jim served as Aviation Planner.

d

(1) TITLE AND LOCATION *(City and State)*
Rehabilitation of Runway 5-23 and Enhancing Runway Safety Area, Okeechobee County Airport, Okeechobee County, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2007** | CONSTRUCTION (If Applicable) **2009**

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

☒ Check if project performed with current firm

This project comprised the milling and overlay of the main runway. The work incorporated correction to the Runway Safety Area and OFA obstruction removal, re-grading and relocation of perimeter fencing. Jim served as Principal-in-Charge.

e

(1) TITLE AND LOCATION *(City and State)*
Construction of Alternate Runway 15R-33L, Chennault International Airport, Lake Charles, LA

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2011-On-going** | CONSTRUCTION (If Applicable) **On-going**

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

☒ Check if project performed with current firm

This project consists of rehabilitating existing Taxiway A and converting the taxiway into a new Alternate Runway for this otherwise one-runway airport. The primary work includes widening the Taxiway to 150 feet, and establishing RSA and ROFA compliance. Jim serves as Program Director.

f

(1) TITLE AND LOCATION *(City and State)*
Airside PCC Apron and Taxiway Paving Design, New Boeing Final Assembly Facility, Charleston, SC

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2010-2011** | CONSTRUCTION (If Applicable) **2011**

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

☒ Check if project performed with current firm

The planning phase of the project included development of future land use height restrictions and coordination of the development plan for the proposed Boeing Final Assembly Building site. The design phases included pavement area designs of the flight line facilities, delivery center, and aircraft loading positions for the B747 Dreamlifter. Mr. Kriss served as Project Manager of airside paving and coordination.

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
Russ Holliday, P.E.	**Project Engineer**	**21**	**2**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC., Orlando, Florida

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
M.S. Civil Engineering, 1998; B.S. Civil Engineering, 1992	**Professional Engineer – FL**

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

Mr. Holliday has nearly 21 years of industry experience and has overseen several recent, relevant projects for General Aviation Airports in Florida and the southeast U.S. Mr. Holliday performs engineering design utilizing AutoCAD, Civil 3D, and other civil industry standard design software packages in conjunction with current standards and scientific methods. His work experience consists solely of engineering design and project management on airports, including all phases of projects from geometry, utility coordination, water and sanitary sewer design, drainage design, and pavement design, 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, FDOT Division of Ports and Airports, and Federal Aviation Administration personnel.

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*
Rehabilitation of Airfield Lighting Vault and Signage, Runway 12-30 MIRL, Witham Field, Martin County Airport, Stuart, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2011-2013**
CONSTRUCTION (If Applicable) **2013**

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

☒ Check if project performed with current firm

As part of the airport's strategy to upgrade its facilities to comply with FAA design criteria, AVCON provided design and construction phase services to enhance the airfield lighting vault, upgrade and replace airfield signage, and replace the Runway 12-30 Medium Intensity Runway Lighting (MIRL) using LED technology. The signage was designed to comply with the latest FAA signage design criteria. The Vault work provided a modernization of the existing lighting vault, and the Runway 12-30 MIRL project corrected spacing among the lights per FAA criteria, along with new transformers and base cans. Russ served as Project Engineer – Design and Construction Phase Services.

b

(1) TITLE AND LOCATION *(City and State)*
Emergency Repair of Failed Asphalt Pavement on Taxiway A1, Witham Field, Martin County Airport, Stuart, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2011**
CONSTRUCTION (If Applicable) **2012**

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

☒ Check if project performed with current firm

AVCON was enlisted to provide emergency engineering services to repair a 150' x 50' portion of Taxiway A1 that had become a hazard to taxiing aircraft. The project entailed immediate response to examine the area with cores; provide a single sheet design plan; and assist the Airport with overseeing a Contractor to repair the area. Russ served as Project Engineer – Design and Construction Phase Services.

c

(1) TITLE AND LOCATION *(City and State)*
Runway 5-23 Rehabilitation, Okeechobee County Airport, Okeechobee, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2004-2007**
CONSTRUCTION (If Applicable) **2007**

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

☒ Check if project performed with current firm

AVCON was assigned the project to rehabilitate Runway 5-23. AVCON performed an in-depth review of the historical construction records of the runway in an attempt to identify and quantify the strength capabilities of the base course material. AVCON's professional services included virtually all of the design and testing services required to complete the Runway 5-23 Rehabilitation Project. Along with the overall project paving work, the project also included new Medium Intensity Runway Lighting (MIRL) and relocation of fencing and drainage channels to achieve full compliance with FAA Part 77 surfaces, including RSA and ROFA clearances. Throughout the development of the project, the design team and airport management worked diligently with the FAA and FDOT to identify sufficient funding to accomplish the actual construction of the project. Russ served as Project Engineer – Construction Phase Services.

d

(1) TITLE AND LOCATION *(City and State)*
Sunstate FBO Group III Aircraft Storage Hangar and Office, Kissimmee Gateway Airport, Kissimmee, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2010-2013**
CONSTRUCTION (If Applicable) **2013**

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

☒ Check if project performed with current firm

This project consisted of construction of 10,000 SF NFPA 409 Group III Aircraft Storage Hangar and 6,000 SF Supporting Offices. The work included pre-engineered metal building including hangar and office spaces; main balcony; hangar catwalk and rear balcony; fire protection; electrical; mechanical and plumbing systems; components, cladding, and glazing systems; access control system; and complete site work including asphalt parking lot/access, PCC sidewalks, ramps, marking, potable water/fire main, and septic system. Russ served as Project Manager.

e

(1) TITLE AND LOCATION *(City and State)*
Runway 6-24 Rehabilitation and Related Work, Kissimmee Gateway Airport, Kissimmee, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2012-2014**
CONSTRUCTION (If Applicable) **On-going**

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

☒ Check if project performed with current firm

Project included the design and construction phase services for a major pavement rehabilitation of Runway 6-24. Work elements included removal of WWII era concrete hardstands, construction of new pavement, new blast pad, all new LED MIRL lighting system, PAPI-4 units on both runway ends and new supplemental wind cones. Project incorporated reducing the runway width from 150 feet to 100 feet with non-precision marking standards. Russ served as 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
Dr. Robert Boyer, Ph.D., P.E.	**Pavement Consultant Engineer**	**50**	**10**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC., Orlando, FL

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
PhD CE Highway and Airport Pavement, 1972; BSCE Soil Mechanics, 1963; BSAE Soil Structures, 1961	**Professional Engineer – FL**

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

Dr. Bob Boyer is the former Asphalt Institute Senior District Engineer covering the states of Alabama, Florida, and Georgia – a position he held from 1988 to his retirement. He now serves as a special consultant to AVCON for asphalt pavement inspection, design, construction, maintenance and repair, and rehabilitation. He is a registered Professional Engineer in Florida and Kentucky and has published more than 30 technical papers in the pavement and asphalt industry. Dr. Boyer regularly consults with AVCON on asphalt paving issues.

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
North Apron Rehabilitation, Bob Sikes Airport, Crestview, FL	PROFESSIONAL SERVICES **2011**	CONSTRUCTION (If Applicable) **2011**
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

This project involved rehabilitation of the North Apron at Bob Sikes Airport to accommodate additional large aircraft (C-130) on this former General Aviation Ramp Area. The work included new asphalt resurfacing along with additional PCC apron expansion. Through the use of a highly polymer-modified asphalt binder in conjunction with low air voids, the project included the installation of non-toxic low-permeability hot mix asphalt that not only resists rutting and degradation, it also provides resistance to aircraft fuels, hydraulic fluids, and petroleum oils. The specification developed by AVCON, INC. and Dr. Robert Boyer, P.E. for this mix was originally identified as "P-401-FR" for its fuel-resistant properties. The material has recently been recognized for use by the FAA under the specification item P-601. In addition to an environmentally safe alternative to coal-tar, the P-601 mixture also provides the added benefit of improved resistance to rutting, commonly observed on asphalt pavements that are subject to heavy aircraft or truck traffic. The development of this new specification represents the first coordinated effort to standardize this new technology for airport pavements on a national level. Dr. Boyer served as Project Engineer.

b

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Pavement Investigation and Rehabilitation Strategy, Runway 17L-35R, St. Pete-Clearwater International Airport, St. Petersburg, FL	PROFESSIONAL SERVICES **2010-2011**	CONSTRUCTION (If Applicable) **N/A**
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

This project entailed a preliminary inspection of the Runway 17L-35R and Terminal Apron pavements at the St. Pete-Clearwater International by AVCON at the request of the Airport Engineer. The preliminary inspection was prompted by premature slippage distress of such severity that two emergency repair patches at the 35R end of the RW had been required in the past 12 months, and at the time of the inspection, an area in the same vicinity of the 35R end of the RW was scheduled for a third emergency repair. On the basis of these discussions, PIE authorized design of an emergency repair of approximately 300-feet of runway pavement that floated during a recent hurricane storm event. Dr. Boyer served as Project Engineer.

c

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Runway 9L-27R Pavement Investigation, Broward County Aviation Department, Ft. Lauderdale-Hollywood International Airport, Ft. Lauderdale, FL	PROFESSIONAL SERVICES **2006**	CONSTRUCTION (If Applicable) **N/A**
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Conducted investigation of durability and predicted premature failure mode of P-401 Bituminous Plant Mix Pavement placed on Runway 9L-27R. Assisted the BCAD in assigning performance responsibility. Dr. Boyer served as Asphalt Pavement Consultant.

d

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Mill and Overlay Runway 02-20, Patrick Air Force Base, Cocoa Beach, FL	PROFESSIONAL SERVICES **2008-2009**	CONSTRUCTION (If Applicable) **2009**
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Project consisted of complete milling and replacement of 7,000 foot x 200 foot Hot-Mix Asphalt. Primary components of the work included re-defining the runway centerline alignment and profile; correction of pavement cross slopes to achieve UFC compliance; development and implementation of a new SuperPave™ specification in conjunction with the USAF AFCESA; complete re-marking of the complete runway, and construction phase support services. Dr. Boyer served as Asphalt Pavement Consultant.

e

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Mill and Overlay Runway 11-29, Patrick Air Force Base, Cocoa Beach, FL	PROFESSIONAL SERVICES **2011**	CONSTRUCTION (If Applicable) **2012**
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

The work included all technical design of the airfield to correct and restore the asphalt surface, airfield markings for a 4,000 foot x 150 foot runway, along with related Specs intact technical specifications. Based on previous successful application on the Runway 02-20 project, AVCON was requested to utilize the previously approved USAF Asphalt SuperPave™ Specification for Bituminous Surface course. Dr. Boyer served as Asphalt Pavement Consultant to evaluate milling depths and fabric installation requirements.

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
Carl S. Johnson II, E.C., A.C.E.	**Senior Electrical Designer**	**31**	**13**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC., Orlando, Florida

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
A.S. Computer Integrated Manufacturing, 1993	**Electrical Contractor – FL** **ACE – Airfield Lighting Maintenance (AAAE)**

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

Carl Johnson has 31 years of experience and his areas of expertise include planning, design, construction, and maintenance of electrical distribution systems. For the last twenty-four years, his primary focus has been the design and construction administration/inspection of airfield lighting and NAVAID systems. He has completed the OSHA 30 Hour course, is a Licensed Electrical Contractor and is an AAAE Airport Certified Employee (ACE) in the field of Airfield Lighting Maintenance. Mr. Johnson has participated in numerous forums and committees relating to airfield lighting, grounding, and lightning protection. ***He has an extensive knowledge of NFPA, NEC, FAA, and military standards, and he is a Principal Member of the NFPA 780 Technical Committee for Lightning Protection and Underwriters Laboratories Standards Technical Panel 96 which covers activity for UL 96, Standard for Lightning Protection Components, and UL 96A, Standard for Installation Requirements for Lightning Protection Systems.***

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*
Lighting Protection Study, Crystal River and Inverness Airports, Citrus County, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2007-2008**
CONSTRUCTION (If Applicable) **N/A**

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

☒ Check if project performed with current firm

AVCON reviewed existing records, performed field assessments and testing of existing airfield and outside electrical facilities, documented the condition of the facilities as it relates to their function and lightning protection and provided recommendations to improve lightning protection of the systems. Carl served as Project Manager.

b

(1) TITLE AND LOCATION *(City and State)*
Repairs to Airfield Lighting System, NAS Key West, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2006-2009**
CONSTRUCTION (If Applicable) **2009**

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

☒ Check if project performed with current firm

AVCON provided design and engineering services for the complete replacement of all electrical components from the primary side of five high voltage transformers throughout the entire airfield. The scope of services included all new airfield lighting, normal power electrical distribution, and standby power distribution systems. The project also included addressing environmental issues of wetlands and endangered species. Permitting efforts were also included. Additional, the scope included the design of a NFPA 780 compliant lightning protection system and transient voltage surge suppression system (TVSS) for two airfield lighting vaults and lightning protection systems for the runway and taxiway lighting systems. Carl served as Sr. Electrical Designer.

c

(1) TITLE AND LOCATION *(City and State)*
Airfield Lighting Vault Study, Perry Foley Airport, Taylor County, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2008-2009**
CONSTRUCTION (If Applicable) **N/A**

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

☒ Check if project performed with current firm

The project included a detailed field evaluation and electrical capacity assessment to identify the requirements needed to upgrade and refurbish airfield electrical improvements and the existing airfield lighting vault serving Perry Foley Airport. The project included a program to conduct a field evaluation and electrical capacity assessment of the lighting vault in order to establish the baseline operating parameters of the vault. These results enabled the team to make a detailed assessment of upgrade requirements and define the airfield electrical improvement project. The study also included evaluation of vault and beacon tower lightning protection. Carl served as Senior Electrical Designer.

d

(1) TITLE AND LOCATION *(City and State)*
Airfield Lighting and Signage Improvements, Opa-Locka Executive Airport, Opa-Locka, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **1998-2004**
CONSTRUCTION (If Applicable) **2004**

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

☒ Check if project performed with current firm

As part of the modernization of the airports under the control of the Miami-Dade Aviation Department, Opa-Locka Airport underwent $7,000,000.00 of electrical upgrades. One project consisted of the electrical upgrade of four runways, associated taxiways, aprons and heliports. The project included a new airfield lighting vault and airfield lighting control system. Mr. Johnson performed the design to layout circuits for the new airfield signage, heliport, runway and taxiway lighting. Design included a new manhole and duct bank system to interconnect functional parts of the existing duct system and to provide connection of the airfield lighting circuits to the new vault. Mr. Johnson received a "Certificate of Appreciation" from the Metro-Dade Aviation Department for his work on the project. The Metro-Dade Aviation Department was able to secure an additional $3,000,000.00 FAA grant due to the timely completion of the project design. Carl served as Project Manager/Senior Electrical Designer.

e

(1) TITLE AND LOCATION *(City and State)*
Airport Standby Generator Program, Naples Municipal Airport, Naples, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2007**
CONSTRUCTION (If Applicable) **2008**

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

☒ Check if project performed with current firm

Project consisted of the design of Prime Power diesel generator systems for the General Aviation Terminal (275 kW-343 kVA) and the Commercial Aviation Terminal (365 kW-456 kVA). Both systems were 208/120 volt, 3 phase 4-wire, 60 Hz. The first phase included design/procurement documents for the Owner's purchase of the two generators and other major equipment. Phase II consisted of construction documents for the installation of the two generator systems. Carl served as Sr. Electrical 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	
Mark Goodacre, A.C.E.	**Electrical Designer**	a. TOTAL **33**	b. WITH CURRENT FIRM **7**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC., Orlando, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
A.S. Mechanical Engineering, 2004	**N/A**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mark Goodacre's previous experience and responsibilities have included the preparation of project documentation and load calculations for airfield lighting circuits, including the development of project base files in AutoCAD format from existing record drawings and field visits. He also has experience preparing design documentation for an airfield's lighting layout and circuitry for all associated Runways, Taxiways and Parking Aprons. Mark has special expertise in the area of 3D modeling and has developed construction details which demystify even the most complicated installations.

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*
Repairs to Airfield Lighting System, Design-Build, Naval Air Station, Key West, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2006** | CONSTRUCTION (If Applicable) **2008**

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

☒ Check if project performed with current firm

AVCON provided design and engineering services for the complete replacement of all electrical components from the primary side of five high voltage transformers throughout the entire airfield at the Naval Air Station. The scope of services included all new airfield lighting, normal power electrical distribution, and standby power distribution systems. The project also included addressing environmental issues of wetlands and endangered species. Permitting efforts were also included. Upgrades included all requirements for Visual Flight Rule (VFR) and Precision Instrument Flight Rule (IFR) Category I operations. Mark served as Electrical Designer.

b

(1) TITLE AND LOCATION *(City and State)*
Repairs to Airfield Lighting System, Naval Air Station Whiting Field, Milton, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2008-2013** | CONSTRUCTION (If Applicable) **2013**

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

☒ Check if project performed with current firm

AVCON provided design services to replace and enhance all airfield lighting systems originating on the line side of the 15 kV distribution transformers. The two airfield lighting vaults were stripped of the original equipment and rehabilitated with new electrical distribution, lighting, standby generators, lightning protection, constant current regulators and an updated control system. Full Breaker Coordination and Arc Flash Hazard studies were performed and implemented at each airfield lighting vault. Both airfields were designed to replace all runway, taxiway, apron and helipad edge lighting and airfield guidance signage at the Naval Air Station. Mark served as Electrical Designer.

c

(1) TITLE AND LOCATION *(City and State)*
Airfield Lighting Upgrades – Phase I, Jacksonville International Airport, Jacksonville, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2007-2008** | CONSTRUCTION (If Applicable) **2008**

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

☒ Check if project performed with current firm

This project is the first in a series of airfield lighting upgrades planned for Jacksonville International Airport. This project will replace an aged taxiway edge light system utilizing direct buried cables with a new base can and conduit system utilizing LED type taxiway edge fixtures. Mark served as Designer.

d

(1) TITLE AND LOCATION *(City and State)*
Runway 31 Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR), Northeast Florida International Airport, St. Augustine, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2010-2013** | CONSTRUCTION (If Applicable) **2013**

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

☒ Check if project performed with current firm

This project involved the installation of Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR). Mark served as Electrical Designer.

e

(1) TITLE AND LOCATION *(City and State)*
Rehabilitation of 9L-27R and Taxiway B1, Orlando Sanford International Airport, Sanford, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES **2008-2009** | CONSTRUCTION (If Applicable) **2009**

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

☒ Check if project performed with current firm

This $8 million project consists of rehabilitating Runway 9L-27R bituminous pavement. The rehabilitation includes milling the entire surface of existing runway pavement and overlaying with varying depths of P-401SP Super Pave Asphalt Pavement. Also included in the project is rehabilitating Taxiway B1 bituminous pavement and paving an existing grass island within the Terminal ramp area. Mark served as Electrical 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
Mary Soderstrum, AIA, NCARB, LEED® AP BD+C	**Senior Airport Planner**	**34**	**2**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC., Orlando, Florida

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Bachelor of Architecture, 1976; Bachelor of Science, Environmental Design, 1975	**Professional Architect – FL, MO, RI, TN** **Certified LEED AP Building Design and Construction** **National Council of Architects Registration Board**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mary Soderstrum has over 35 years of experience as an airport planner, a senior aviation executive, facilities programmer, aviation activity forecaster, and architect. She has extensive expertise in airport master planning; facilities forecasting; and planning and design of aviation facilities including passenger terminals, aprons, airside facilities, terminal renovation, and airport expansion programs. ***She was part of separate teams that wrote the FAA Advisory Circular 150/5070-6 Airport Master Plans, and the FDOT Airport Master Plan Guidebook.***

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*: **Spaceport System Plan, Space Florida, Kennedy Space Center, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2012-2013**; CONSTRUCTION (If Applicable): **N/A**

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

The purpose of the Spaceport System Plan is to provide information and guidance to determine the extent, type, and nature of infrastructure development needed to position Florida for growth and to provide the State with the competitive edge for capturing new and diversified aerospace business. Mary served as Airport Planner.

b

(1) TITLE AND LOCATION *(City and State)*: **Cape Canaveral Spaceport Master Plan, Cape Canaveral Spaceport, Brevard County, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2012-2013**; CONSTRUCTION (If Applicable): **N/A**

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

The purpose of the Spaceport Master Plan is to provide information and analysis to guide Space Florida in its efforts to expand and modernize facilities infrastructure at the Cape Canaveral Spaceport in Brevard County, Florida. The plan shall contain recommended projects to meet current and future commercial, national, and State space transportation requirements, and to otherwise enable Space Florida to perform its mission using the existing and future capabilities of the Cape Canaveral Spaceport. The plan will identify the extent, type, and nature of future development requirements necessary to achieve the desired "future state" of the Spaceport, identify the planned role of Space Florida and the Florida agencies in the facilitation and funding of planned improvements, and guide the prioritization of recommended investments. Mary served as Airport Planner.

c

(1) TITLE AND LOCATION *(City and State)*: **Master Plan Guidebook Update, Aviation Division Florida Department of Transportation, State of Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2009**; CONSTRUCTION (If Applicable): **N/A**

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

Responsible for the 2009 re-write of the FDOT Airport Master Plan Guidebook, which incorporated many Florida specific statutes as well as delineated many FDOT specific requirements for the production of Airport Master Plans. Mary served as Principal Author.

d

(1) TITLE AND LOCATION *(City and State)*: **FAA Master Plan Advisory Circular, Federal Aviation Administration, Washington, D.C.**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2004**; CONSTRUCTION (If Applicable): **N/A**

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

Participated in the team that after twenty years re-wrote the FAA Advisory Circular (AC) 150/5070-6 Airport Master Plans that brought the AC up-to-date with respect to the requirements, procedures and process of developing Airport Master Plans. Mary served as a project writer and review panelist.

e

(1) TITLE AND LOCATION *(City and State)*: **Master Plan Update, Tampa International Airport, Tampa, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2007**; CONSTRUCTION (If Applicable): **N/A**

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

Directed the firm's terminal and airfield planning work and cost estimating work on this multi-firm project to plan the new North Terminal Area and to ensure that the existing terminal meets the planning requirements necessary until the new North Terminal Area is operational. Mary served as Project Manager.

f

(1) TITLE AND LOCATION *(City and State)*: **Master Plan Update, Wauchula Municipal Airport, Wauchula, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2013-On-going**; CONSTRUCTION (If Applicable): **N/A**

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

This Airport Master Plan Update was prepared for the City of Wauchula (City) and the Wauchula Municipal Airport Authority (Authority) to provide long-range airport improvement strategies that address the future demand for aviation and aviation-related services at the Wauchula Municipal Airport (Airport). This study considers future airport improvements for a 20-year period of 2012 to 2031. This project provides an update to the previous Master Plan Update completed in November 2007. Mary serves as 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
Rocky Dovichi	**Civil and Airfield Construction Sr. Inspector**	**30**	**1**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC. (Ft. Lauderdale, FL)

16. EDUCATION *(Degree and Specialization)*

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mr. Dovichi is an accomplished Construction Professional with over 25 years of experience in all facets of heavy and highway construction, including substantial airport experience. Some of the highlights of his career include safety, planning, and inspecting construction and major improvements for international airports, DOT heavy highway projects, bridges, industrial, commercial land developments and mixed use hi rises. He has managed and completed the installation of asphalt and concrete pavements, FAA signage, lighting, vaults and duct banks, lift and pump stations, pavement markings and most civil disciplines and underground utilities. He is a skilled construction negotiator, with a full understanding of civil construction QA/QC standards; and a complete grasp of state and federal reporting criteria and records management. His many years of construction provide an excellent platform from which to oversee construction projects of all types.

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*
Rehabilitation of Runway 4-22
Zephyrhills Municipal Airport
(Zephyrhills, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
	2014

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

☒ Check if project performed with current firm

The project consisted of rehabilitating Runway 4-22, the Airport's 5,001' x 100' primary Runway. Pavement rehabilitation involved recycled stabilized base construction utilizing the existing pavement structure (asphalt and limerock) prior to a 4" asphalt overlay. Additionally, an area of concrete in poor condition at the Runway 4-22 end was removed and crushed on site to create additional new base material. As part of the project, the runway numerals we adjusted from 4-22 to 5-23 to account for the current magnetic declination. The project also included rehabilitation of the runway lighting system (upgrade to LED edge lights, threshold lights, and REILs), new signage, and the installation of new 4-Box PAPIs, as well as marking and grooving of the entire runway. A new taxiway and small hold apron was also constructed to de-conflict the Runway 22 and Runway 18 ends in order to comply with geometric layout requirements of FAA AC 150/5300-13A. Mr. Dovichi serves at Senior Construction Inspector

b

(1) TITLE AND LOCATION *(City and State)*
Taxilane A Extension
Naples Municipal Airport
(Naples, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
	2013

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

☒ Check if project performed with current firm

TAXILANE A EXTENSION
Naples Municipal Airport, Naples, FL
Construction Inspector
For this assignment AVCON provided engineering planning, design, bid phase and construction phase services for the 800-foot extension of Taxiway A to connect to the end of the previously lengthened end of Runway 23. The project included partial reclamation and back-filling of an existing wet stormwater pond to create the safety area necessary for the Taxiway A extension. Construction Inspection was provided during the pavement of the P-401 Superpave Asphalt Test Strip. This also included conducting a pre-paving meeting with the Owner and Contractor for a thorough review of the Contract Document Requirements for both the test strip and full production paving of the Superpave Asphalt Design Mix to ensure a high quality pavement construction. Mr. Dovichi served as Sr. Construction Inspector.

c

(1) TITLE AND LOCATION *(City and State)*
Airport Terminal and Ramp Expansion
Miami International Airport
(Miami, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
	2006

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

☐ Check if project performed with current firm

This project consisted of the removal and replacement of PCC Aprons for Terminals B, C, E and D Extension. Work also included new construction of PCC / asphalt taxiway connectors, FAA signage and lighting, interior roads and tug roads; demolition of existing building structures and utilities; installation and inspection of new underground facilities, new terminal fiber optics above and below ground; extension of new underground jet fuel system; and support role for International and Domestic Baggage system site logistics. Mr. Dovichi served as Project Manager for the Contractor.

d

(1) TITLE AND LOCATION *(City and State)*
Construction of Taxiway N
Tampa International Airport
(Tampa, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
	2002

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

☐ Check if project performed with current firm

Constructed new concrete taxiway "N" and air cargo facility, site security and logistics, demolition, PCC crushing operations, dewatering, all related underground utilities, fiber optic, electrical lighting and signage, Slip form concrete and asphalt paving. Mr. Dovichi served as Construction Manager for the Contractor.

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
Zemp B. Pepper, P.E.	**Mechanical / Plumbing / Fire Protection Engineer**	**28**	**2**

15. FIRM NAME AND LOCATION *(City and State)*
AVCON, INC. (Ft. Lauderdale, FL)

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
B.S. Mechanical Engineering, 1983	**Professional Engineer – FL** **Fire Protection Engineer – FL**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mr. Pepper has more than 28 years of experience in design, analysis and layout of HVAC, plumbing and fire protection for a wide variety of public, commercial and industrial projects, including aviation projects. His technical skills include proficiency in Microsoft Word and Excel, AutoCAD 2010, Trane Trace 700 Load Program, Florida Energy Code and Elite Fire Protection Software. In addition to his various mechanical design roles, Mr. Pepper has demonstrated expertise in the design and understanding of various fire suppression system projects. Fire protection design includes wet and dry type sprinkler systems, standpipe systems, fire pump systems, and clean agent systems.

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*
Airside 4 Restroom Renovation Program
Orlando International Airport
(Orlando, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2008	**2009**

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

☐ Check if project performed with current firm

Design included complete renovation of twelve (12) different restroom locations on the Transfer Level of Airside 4 at OIA. Work included complete gutting of the restrooms to original framing, new chases, new code compliant fixture count, and considerable phasing to maintain restrooms for public service throughout construction. Design included new cold water, hot water, sanitary waste and vent piping, new plumbing fixture specifications, complete new LED lighting and ventilation, electrical hand dryers, and new electrical services to all facilities from existing house panels in the terminal. Mr. Pepper served as Lead MEP Engineer.

b

(1) TITLE AND LOCATION *(City and State)*
Maintenance Hangar
Wauchula Municipal Airport
(Wauchula, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2008	**2009**

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

☐ Check if project performed with current firm

HVAC design included ventilation systems for the hangar maintenance spaces and restrooms. Plumbing design included domestic cold water, hot water, sanitary waste and vent, and plumbing fixture specification for the facility. Mr. Pepper served as Lead MEP Engineer.

c

(1) TITLE AND LOCATION *(City and State)*
Waste Water Treatment Administrative Building
Panama City-Bay County International Airport
(Panama City, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2007	**N/A**

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

☐ Check if project performed with current firm

HVAC design included package split system unit to condition the WWTP office spaces and locker room. Ventilation systems were provided for the restroom and locker room facilities. The remote Electrical Control Building was provided with ventilation and heating. Plumbing work included domestic cold water, hot water, sanitary waste and vent systems for the facility fixtures. An emergency eye wash station was provided for the lab area. Mr. Pepper served as Lead MEP Engineer.

d

(1) TITLE AND LOCATION *(City and State)*
Airfield Lighting Control Buildings
Naval Air Station
(Key West, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2006	**2008**

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

☐ Check if project performed with current firm

HVAC design included package rooftop units to condition the airfield regulator rooms and computer control spaces. Exhaust flue piping and radiator discharge duct were provided for the emergency generator systems. A ventilation system was provided for the non-conditioned building spaces. Diesel fueling system was upgraded with new piping and inventory/monitoring systems. Mr. Pepper served as Lead MEP Engineer.

e

(1) TITLE AND LOCATION *(City and State)*
Showalter Flying Service
Orlando Executive Airport
(Orlando, FL)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2006	**2006**

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

☐ Check if project performed with current firm

HVAC design included single zone DX unit to service the office and support spaces for the hangar facility. An exhaust system was provided for the restroom facilities. Plumbing design included domestic hot and cold water, sanitary and vent systems as well as plumbing fixture specifications. Mr. Pepper served as Lead MEP Engineer.

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 1

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
General Consulting Services - Kissimmee Gateway Airport, Kissimmee, FL	**2008-On-going**	**On-going**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
City of Kissimmee, FL – Kissimmee Gateway Florida	**Terry Lloyd**	**(407) 847-4600**

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

AVCON has served as a Prime Consultant to City of Kissimmee / Kissimmee Gateway Airport since 2008. Samples projects completed under this General Consulting Services contract have included:

- **Replace Airfield Guidance Signs and Lighted Windcone** (2010-2012): The project included design, bidding, and construction phase services for the construction of an FAA L-858 LED Guidance Signs and an L-807 LED Lighted Windcone.
- **Rehabilitation of Runway 6-24** (On-going): The project consists of design and bid phase services, including pavement and geometry analysis for rehabilitation of Runway 6-24 (currently 5,000' x 150'); design provision for Runway 6 standard blast pad; airfield lighting, vault, and navigational aid analysis and design to consider future Runway 6 extension and LED versus Quartz/Halogen technology; temporary and permanent runway marking design; storm-water design and permit application; comprehensive land survey and geotechnical testing programs; comprehensive project and cost administration phase services; and FAA grant pre-application services.
- **Sunstate FBO Group III Aircraft Storage Hangar And Office** (2010-2013): This project consisted of construction of 10,000 SF NFPA 409 Group III Aircraft Storage Hangar and 6,000 SF Supporting Offices which included pre-engineered metal building including hangar and office spaces with supporting structure; main balcony with supporting structure; hangar catwalk and rear balcony with supporting structure; fire protection systems; electrical support systems; mechanical and plumbing support systems; components, cladding, and glazing systems; access control systems; and complete site work including asphalt parking lot/access, PCC sidewalks, airside support ramps, marking, potable water/fire main, and septic system with drainfields.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**
b	**Cal-Tech Testing, Inc.**	**Jacksonville, Florida**	**Geotechnical Engineering**
c			
d			
e			
f			

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)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
General Consulting Services - Wauchula Municipal Airport, Wauchula, FL	**1996-On-going**	**On-going**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
City of Wauchula	**Olivia Minshew**	**(863) 773-3115**

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

AVCON has provided on-call General Consulting Services to this client since 1996. Services include: grant coordination with FDOT and FAA, and other project specific work orders as required by the City. Projects under this contract have included:

- **Security Enhancements** (On-going): Design of security fencing, CCTV cameras and electronic access gates. Construction to occur in 2013.
- **T-Hangars and Taxi-lanes** (On-going): Design of taxilanes and supporting Taxiway to future T-hangar lots. Construction to occur in 2013.
- **Construct Master Stormwater Ponds** (2011-2012): Design and construction of storm-water detention ponds which allows future development in the northwest quadrant of the Airport.
- **Maintenance Hangar, Site Utilities and Apron** (2007-2010): This project provided a new aircraft maintenance hangar, ramp area and new utilities to support the airport's economic development objectives. It also provided for the construction of a 9,600 square foot single bay hangar to be used for aircraft storage/maintenance adjacent to a new aircraft parking apron. The building site included a connector to the existing roadway, a new vehicle parking lot, and new or extended utilities to serve the new facility.
- **T-hangar Design and Westside Master Development** (2006): Provided Master Development Plan on properties to the North, West and South; including a Conceptual Stormwater Plan and Conceptual Utilities Plan for the entire site to support four rows of T-hangars along a new taxilane.
- **Sealcoat and Mark Runway 18-36** (2003): The project consisted of placing a surface treatment on Runway 18-36. The runway was then re-marked with visual markings. The design included analysis of several different treatment alternatives and final recommendation of the selected system.

"Based on the expertise provided by AVCON, their commitment to excellence and design innovation, as well as the quality and consistency of AVCON's outstanding staff, I am pleased to recommend AVCON and Mr. Holliday as project manager, without reservation to any Airport for all related airport consulting services."

Olivia Minshew
Director of Community Development
City of Wauchula

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**
b			
c			
d			
e			

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 3

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
General Consulting Services - Perry-Foley Airport, Taylor County, FL	**2007-On-going**	**On-going**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Taylor County, FL	**Melody Cox**	**(850) 838-3553**

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

AVCON has provided on-call General Consulting Services to this client since 2007. Services include grant coordination with FDOT and FAA as well as specific task orders as required by the County. Projects under this contract have included:

- **Runway 18-36 Rehabilitation—Phase I** (2011-2012): The Phase I work included the complete removal of existing runway and shoulder asphalt to allow for re-shaping of the base course material to eliminate depressions and areas of ponding. New asphalt was installed on the re-shaped base course in accordance with FAA grading standards. Re-marking of the northern half of the runway was included.
- **Runway 18-36 Rehabilitation—Phase II** (2012-On-going): The Phase II design has been completed and bids were opened August 2012. The project is anticipated to be awarded for construction in September and will address the reconstruction of the south half of Runway 18-36 to rehabilitate the asphalt surface. The new runway surface and associated Runway Safety Area will be re-graded in accordance with FAA standards.
- **Marking and Lighting Rehabilitation** (2009): Project included the design and construction administration for the re-marking of Runway 18-36 and Runway 12-30. The project also replaced 20 airfield directional/information signs and several taxiway edge lights. New L-806 LED windcones were also specified to reduce operational costs.
- **North T-Hangar Development** (2008-2009): Developed a T-hangar development strategy for long-term demand. Designed and permitted a stormwater management facility to accommodate three future hangar rows. Designed a developed a new eight-unit T-Hangar facility with associated taxiway/taxilane infrastructure.
- **Electrical (Vault) Capacity Assessment and Field Evaluation** (2008): Project evaluated the integrity and the loads associated with the existing airfield lighting circuits and the equipment contained within the airfield electrical vault. The evaluation identified significant capacity for expansion within the vault (currently utilizing 49% of existing capacity) and identified priorities for reducing operational costs and improving system integrity.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Niceville and Orlando, Florida**	**Professional Engineering Services**
b	**Cal-Tech Testing, Inc.**	**Jacksonville, Florida**	**Geotechnical Engineering**
c			
d			
e			

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 4

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Rehabilitate Electrical Vault and Airfield Signage, Martin County Airport / Witham Field, Stuart, FL	**2011-2013**	**2013**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Martin County Airport / Witham Field	**George Stokus, A.A.E.**	**(772) 221-2374**

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

This project included improvements to airfield signage and consisted of replacing approximately 80 internally illuminated airfield guidance and mandatory hold signs. The Scope of Work also included a study of the Electrical Vault and assessment report of the regulators and other equipment. Additionally, the airport elected to place additional signs which included Runway Distance Remaining Signs (RDR) along Runway 12-30 where funds allowed.

Many of the existing signs exceeded their expected service life with sign faces faded, and differing manufacturers spread across the airfield. Replacing signs with updated Light Emitting Diode (LED) fixtures results in decreased utility and maintenance costs with an increase in brightness and reliability. Additionally, there will be a decrease in the overall carbon emissions due to the reduction in power requirements. The installation of the airfield signage increases the safe operations of aircraft ground traffic movement at the Martin County Airport/Witham Field.

The objective of this contract were to prepare the necessary plans and specifications to bid the improvements; assist the County in bidding the project and selecting a contractor to construct the improvements; and providing the administration and management services for the design and construction associated with the project.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**
b			
c			
d			
e			
f			

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 5

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Stormwater Master Plan and Taxiway Rehabilitation and Widening, Bob Sikes Airport, FL	**2009-2012**	**2012**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Okaloosa County Airports	**Tracy Stage**	**(850) 651-7160 x 1055**

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

This project consisted of complete design, permitting, construction administration and inspection services to widen the 8,000-foot Taxiway A from 50 to 75 feet and add 18,000 sy of asphalt apron to accommodate new industrial tenants. The pavement work included over 37,000 tons of asphalt. Additionally, an airport stormwater master plan was developed to provide a centralized stormwater management system to treat the existing and future airport development. The airport property is composed of 1,088 acres and the stormwater improvements encompass approximately 270 acres of development.

The purpose of the airport stormwater master plan was to develop a stormwater management plan consistent with FAA policy regarding stormwater management facilities, provide water quality treatment requirements to comply with Okaloosa County and the Northwest Florida Water Management District (NWFWMD), and to have sufficient attenuation capacity to meet Okaloosa County attenuation requirements. **The AVCON Phase I stormwater permit recently obtained for this project is the second largest permit issued by the NWFWMD to date. Upon NWFWMD assuming ERP Phase II permitting responsibilities from the Florida Department of Protection in October of 2010, this project also became the first wetland project evaluated by the NWFWMD under the new rules.**

This project brought the airfield and other improvements existing and proposed into compliance with the local and state permitting agency requirements. Previously, the airport had little onsite stormwater treatment and attenuation which resulted in compliance issues as new projects were permitted resulting in longer permit times and higher construction costs. The stormwater master plan considered the proposed build-out shown in the ALP and other areas that may be revenue generators for the airport. The approved plan included the construction of ponds in key development areas; therefore streamlining the permitting process for the airport and future tenants resulting quicker design/permitting times, significant construction cost savings (only secondary stormwater improvements are required) and shorter construction schedules.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Niceville, Florida**	**Professional Engineering Services**
b			
c			
d			
e			
f			

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)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
General Consulting Services - Okeechobee County Airport, Okeechobee County, FL	**2001-On-going**	**On-going**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Okeechobee County, FL	**Kathy Scott**	**(863) 467-5505**

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

AVCON has served as a Prime Consultant to the Okeechobee County Airport Authority since 2001. Some of the projects completed under this General Consulting Services contract have included:

- **Upgrade Airport Security and Fencing** (On-going): The project consists of design, equipment selection and specifications, plans, and bid documents along with construction phase services to upgrade existing access gates, replace gate operators, install new access control hardware and software, and install new CCTV cameras.
- **Master Drainage Plan Update** (On-going): This project consists of the revision and completion of a Master Drainage Plan to guide future development to 2025.
- **Taxiway A Extension - West** (On-going): This design project will extend Taxiway A to serve the airport's future FBO/Hangar development areas. The extension is approximately 1, 000 feet, and will include three connector taxiways to the development site.
- **Replace and Relocate Airfield Rotating Beacon** (2011): This project consisted of the installation of a new rotating beacon in a new location as the existing location conflicted with expansion plans for the terminal building. Power was run to the new beacon via directionally drilled and direct buried conduit from the airfield electrical vault.
- **Taxiway A and C** (Professional Services 2010-2011, Construction 2011): AVCON's services included inspection during construction, substantial completion with preparation of a contractor punch list and final inspection of the project. All of the Taxiway edge lighting was replaced and new FAA-required airport signage was installed. Existing direct buried cable and stake-mounted quartz lighting was replaced with new LED light fixtures, base cans and conduit system.
- **Rehabilitation of Runway 5-23** (2006-2009): This work involved the complete planning, funding and grant support, and all construction phase services for rehabilitation of the airport's primary runway, the primary parallel taxiway and the terminal apron using a variety of techniques including cold-in-place recycling, mill and overlay, P-401 SuperPave™ asphalt concrete. The work incorporated new airfield lighting and signage, airfield markings, many other support roles as requested from time to time.
- **On-Call Services, JACIP, SFWMD Compliance, Industrial Park Zoning, Airspace, and Other Issues** (On-going): Along with the project specific assignments undertaken over the past several years, the AVCON Team is routinely called upon by airport management to address other non-specific issues relating to the overall operation, maintenance and related activities at the airport.
- **Emergency Generator** (2007): This project included installation of an airport-wide emergency generator system.
- **Apron Lighting** (2005): This project was undertaken to increase safety and security at the airport during darkness and low visibility conditions. This project was designed and constructed using multiple grants due to size limitations on the recurrent funding from the FAA. However, as a result of this careful grant coordination, and timing of the original bidding and award of a supplemental agreement for additional scopes of work, the project was completed in December of 2005. AVCON provided planning, design, bidding, and construction phase services.

"The progress we have achieved is largely due to the professionalism, expertise and work of AVCON personnel. In particular, I have been ably assisted by Jim Kriss, Carl Johnson…

…The stature of a company is measured by the quality of its employees, and AVCON is well-served by these outstanding professionals."

W. Vernon Gray
Former Airport Manager

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**

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 7

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Rehabilitation of Runway 5-23, Jacksonville Executive at Craig Airport; Rehabilitation of Runway 7-25, Herlong Recreational Airport; Jacksonville, FL	**2008-2011**	**2009-2011**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Jacksonville Aviation Authority	**Doug Sherman**	**(904) 741-2234**

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

Jacksonville Executive at Craig Airport (CRG) is located just 8 miles east of downtown Jacksonville, Florida. Because of its location, size and capacity, Craig Airport helps to divert general aviation traffic away from Jacksonville International Airport (JAX) and its large commercial planes. Craig Airport is a mid-sized general aviation airport that handles personal aircraft and small commuter planes. The airport has a control tower and handles 400-500 aircraft operations daily. Craig Airport covers an area of 1,342 acres which contains two paved runways: 5/23 measuring 4,004 x 100 ft. and 14/32 measuring 3,998 x 100 ft. Craig Municipal Airport also has 17 taxiways.

Herlong Recreational Airport located approximately eleven (11) miles southwest of downtown Jacksonville, is promoted as "Jacksonville's premier general aviation recreational and sport flying airport". The Airport is currently a prime recreational site for small private planes, hot air balloons, skydiving, gliders and other small or experimental aircraft. Herlong supports JAX by accommodating sport aeronautical operations, thereby serving as a reliever airport to JAX.

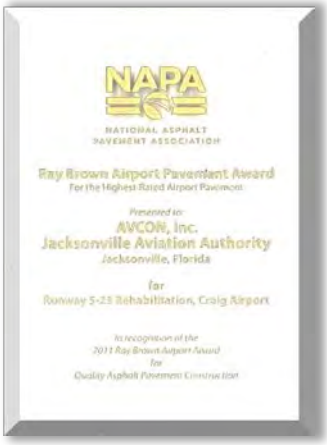
Based on the Master Plan, the critical aircraft for the runway is the Citation X, an ADG-II aircraft, Approach Category C. However, the new pavement design program released by the FAA, called FAARFIELD, no longer uses the critical aircraft design concept. Instead, the entire fleet mix is input into the program and cumulative damage factor (CDF) is computed to determine the recommended pavement structure.

The rehabilitation of the Runways consisted of milling a nominal ½" of the existing asphalt and placing a variable depth overlay of P-401SP (SuperPave™) asphalt. The overlay encompassed the full 100 foot width of the runway and required transitional areas on the taxiway connectors. The Craig 5-23 project included widening of the existing 10 foot shoulders to 13 feet. The existing light fixtures were adjusted to proposed grades. A geosynthetic membrane interlayer was placed over the existing concrete encased duct to prevent reflective cracking.

The new pavement markings at both airports included runway designation markings, runway centerline markings, runway edge stripes, and runway threshold markings. These markings consisted of white paint with retroreflective beads. In addition, taxiway centerline markings and edge markings were placed as necessary on the taxiway connections.

QUICK FACTS:

- ✓ The flexible pavements were designed in accordance with FAA Advisory Circular 150/5320-6, "Airport Pavement Design and Evaluation".
- ✓ The pavement section was evaluated using LEDFAA for the Herlong project and subsequently the new **FAARFIELD – Airport Pavement Design** (V 1.302, 3/11/09) computer program for Craig.
- ✓ The pavement overlay was determined using the FAA programs for a CBR value of 17.
- ✓ The marking color and layouts are designed in accordance with the requirements outlined in FAA Advisory Circular 150/5340-1K, "Standards for Airport Markings".
- ✓ The projects included work on existing R/W 5-23 shoulders and airfield lighting fixtures.
- ✓ The projects required both daytime (Phase 1) and nighttime (Phase 2) construction and a detailed phasing summary was included in the construction plans.
- ✓ **Overall Project Cost:** $1,246,000 (Craig) **Overall Project Cost:** $800,000 (Herlong)



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**

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 8

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
General Consulting Services – Jacksonville International, Cecil, Jacksonville Executive at Craig, and Herlong Recreational Airports, Jacksonville, FL	**1989-2011**	**1989-2011**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Jacksonville Aviation Authority	**J. Derek Powder, P.E.**	**(904) 741-2225**

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

AVCON has served as a Prime Consultant and subconsultant to the Jacksonville Aviation Authority and is predecessor Jacksonville Port Authority since 1989. Samples of recent projects completed under this Prime General Consulting Services contract have included:

- **Rehabilitation of Airfield Drainage System - Craig** (2010-2012): AVCON is providing inspection, evaluation, preparation of construction documents, bidding, construction phase services for rehabilitative repairs, re-construction, and restoration of the pipes, inlets, and surface grades immediately surrounding the site, as appropriate. AVCON is analyzing cost-efficient rehabilitation methods of in-place restoration such as Centricrete lining. The system is comprised of approximately 4,824 linear feet of pipe ranging from 36-inches to 60-inches in diameter connected through 12 ditch bottom inlets and open channel ditches.
- **Rehabilitation NE Apron and Taxilane - Herlong** (2010-On-going): This project involves the rehabilitation of the Northeast Apron and Taxilane at Herlong Recreational Airport located in Jacksonville, Florida. The apron serves strictly general aviation aircraft weighing less than 12,500 pounds or less. The scope of the project includes milling and overlaying the existing apron, taxilane, and connectors as well as placing new markings. The rehabilitation of Northeast Apron and Taxilane will consist of milling 2.5 inch of the existing asphalt and placing a constant depth overlay of P-403 asphalt. The overlay will encompass the full apron (approximately 9900 square yards) and will require transitional areas on the taxilane connectors. The new pavement markings will consist of taxilane centerline markings, and non-movement area markings enclosing the aircraft tie-down parking positions. These markings will consist of yellow paint with retro-reflective beads, and black outline paint with no beads.
- **Runway Length Justification Study - Cecil** (2009): This project consisted of performing a detailed analysis of operational data, fleet mix analysis, and wind coverage to validate the runway length for FAA funding for rehabilitation options and grant elibility.
- **Pavement Repairs and Joint Resealing – Phases I through IV - Jacksonville** (2003-On-going): AVCON provided all technical planning assistance, base drawings, engineering design, specifications, scheduling, cost estimating, bidding and construction phase services in connection with the Pavement Repairs and PCC Joint Resealing Project at Jacksonville International Airport.
- **Taxiway D Extension - Cecil** (2008-2009): The project consisted of the design and construction of the northward extension of Taxiway D. Taxiway "D" is parallel to Taxiway "A" and is located in the northwest General Aviation Development Area. The project extended Taxiway D some 1800 feet north bypassing a contaminated site defined by a shallow and deep plume on the project sketch. The project was constructed over an abandoned munitions site and required detection and management of this environmental challenge both during design and construction.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**
b	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
c	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
d	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

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)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
General Consulting Services – Orlando Sanford Int'l Airport, Sanford, FL	**2003-On-going**	**2003-On-going**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Sanford Airport Authority	**Larry Dale**	**(407) 585-4015**

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

AVCON has served as a Prime Consultant to the Sanford Airport Authority since 2003. Samples of projects completed under this Prime General Consulting Services contract have included:

- **Rehabilitation of Runway 9L-27R and Taxiway B1** (2008-2009): This $8 million project consisted of rehabilitating Runway 9L-27R bituminous pavement. The rehabilitation included milling the entire surface of existing runway pavement and overlaying with varying depths of P-401SP Super Pave Asphalt Pavement. Also included in the project was rehabilitating Taxiway B1 bituminous pavement and paving an existing grass island within the Terminal ramp area. AVCON provided evaluation of the existing condition of the runway pavement, developed a rehabilitation strategy, and prepared construction documents.
- **Runway 9C-27C Rehabilitation** (2004): This project consisted of the rehabilitation of a General Aviation runway originally built in the 1940s and overlaid twice since. The structural strength of the runway pavement was thoroughly analyzed to ensure that it would be appropriate for the forecast GA fleet mix and ADG-V aircraft - such as A330s. The rehabilitation consisted mostly of engineered milling and overlay of the asphaltic surface course.
- **44,000 Square Foot Hangar and Office Site** (2009-2010): This project was for design, bidding, and permitting of Site Improvements to support a new nine-acre (9 Acres) project at Orlando-Sanford International Airport. The project also included preparation and bidding services of a Design Criteria Package for a 44,000 square foot Hangar for a 767-300 design aircraft, with 5,000 square feet of attached Office Spaces and 4,000 square feet of Maintenance/Shop Area, inclusive of all of the related site work.
- **Airfield Electrical System Upgrade and Airfield Lighting Control System (ALCS)** (2004): AVCON provided evaluation of the existing airfield lighting lightning protection (counterpoise) system, assisted with counterpoise installation, updated an Airfield Lighting Control System (ALCS) panel, and assisted with Airfield Lighting Vault (ALV) modifications which consisted of removal of the wall between the existing generator room and the fuel tank room.
- **Airfield Improvements** (2008-2009): AVCON provided technical assistance, field inventory, field survey, engineering design, specifications, quantity takeoffs, cost estimating, and support services in connection with an Airfield Improvement project at Orlando Sanford International Airport. The project consisted of the following four major work items: Inventory and Rehabilitation of Airfield Signage, New Signage and Markings for Taxiway K1, Rehabilitation of Lighting and Underground Electrical for Taxiway C East, and Rehabilitation of Lighting and Underground Electrical for Taxiway R.
- **Environmental Assessment for the Extension of Runway 9L-27R** (2007): The Environmental Assessment (EA) for the proposed extension of Runway 9L-27R at the Orlando Sanford International Airport (SFB) was prepared in accordance with the guidance provided in Federal Aviation Administration (FAA) Order 5050.4B. The EA also included an assessment of the relocation of the precision approach instrument landing system (ILS) for Runway 9L-27R.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**
b	**Universal Engineering Sciences, Inc.**	**Orlando, Florida**	**Geotechnical Engineering**
c	**Cal-Tech Testing, Inc.**	**Jacksonville, Florida**	**Construction Materials Testing**
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 10

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
General Consulting Services – Naples Municipal Airport, Naples, FL	**2003-2009**	**2003-2009**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT PHONE NUMBER
Naples Airport Authority	**Theodore Soliday, C.M.**	**(239) 643-0733**

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

AVCON served as a Consultant to the City of Naples Airport Authority (NAA) and Naples Municipal Airport (APF) from 2003-2009. Among the projects completed for the Authority are the following:

- **Taxiway B Extension** (2009): Design/Build. Extended Taxiway B and provided engineering design for pavement, airfield lighting, signage, markings, and stormwater improvements.
- **Airfield Marking Plan Update** (2008): Provided design services for the complete remarking of the airfield, along with bidding and construction phase services.
- **Airport Access Control System Upgrade** (2007): This work covered the preparation of a design/build scope document, performance specifications and schematic drawings depicting the installation and replacement of the Airport Access Control System, card Readers, Gate Operators, and related equipment at APF.
- **Wildlife Survey and Wildlife Management Plan** (2007): This project incorporated the following: identification of protected species of flora and fauna both on the airport and adjacent to the airport including, but not limited to, bald eagles, ospreys, owls, wading birds, rookeries (nest areas) and the like; a mapped survey with limited field inspection of all airport wetlands for the purpose of identifying attractions for wading birds and related species; documentation of existing protected species including bald eagle reports, natural areas inventory, Florida Fish and Wildlife Commission, U.S. Fish and Wildlife reports. Naples Airport bird strike data and recently completed Regional Planning Council reports will be incorporated into high, medium and low probability areas for potential wildlife impacts; and completion of a Wildlife Management Plan that recommends actions to be taken to minimize wildlife impacts compatible with FAA requirements.
- **Airport Hangar and Building Restoration Program** (2006-2007): Provided all technical assistance, final detailed field assessments, schematic base drawings and details, photo-based descriptions of various repairs, estimate of quantities for comparative bidding purposes, front-end drawings (safety, access, general notes, phasing), specifications, scheduling, cost estimating, bidding phase services and resident construction p hase services in connection with the Authority Hurricane Repair Program at APF. The final project made substantial repairs to over 100 hangars damaged by storm winds.
- **Emergency Repairs to Airport Lighting Systems** (2006): Design/Build. This project incorporated both design and build component to repair and replace the airport lighting beacon and tower, ODALS light station adjacent to Airport Road N., and a general aviation highmast light pole damaged in a hurricane event.
- **General Aviation Terminal and Commercial Aviation Terminal (GAT and CAT) Roof Replacement** (2006): This work covered the design and repair and/or replacement of various roofing elements on the GAT and CAT following damages caused by a series of hurricanes which impacted the airport.
- **Standby Generator Installation** (2004-2006): Provided technical assistance, design criteria, performance requirements, specifications, plan sketches and cost estimating services in connection with the preparation of a procurement document covering the installation of standby generator(s) and associated equipment at the Naples Municipal Airport. Ultimately this construction work was completed by AVCON acting in an electrical contract role with our sister construction group firm.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a	**AVCON, INC.**	**Orlando, Florida**	**Professional Engineering Services**

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
Russ Holliday, P.E.	Project Manager/Engineer	X	X		X		X	X	X		
Sandeep Singh, P.E.	Principal-in-Charge	X	X		X		X	X	X	X	X
James A. Kriss, P.E.	Quality Assurance / Quality Control	X	X	X	X	X	X	X	X	X	X
Tim Shea, A.A.E.	Aviation Management Support	X	X		X			X	X	X	
Robert K. Hambrecht, P.E.	Project Engineer										
Hilary Maull, P.E.	Project Engineer				X		X			X	
Carl S. Johnson II, E.C., A.C.E.	Senior Electrical Designer	X	X	X	X	X	X	X	X	X	X
Mark Goodacre, A.C.E.	Electrical Designer	X		X	X				X	X	
Robert H. Palm, P.E.	Senior Project Engineer		X			X	X		X		X
Mary Soderstrum, AIA, NCARB, LEED® AP BD+C	Senior Airport Planner	X	X						X	X	
Lee Lewis, P.E.	Airport Planner			X		X			X		X
Zemp B. Pepper, P.E.	Mechanical / Electrical / Plumbing / Fire Protection Engineer		X						X		
Luca DelVerme, P.E.	Structural Engineer	X							X	X	X

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	**General Consulting Services - Kissimmee Gateway Airport, Kissimmee, FL**	6	**General Consulting Services - Okeechobee County Airport, Okeechobee County, FL**
2	**General Consulting Services - Wauchula Municipal Airport, Wauchula, FL**	7	**Rehabilitation of Runway 5-23, Jacksonville Executive at Craig Airport; Rehabilitation of Runway 7-25, Herlong Recreational Airport; Jacksonville, FL**
3	**General Consulting Services - Perry-Foley Airport, Taylor County, FL**	8	**General Consulting Services – Jacksonville International, Cecil, Jacksonville Executive at Craig, and Herlong Recreational Airports, Jacksonville, FL**
4	**Rehabilitate Electrical Vault and Airfield Signage, Martin County Airport / Witham Field, Stuart, FL**	9	**General Consulting Services – Orlando Sanford International Airport, Sanford, FL**
5	**Stormwater Master Plan and Taxiway Rehabilitation and Widening, Bob Sikes Airport, FL**	10	**General Consulting Services – Naples Municipal Airport, Naples, FL**

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: **946-11333**

PART II – GENERAL QUALIFICATIONS

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

2a. FIRM (OR BRANCH OFFICE) NAME: **AVCON, INC.**	3. YEAR ESTABLISHED: **1988**
	4. DUNS NUMBER: **60-672-0266**
2b. STREET: **101 NW 3rd Avenue, Suite 300A**	5. OWNERSHIP
2c. CITY: **Fort Lauderdale** / 2d. STATE: **FL** / 2e. ZIP CODE: **33301**	a. TYPE: **Corporation**
	b. SMALL BUSINESS STATUS: **Small Business, DBE, MBE**
6a. POINT OF CONTACT NAME AND TITLE: **James A. Kriss, P.E., Vice President – Aviation Services**	7. NAME OF FIRM (If block 2a is a branch office): **AVCON, INC.**
6b. TELEPHONE NUMBER: **(754) 200-2030** / 6c. E-MAIL ADDRESS: **jakriss@avconinc.com**	

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

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	(2) BRANCH
02	Administrative	10	0
08	CADD Technician	11	0
12	Civil Engineers	15	0
15	Construction Inspector	5	0
21	Electrical Engineers	2	0
42	Mechanical Engineer	1	0
48	Project Manager	1	1
57	Structural Engineers	2	0
60	Transportation Engineers	2	0
	Airport Planner	1	0
	Engineer Intern (Mechanical)	2	0
	Other Employees	0	0
	Total	52	1

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

a. Profile Code	b. Experience	c. Revenue Index Number (see below)
A05	Airports; Navaids; Airport Lighting; Aircraft Fueling	6
A06	Airports; Terminals & Hangars; Freight Handling	4
B02	Bridges	4
C18	Cost Est; Cost Eng& Analysis; Param. Cost.; Forecast	1
D04	Design-Build - Preparation of Requests for Proposals	1
E02	Educational Facilities; Classrooms	1
H07	Highways; Streets; Airfield Paving; Parking Lots	6
I06	Irrigation; Drainage	1
O01	Office Buildings; Industrial Parks	1
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.)	1
S09	Structural Design; Special Structures	1
S13	Storm Water Handling & Facilities	2
T03	Traffic & Transportation Engineering	1
U03	Utilities (Gas and Steam)	1
W03	Water Supply; Treatment & Distribution	1
Z01	Zoning; Land Use Studies	1

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

(Insert revenue index number shown at right)

a. Federal Work	3
b. Non-Federal Work	7
c. Total Work	7

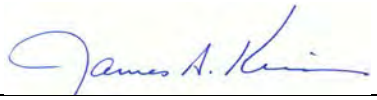
PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE



B. DATE: **February 7, 2014**

c. NAME AND TITLE: **James A. Kriss, P.E., Vice President – Aviation Services / AVCON Project Manager**

AUTHORIZED FOR LOCAL REPRODUCTION
MANDATORY USE DATE OF FORM 5/1/2004

STANDARD FORM 330 (6/2004)

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

12. Name	**Michael M. Mossey, P.S.M.**				13. Role in this contract	**Senior Project Surveyor**
14. Years Experience	Total	**37**	With Firm	**8**	15. Firm Name and Location	**Keith and Associates, Inc. 301 East Atlantic Boulevard Pompano Beach, Fl 33060**

16. Education (Degree and Specialization)	17. Current Professional Registration *(State and Discipline)*
Maryville College, Maryville, Tennessee	**Professional Surveyor & Mapper, Florida #5660**

18. Other Professional Qualifications *(Publications, Organizations, Training, Awards, etc.)*

Florida Society of Professional Surveyors & Mappers, Secretary, Broward Chapter, FSMS, 1999-2000 and 2000-2001

19. Relevant Projects

	Title and Location *(City & State)* ⁎ Year Completed (Eng. / Const.) ⁎ Role ⁎ Brief Description *(Scope, Size, Cost, etc.)*	Performed with current firm ☒
a.	**Fort Lauderdale/Hollywood International Airport Utility Atlas Update for South Runway Expansion 9R/27L, Ft. Lauderdale, Florida** Professional Services – On-Going Construction Services – N/A As Sub-Consultant to RS&H, Keith & Associates, Inc. is currently tasked with providing the preconstruction design survey, horizontal and geodetic control surveys and aerial photography survey support.	
b.	**Fort Lauderdale Executive Airport (FXE) Taxiway Bravo Resurfacing, Ft. Lauderdale, Florida** Professional Services – Completed 2011 Construction Services – N/A As a Sub-Consultant to Kimley-Horn and Associates, Keith and Associates provided Boundary and Engineering Design Surveys for this 1,200 acre City of Ft. Lauderdale airport property. This project includes milling, re-surfacing along with enhancements to turn-offs and entrances to tenant ramps, and reconstruction of the pavement along Taxiway Bravo, including widening of the taxiway intersections. Construction will consist of grading, embankment, stabilized subgrade, compacted limerock base, paving, airfield lighting and electrical work, turfing, pavement markings and other related work	
c.	**Fort Lauderdale Executive Airport (FXE) Taxiway Golf Relocation, Ft. Lauderdale, Florida** Professional Services – Completed 2012 Construction Services – N/A Mr. Mossey served as Project Surveyor for this project, in which he assisted the City with the survey submittal process to the FAA for the Taxiway Golf project in accordance with FAA/NGS requirements. Keith and Associates provided surveying services.	
d.	**Fort Lauderdale Executive Airport (FXE) Customs Building, Ft. Lauderdale, Florida** Professional Services – Completed 2012 Construction Services – N/A Mr. Mossey provided surveying services which included a boundary survey required for the Customs Replacement Building at Fort Lauderdale Executive Airport.	
e.	**Pompano Air Park Hangers, Pompano Beach, Florida** Professional Services – Completed 2012 Construction Services – N/A Keith and Associates prepared a boundary and topographic survey for the SheltAir lease parcel at Pompano Air Park.	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

12. Name	**James Thiele, PE**		13. Role in this contract	**Director of Engineering**
14. Years Experience	Total **36**	With Firm **3**	15. Firm Name and Location	**Keith and Associates, Inc. 301 East Atlantic Boulevard Pompano Beach, FL 33060**

16. Education (Degree and Specialization)
B.S. in Civil Engineering, University of Miami, 1978

17. Current Professional Registration *(State and Discipline)*
State of Florida Professional Engineer #33256
Commonwealth of Pennsylvania Professional Engineer #53735

18. Other Professional Qualifications *(Publications, Organizations, Training, Awards, etc.)*
N/A

19. Relevant Projects

a. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Fort Lauderdale-Hollywood International Airport (FLL) – 9R/27L Runway Expansion Design Team (Fort Lauderdale, FL)
Professional Services – On-Going Construction Services - On-Going
Responsible for the preliminary engineering and design of all utilities, earthwork, grading and portions of the stormwater management system associated with the 8,000 foot runway expansion project. Additional responsibilities include the preparation of the Design Criteria Package for the Design/Build portion of the tunnel and bridge section over the FEC Railroad, US 1 and Interstate 595 entrance ramps. Mr. Thiele is directly responsible for supervision of Civil Inspection Representatives during the construction phase.

b. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

The Cove Shopping Center, Deerfield Beach, Florida
Professional Services – Completed 2013 Construction Services – Completed 2013
Keith and Associates provided engineering design and permitting services including topographic survey, drainage and gravity drainage well, and parking lot design for this 6.7 acre city owned property located directly adjacent to the Cove Marina and Intracoastal Waterway. Mr. Thiele supervises construction inspection and project management for phases 2, 3 and 4 of construction.

c. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Pompano Beach Boulevard Streetscape, Pompano Beach, Florida
Professional Services – Completed 2010 Construction Services – Completed 2013
Keith and Associates prepared drainage, water distribution and pavement design for this roadway/ streetscape overhaul project. The work being proposed will provide for a more modern beachfront access way with improved parking and pedestrian walkways. Mr. Thiele is performing quality control and quality assurance reviews on the design and will supervise the construction phase of the project. Construction is scheduled to start in October 2010 and Keith and Associates will perform construction inspection duties in order to prepare and submit the construction certification of completion to all governing permitting agencies.

d. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Gove Elementary School, Belle Glade, Florida
Professional Services – On-Going Construction Services - On-Going
Keith and Associates is preparing a land development plan for this new school facility including the design and permitting of all land development infrastructure. Mr. Thiele is responsible for the project design quality control and quality assurance oversight including supervision of construction phase services.

e. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Pompano Beach Chiller Plant, Pompano Beach, Florida
Professional Services – On-Going Construction Services - On-Going
The project included a 750 square foot chiller plant building and cooling tower yard for Pompano Beach City Hall. The new chiller plant will provide energy efficient air-conditioning to City Hall and the Commission Chambers while reducing energy costs to the City. The impacted area around the proposed chiller plant increased the entire site pervious area by 619 square feet and also required the elimination of four parking spaces. Keith and Associates provided Planning, Civil, Survey and SUE services including layout and processing of the site plan, utilities design and permitting through all agencies having jurisdiction.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

12. Name	**Alex Lazowick, E.I.**				13. Role in this contract	**RPR**
14. Years Experience	Total	**14**	With Firm	**4**	15. Firm Name and Location	**Keith and Associates, Inc. 301 East Atlantic Boulevard Pompano Beach, Florida 33060**

16. Education (Degree and Specialization)
BS, Civil Engineering, University of North Florida

17. Current Professional Registration (State and Discipline)
Engineer Intern, Florida #1100014926

18. Other Professional Qualifications *(Publications, Organizations, Training, Awards, etc.)*

ASCE Member/Team Captain for Competitions, FES Member, 2nd Place in PCI Big Beam Competition in 2009 & 2010, Asphalt Paving Technician Level 1 & 2 (FDOT), Earthwork Construction Inspection, Level 1 (FDOT), Concrete Field Technician, Level 1 (FDOT), Troxler Nuclear Gauge, Final Estimates Level 1 (FDOT), FDOT Workzone Traffic Control Intermediate Level MOT, 30 Hour OSHA General Industry safety and health hazard recognition and prevention

19. Relevant Projects

a. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Fort Lauderdale / Hollywood International Airport (FLL) 9R/27L Runway Expansion Lead Design Team
Professional Services – On-going Construction Services – On-going
Mr. Lazowick was responsible for the coordinating and overseeing designations and locations of all geotechnical borings associated with the design efforts for the 8,000 foot south runway expansion project. He assisted with the development of conceptual runway extension design alternatives. He provided design and permitting of the 24" water and 16" sewer transmission utility main relocations. His Duties also included providing drainage, cross-sections and grading design for the new south runway and taxiway system and engineering inspections to confirm site conditions as needed. Mr. Lazowick inspected the WM/FM transmission lines which included the new 24" water transmission main that will feed all the terminals and the west hangars. In addition to the water main, he also preformed inspections on the sanitary sewer force main that feeds the south terminals, and inspections on the relocation of south perimeter road. He also assisted with utility and roadway conceptual design for the Design Criteria Package for the U.S. 1/FEC RR Structures for the Expansion of Runway 9R-27L at FLL (Design-Build)

b. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Fort Lauderdale / Hollywood International Airport (FLL) AGIS Safety Critical Airfield Signage Survey
Professional Services – On-going Construction Services – On-going
Mr. Lazowick was responsible for the field verification and data collection of all the elevated airport signage on the entire FLL airfield and the population of attribute data within the elevated signs AutoCAD drawings in accord with AC150/5300-18B to be utilized for the Airport Layout Plan (ALP) as well as future planning efforts.

c. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

The Cove Shopping Center Parking Facilities, Deerfield Beach, FL
Professional Services – Completed 2013 Construction Services – Completed 2013
Terminal Access Roadway Interchange & Entrance Roadways: Mr. Lazowick provided inspections of demolition, water distribution, system installation and testing, painting, lamping/video inspection and testing, shoulder and roadway construction milling and resurfacing, roadway and drainage system construction. Signage and pavement marking installation/application, curb/sidewalk construction.

d. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Blanche Ely High School – School Board of Broward County, Pompano Beach, FL
Professional Services – Completed 2011 Construction Services – Completed 2011
Mr. Lazowick provided construction engineering inspections for the final stages of the school's stadium project facilitated through a Design Build Contract with Balfour Beatty Construction. This project included complete reconstruction associated with the new football stadium, track and concession stand.

e. Title and Location *(City & State)* • Year Completed (Eng. / Const.) • Role • Brief Description *(Scope, Size, Cost, etc.)* — Performed with current firm ☒

Runway 13/31 Rehabilitation Project, Fort Lauderdale / Hollywood International Airport (FLL)
Professional Services – Completed 2013 Construction Services – Completed 2013
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. Mr. Lazowick provided all CEI services, checking material with specifications & coordination with contractor personnel.

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

20. Example Project Key Number		21. Title and Location *(City and State)*	**Ft. Lauderdale Executive Airport (FXE) SheltAir Hangar, Ft. Lauderdale, FL**	22. Year Completed	
				Professional Services	Construction *(if Applicable)*
				On-going	**On-going**

23. Project Owner's Information

a. Project Owner	**Holland SheltAir Aviation Group**
b. Point of Contact Name	**John Sobol, Vice President/Construction**
c. Point of Contact Telephone Number	**(954) 771-2210**

24. Brief Description of Project and Relevance to this contract *(include scope, size and cost)*

Ft. Lauderdale Executive Airport (FXE) SheltAir Hangar, Ft. Lauderdale Beach, FL
(Estimated Project Value: $600,000.00)

This project proposes demolition of small scale aviation aircraft angers on approximately 6 acres of leased property at the Ft. Lauderdale Executive Airport (FXE). There are 3 proposed modern hangar structures proposed with 52,800 sqft of hangar space and 7,440 sgft of office space. Associated paving, drainage, water distribution, sanitary sewer and landscape improvements are included in the site infrastructure improvement.

Keith and Associates is responsible for the surveying, preliminary engineering, landscape and irrigation plans, construction administration, and subsurface utility engineering (S.U.E.) services for the existing site. The renovation design will include preparations of the site plan and preliminary engineering drawings. Following the approval of the site plan, K&A will prepare final engineering plans and calculations for the pavement, drainage, water distribution and sanitary sewer system improvements. A final landscape and irrigation system plan will be prepared and will meet local landscape ordinances as well as FAA regulations and recommendations for the landscape in this airport. K&A will also prepare elaborating site inventory and assessments of the existing landscape to develop tree disposition that meets DERM regulations for tree removal. The plans will be submitted for approval and applicable permitting through all applicable local, county and state agencies.

K&A is also responsible for the construction phase services for this project. This will include review of shop drawings and as-builts reward drawings. Periodic site inspections will be performed by K&A in accordance with the applicable permit conditions.

25. Firms from Section C involved with this Project

	(1) Firm Name	(2) Firm Location *(City and State)*	(3) Role
a.	Keith & Associates, Inc.	Pompano Beach, Florida	Surveying, Engineering, Landscape Architecture, SUE, Construction Admin
b.			

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

20. Example Project Key Number		21. Title and Location *(City and State)*	**Miscellaneous Surveying Services for Ft. Lauderdale Executive Airport (FXE), Ft. Lauderdale, FL**	22. Year Completed	
				Professional Services **2013**	Construction *(if Applicable)* **2013**

23. Project Owner's Information

a. Project Owner	**City of Fort Lauderdale**
b. Point of Contact Name	**Mr. Dave R. Bardt, PE, Senior Vice President (Kimley-Horn and Assoc)**
c. Point of Contact Telephone Number	**(561) 845-0665**

24. Brief Description of Project and Relevance to this contract *(include scope, size and cost)*

Keith and Associates, Inc provided general surveying services as a Sub-Consultant to Kimley-Horn and Associates, Inc. on their general engineering contract with Fort Lauderdale Executive Airport (FXE). Projects which we worked on:

- **FXE Customs Building:** Mr. Mossey provided surveying services which included a boundary survey required for the Customs Replacement Building at Fort Lauderdale Executive Airport.

- **FXE Taxiway Bravo Resurfacing:** Keith and Associates provided Boundary and Engineering Design Surveys for this 1,200 acre City of Ft. Lauderdale airport property. This project included milling, re-surfacing along with enhancements to turn-offs and entrances to tenant ramps, and reconstruction of the pavement along Taxiway Bravo, including widening of the taxiway intersections. Construction will consist of grading, embankment, stabilized subgrade, compacted limerock base, paving, airfield lighting and electrical work, turfing, pavement markings and other related work.

- **FXE Taxiway Charlie & Delta Rehabilitation:** Keith and Associates provided surveying services associated with the rehabilitation of Taxiways Charlie and Delta at Fort Lauderdale Executive Airport. K&A was tasked with: preparing a Specific Purpose Survey within the project limits; the topographic data shall be obtained throughout the site on a 20-foot grid with obvious intermediate high and low areas obtained; horizontal and vertical location of all existing surface features including: centerline of pavement markings (striping), edge(s) of pavement, taxiway lighting, signage, electrical boxes, utility structures, runway and FAA utility markers.

- **FXE Taxiway Echo Rehabilitation:** Keith and Associates provided surveying services associated with the rehabilitation of Taxiways Echo at Fort Lauderdale Executive Airport. The Survey limits consisted of 100 feet north of the centerline of Taxiway Echo to the intersection with Runway 8 on the south and a width of 100 feet centered on the taxiway centerline, as well as areas for the taxiway connectors at E2, Hotel, and Quebec along Taxiway Echo. K&A provided the following services: set adequate project horizontal control and references; establish baselines at 100-foot stations for the rehabilitated taxiway; set project benchmarks; perform a topographic survey within the survey limits to locate all above-ground features and all evidence of below-ground features; obtain elevations within the survey limits using a 20-foot grid; locate and obtain surface elevations at soil borings; confirm horizontal and vertical control prior to construction; map the survey and provide files electronically and in hardcopy.

25. Firms from Section C involved with this Project

	(1) Firm Name	(2) Firm Location *(City and State)*	(3) Role
a.	Keith and Associates, Inc.	Pompano Beach, Florida	Misc. Surveying Services
b.			

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
Michael Mossey, PSM	Senior Project Surveyor	•	•								
Daniel Checchia	Director of Subsurface Utility Engineering (SUE)	•	•								
Jim Thiele, PE	Director of Engineering, Engineer of Record	•									
Alex Lazowick, EI	RPR	•									

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Ft. Lauderdale Executive Airport (FXE) SheltAir Hangar, Ft. Lauderdale, Florida	6	
2	Misc. Surveying Services for Ft. Lauderdale Executive Airport (FXE), Ft. Lauderdale, Florida	7	
3		8	
4		9	
5		10	

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(if any)*: RFQ 946-11333

PART II – GENERAL QUALIFICATIONS

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

2a. FIRM (OR BRANCH OFFICE) NAME: Keith and Associates, Inc.	3. YEAR ESTABLISHED: 1998 / 4. DUNS NUMBER: N/A
2b. STREET: 301 East Atlantic Boulevard	5. OWNERSHIP — a. TYPE: Corporation
2c. CITY: Pompano Beach / 2d. STATE: FL / 2e. ZIP CODE: 33060	b. SMALL BUSINESS STATUS: DBE-SBE-CBE-W/MBE
6a. POINT OF CONTACT NAME AND TITLE: A. Dodie Keith-Lazowick, President	7. NAME OF FIRM *(if block 2a is a branch office)*: N/A
6b. TELEPHONE NUMBER: 954.788-3400 / 6c. E- MAIL ADDRESS: dkeith@keith-associates.com	
8a. FORMER FIRM NAME(S) *(If any)*: N/A	8b. YR. ESTABLISHED: N/A / 8c. DUNS NUMBER: N/A

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	9	
08	CADD Technician	2	
12	Civil Engineer, PE	6	
15	C.E.I. Inspector	7	
16	Construction Manager	2	
29	G.I.S. Specialist	1	
38	Land Surveyor, PLS	4	
39	Landscape Architect, RLA	1	
47	Planner: Urban/Regional	2	
48	Project Engineer	5	
53	Scheduler	1	
	Survey Field Crew	21	
	Subsurface Utility Engineer	3	
	Project Surveyor	1	
	Total	65	

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

a. Profile Code	b. Experience	c. Revenue Index Number (see below)
A06	Airports; Terminals and Hangars	4
B02	Bridges	1
C07	Coastal Engineering	3
C10	Commercial Building (Low Rise)	3
C11	Community Facilities	2
C15	Construction Management	4
C16	Construction Surveying	4
E02	Educational Facilities	2
F02	Field Houses; Gyms; Stadiums	2
G04	G.I.S. Services; Development, Analysis	1
H07	Highways, Streets, Airfield Paving	2
H09	Hospitals & Medical Facilities	2
I06	Irrigation; Drainage	3
L03	Landscape Architecture	1
P05	Planning (Community, Regional …)	2
R03	Railroad; Rapid Transit	2
R04	Recreation Facilities (Parks, Marinas, etc)	1
S10	Surveying; Platting; Mapping; Flood Study	2
S13	Storm Water handling & Facilities	1
T04	Topographic Surveying & Mapping	2
W03	Water Supply; Treatment & Distribution	2
Z01	Zoning; Land Use Studies	2

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

(Insert revenue index number shown at right)

a. Federal Work	N/A
b. Non-Federal Work	6
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: 

b. DATE: 01/31/2014

c. NAME AND TITLE: A. Dodie Keith-Lazowick, President

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
Adolfo J. Cotilla, Jr., AIA	Principal in Charge	38	29

15. FIRM NAME AND LOCATION *(City and State)*
ACAI Associates, Inc.; Fort Lauderdale, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Design/Architecture, 1975 Master of Fine Arts in Architecture/Architecture, 1977	NCARB Registered Architect: Florida AR8011 Certified General Contractor: Florida CGC010769

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

Member: AIA - American Institute of Architects; RCI – Roofing Consultants Institute; NRCA – National Roofing Contractors Association and National Trust for Historic Preservation.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
FT. LAUDERDALE EXECUTIVE AIRPORT ADMINISTRATION BUILDING
Fort Lauderdale, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☒ Check if project performed with current firm

ACAI provided architectural schematic evaluations for the interior and exterior renovations to the FXE Airport Administration building. The architectural evaluations include the addition of patio and lanai space at rear of facility, replacing storefront at large conference room, replacement of restroom fixtures, floor carpet, ceiling tile, light fixtures, providing lighting controls, new paint scheme, replace entire HVAC system and components, provide building signage, evaluate roof leaks and provide probable cost estimate as well as provide an evaluation of achieving LEED certification for the project.

b.

(1) TITLE AND LOCATION *(City and State)*
FT. LAUDERDALE EXECUTIVE AIRPORT GENERAL ENGINEERING SERVICES
Fort Lauderdale, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☒ Check if project performed with current firm

Working with the prime consultant, Kimley-Horn and Associates Inc., ACAI was chosen to provide architectural services under this General Engineering Aviation Consultant Services contract for the City of Fort Lauderdale Executive Airport and John H. Fuhrer Downtown Helistop. The desired services may include engineering design and construction management of Airport Capital Improvement Plan, surveying, structural, mechanical, electrical engineering services, geotechnical testing services, grant support services (including providing Disadvantaged Business Enterprise (DBE) support services), site plan review and analysis, related engineering support functions, environmental services, bidding services, and architectural services.

c.

(1) TITLE AND LOCATION *(City and State)*
FT. LAUDERDALE EXECUTIVE AIRPORT ADMINISTRATION COMPLEX AND EMERGENCY OPERATIONS CENTER
Fort Lauderdale, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2004	2008

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

☒ Check if project performed with current firm

Delivered as part of a General Consulting Contract, ACAI served as the Design Criteria Professional and Design Architect for this first phase of a multiple phase project to house the City's Executive Airport Administration functions. The building houses a police substation, an interior emergency operations center and offices for the airport's Director and staff.

d.

(1) TITLE AND LOCATION *(City and State)*
FORT LAUDERDALE EXECUTIVE AIRPORT
AIR RESCUE AND FIRE FIGHTING TRAINING FACILITY (ARFF)
Fort Lauderdale, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2008	2008

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

☒ Check if project performed with current firm

The ARFF is a consolidation of the city's multiple Fire Fighting activities under one roof. Housed in 24,000 sq. ft. of space the facility includes apparatus area, the City's west Emergency Operations Center, and Fire and Rescue Training Facilities. The two story structure contains fire department related offices, kitchen facilities, and sleeping quarters for 12 firefighters. The facility has been designed to handle airport runway emergencies as well as landside and City fire emergencies and is serviced by an emergency generator to prevent any disruption of service to the community. ACAI's scope of services included the design criteria, programming, architecture, engineering and construction management.

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
Adolfo J. Cotilla, Jr., AIA	Principal in Charge	38	29

15. FIRM NAME AND LOCATION *(City and State)*
ACAI Associates, Inc.; Fort Lauderdale, Florida

19. RELEVANT PROJECTS

e.

(1) TITLE AND LOCATION *(City and State)*
BROWARD COUNTY AVIATION DEPARTMENT AIRPORTS PLANNING SERVICES
Broward County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2012	N/A

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

☒ Check if project performed with current firm

Working with the prime consultant, Leigh Fisher, Inc., ACAI was chosen to provide continuing Planning and Design services for the Broward County Aviation Department. Work includes the development of Design Guidelines for Fort Lauderdale - Hollywood International Airport. The scope of services included the production of Design Standards for the Terminal Areas of Fort Lauderdale International Airport. The goal of these standards is to establish a general direction for all future development of the Terminal areas; create a descriptive criteria regarding appearance, cost and maintenance goals; establish a format for the Guidelines, and establish a process for the implementation of the Guidelines.

f.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

h.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

i.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

j.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ 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
DONALD M. WILKIN, RA	Project Architect	34	3

15. FIRM NAME AND LOCATION *(City and State)*
ACAI Associates, Inc.; Fort Lauderdale, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.A. Architecture/1983/Architecture B.S. Resource Development/1974/Landscape Design	Registered Florida Architect No. 8011

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

NCARB Certified, CPTED Certified, Professional Liability Education Program Certificate, Former City of Fort Lauderdale Historic Preservation Advisory Board Member, Tau Sigma Delta Honor Society in Architecture and Allied Arts

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
BROWARD COUNTY RAVENSWOOD BUS MAINTENANCE FACILITY
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	N/A

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

☒ Check if project performed with current firm

ACAI Associates was selected by Broward County, Florida to provide programming, design and construction administration services for the replacement of facilities at the Ravenswood Bus Maintenance Facility. The 9-acre site will be reconfigured, replacing the existing 1970's structures with new state-of-the-art facilities for current and future needs. When completed, the facility will accommodate up to 150 fleet vehicles including (130) 40-foot buses and (20) 60-foot articulated buses along with staff and visitor parking, the majority of which will be provided by a new 268 - space multi-level parking garage. The existing facilities to be replaced include: an operations building, an 11-Bay bus maintenance building, a fueling and fare retrieval facility, bus washing facility and surface parking. In addition, ancillary structures include: a sanitary lift station, guard gate, a compressor building and other miscellaneous storage buildings. All of these are proposed to be removed as part of this project. As part of Broward County's ongoing efforts to provide more energy efficient, environmentally sustainable building, the new Ravenswood Maintenance Facility will pursue a LEED® Gold Certification.

b.

(1) TITLE AND LOCATION *(City and State)*
CITY OF MIRAMAR CONTINUING SERVICES CONTRACT
Miramar, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	N/A

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

☒ Check if project performed with current firm

ACAI has been selected as part of a library of consultants to be used to provide professional planning and engineering services for the following general types of improvements: 1. Utilities Infrastructure Redevelopment, Improvement, and Expansion: Includes potable water, reclaimed water, wastewater, sanitary sewer, storm water, and treatment works. 2. Public Buildings and Facilities: Includes new municipal facilities (e.g. public safety facilities and community centers) and renovations to existing buildings. 3. Parks & Recreation: Includes new parks and upgrades to existing facilities. 4. Energy Conservation and 5. Other consulting services that may be required to improve the City's services.

c.

(1) TITLE AND LOCATION *(City and State)*
CITY OF FORT LAUDERDALE ARCHITECTURE CONTINUING CONTRACT
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2011	N/A

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

☒ Check if project performed with current firm

This contract shall include the following services as authorized by individual task orders for individual projects: Design of architectural projects to help ease back log of work assigned to City staff; ADA analysis and design modifications for ADA compliance at City facilities; Space studies for City facilities; Building analysis regarding maintenance and repair of existing facilities; Design of Capital Improvement Programs (CIP) projects; Review of plans and specifications for conformance to City and other standards; Architectural analysis and reports and construction observation.

d.

(1) TITLE AND LOCATION *(City and State)*
SBBC SOUTHWEST BUS MAINTENANCE FACILITY
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2012	

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

☒ Check if project performed with current firm

This Contract comprised of general construction of the Southwest Area Bus Complex for the School Board of Broward County, Florida. The work included a two story Control/Administration Building, a Garage/Maintenance Building, a Fueling Area/Bus Wash Facility, as well as associated paving, landscaping, irrigation, site utilities, drainage, trash dumpster enclosure, exterior facility sign, site lighting, and fencing of mechanical/electrical enclosures as well as car parking. The prototype facility has parking for over 300 buses.

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
DONALD M. WILKIN, RA	Project Architect	34	3

15. FIRM NAME AND LOCATION *(City and State)*

ACAI Associates, Inc.; Fort Lauderdale, Florida

19. RELEVANT PROJECTS

e.

(1) TITLE AND LOCATION *(City and State)*

MIAMI-DADE EQUITIBLE DISTRIBUTION PROGRAM CONTINUING CONTRACT

Miami-Dade County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2011	N/A

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

☒ Check if project performed with current firm

ACAI's Miami-Dade County experience includes various projects awarded through its EDP program. The scope of services under this contract include, complete professional architectural, civil engineering, structural, MEP and landscape design services, construction engineering and inspection services. Services include the following facilities: Miami Courthouse, Tamiami Air Rescue Facilities, Scalehouse buildings, Prototype K-9 Facility, and Jackson Memorial Hospital.

f.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

h.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

i.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

j.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ 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
HARVEY ALIX LOISEAU	BIM Manager	12	5

15. FIRM NAME AND LOCATION *(City and State)*

ACAI Technologies, Inc.; Fort Lauderdale, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Architecture	

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

Associate Member of AIA, CM-BIM Certified, CPTED Certified, USGBC LEED® Accredited Professional, AutoCAD 2010 Certified Professional, AutoCAD Architecture 2010 Certified Professional

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*

BROWARD COUNTY AVIATION DEPARTMENT BIM STANDARDS
Broward County, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☐ Check if project performed with current firm

Selected by the prime consultant EAC Consulting, Inc., to create the Fort Lauderdale/Hollywood International Airport (FLL) Building Information Modeling Standards (BIM Standards) and BIM Execution Plan (BEP) for implementation at the facilities owned and maintained by the Broward County Aviation Department (BCAD).

b.

(1) TITLE AND LOCATION *(City and State)*

BROWARD COUNTY RAVENSWOOD BUS MAINTENANCE FACILITY
Fort Lauderdale, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	Est. 2014

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

☐ Check if project performed with current firm

ACAI was selected by Broward County, Florida to provide BIM services for the replacement of facilities at the Ravenswood Bus Maintenance Facility. The 9-acre site will be reconfigured, replacing the existing 1970's structures with new state-of-the-art facilities for current and future needs. When completed, the 214,789 sf facility will accommodate up to 150 fleet vehicles including (130) 40-foot buses and (20) 60-foot articulated buses along with staff and visitor parking, the majority of which will be provided by a new 250 - space multi-level parking garage. Integrated 4D modeling is part of the deliverables for analyzing project phasing, tenant sequencing, and construction scheduling.

c.

(1) TITLE AND LOCATION *(City and State)*

SANDIA NATIONAL LABORATORIES COBIE PROGRAMMING
Various Locations

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	N/A

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

☒ Check if project performed with current firm

ACAI Technologies is currently providing COBie Programming services for Sandia National Laboratories. Sandia Contract documents for COBie deliverable requirements on future BIM projects include: Asset type list; Sandia naming conventions; COBie-Sandia Data set; COBie progression schedule; COBie formatted file template; COBie Sandia formatted file deliverable example; and POC COBie - Sandia Schedule Templates-Update. In addition, ACAI Technologies is providing COBie deliverable requirements on-site training.

d.

(1) TITLE AND LOCATION *(City and State)*

NSU CENTER FOR COLLABORATIVE RESEARCH CONSTRUCTION BIM SERVICES
Davie, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	N/A

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

☒ Check if project performed with current firm

TACAI Technologies has been selected to provide BIM services for Nova Southeastern University's Center for Collaborative Research Facility (CCR). The CCR will be a state-of-the-art, cooperative interdisciplinary center for medical, pharmaceutical, dental and oceanographic research. The 216,000 square foot building, which will pursue a LEED® Silver Certification, will include access to a six level 1,650 car parking garage, providing additional student parking and parking for the CCR staff. The CCR is scheduled to start construction in the first quarter of 2014. Our services include a BIM Execution Plan, COBie, BIM Management and Coordination for all the disciplines, Modeling Upgrade to LOD 350 for Mechanical, Electrical, Plumbing, Fire Protection & Civil Utilities and modeling upgrade to LOD 500 for all disciplines.

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
HARVEY ALIX LOISEAU	BIM Manager	12	5

15. FIRM NAME AND LOCATION *(City and State)*

ACAI Technologies, Inc.; Fort Lauderdale, Florida

19. RELEVANT PROJECTS

e.

(1) TITLE AND LOCATION *(City and State)*

BROWARD COUNTY COURTHOUSE BIM SERVICES
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	N/A

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

☒ Check if project performed with current firm

ACAI Technologies was commissioned by the general contractor to provide Building Information Modeling services for the New Broward County Courthouse Architectural, Structural, and Civil disciplines. The new, 23-story facility will provide 693,000 sf of programmed space for civil and family courts with supporting services.

f.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

h.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

i.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

j.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ 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
Sakomvat Peck Sukphisit	BIM Coordinator	13	2.5

15. FIRM NAME AND LOCATION *(City and State)*
ACAI Technologies, Inc.; Fort Lauderdale, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.A in Environmental Design, Texas A&M University A.A. in Architecture, Broward Community College	

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
BROWARD COUNTY AVIATION DEPARTMENT BIM STANDARDS
Broward County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☐ Check if project performed with current firm

Selected by the prime consultant EAC Consulting, Inc., to create the Fort Lauderdale/Hollywood International Airport (FLL) Building Information Modeling Standards (BIM Standards) and BIM Execution Plan (BEP) for implementation at the facilities owned and maintained by the Broward County Aviation Department (BCAD).

b.

(1) TITLE AND LOCATION *(City and State)*
BROWARD COUNTY RAVENSWOOD BUS MAINTENANCE FACILITY
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	Est. 2014

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

☐ Check if project performed with current firm

ACAI was selected by Broward County, Florida to provide BIM services for the replacement of facilities at the Ravenswood Bus Maintenance Facility. The 9-acre site will be reconfigured, replacing the existing 1970's structures with new state-of-the-art facilities for current and future needs. When completed, the 214,789 sf facility will accommodate up to 150 fleet vehicles including (130) 40-foot buses and (20) 60-foot articulated buses along with staff and visitor parking, the majority of which will be provided by a new 250 - space multi-level parking garage. Integrated 4D modeling is part of the deliverables for analyzing project phasing, tenant sequencing, and construction scheduling.

c.

(1) TITLE AND LOCATION *(City and State)*
BOCA RATON REGIONAL HOSPITAL MARCUS NEUROSCIENCE ADDITION
Various Locations

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☒ Check if project performed with current firm

BIM Modeling and Coordination Services were provided for the new construction as well as immediately proximate, existing facility for the Marcus Neuroscience Institute Addition at Boca Raton Regional Hospital. In order to accomplish our client goals, we emphasized our services in the following Areas: BIM and Constructability Review, BIM Standards and Administration, BIM Coordination and Clash Detection, and Vela BIM Integration.

d.

(1) TITLE AND LOCATION *(City and State)*
NSU CENTER FOR COLLABORATIVE RESEARCH CONSTRUCTION BIM SERVICES
Davie, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	N/A

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

☒ Check if project performed with current firm

TACAI Technologies has been selected to provide BIM services for Nova Southeastern University's Center for Collaborative Research Facility (CCR). The CCR will be a state-of-the-art, cooperative interdisciplinary center for medical, pharmaceutical, dental and oceanographic research. The 216,000 square foot building, which will pursue a LEED® Silver Certification, will include access to a six level 1,650 car parking garage, providing additional student parking and parking for the CCR staff. The CCR is scheduled to start construction in the first quarter of 2014. Our services include a BIM Execution Plan, COBie, BIM Management and Coordination for all the disciplines, Modeling Upgrade to LOD 350 for Mechanical, Electrical, Plumbing, Fire Protection & Civil Utilities and modeling upgrade to LOD 500 for all disciplines.

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
Sakomvat Peck Sukphisit	BIM Coordinator	13	2.5

15. FIRM NAME AND LOCATION *(City and State)*

ACAI Technologies, Inc.; Fort Lauderdale, Florida

19. RELEVANT PROJECTS

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
BROWARD COUNTY COURTHOUSE BIM SERVICES *Fort Lauderdale, Florida*	On-going	N/A

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

☒ Check if project performed with current firm

ACAI Technologies was commissioned by the general contractor to provide Building Information Modeling services for the New Broward County Courthouse Architectural, Structural, and Civil disciplines. The new, 23-story facility will provide 693,000 sf of programmed space for civil and family courts with supporting services.

f.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

h.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

i.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

j.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ 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
W. RANDY SCOTT	Project Manager	28	6

15. FIRM NAME AND LOCATION *(City and State)*
ACAI Associates, Inc.; Fort Lauderdale, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Architecture Business Management	

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
FT. LAUDERDALE EXECUTIVE AIRPORT ADMINISTRATION BUILDING
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☒ Check if project performed with current firm

ACAI provided architectural schematic evaluations for the interior and exterior renovations to the FXE Airport Administration building. The architectural evaluations include the addition of patio and lanai space at rear of facility, replacing storefront at large conference room, replacement of restroom fixtures, floor carpet, ceiling tile, light fixtures, providing lighting controls, new paint scheme, replace entire HVAC system and components, provide building signage, evaluate roof leaks and provide probable cost estimate as well as provide an evaluation of achieving LEED certification for the project.

b.

(1) TITLE AND LOCATION *(City and State)*
FT. LAUDERDALE EXECUTIVE AIRPORT GENERAL ENGINEERING SERVICES
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☒ Check if project performed with current firm

Working with the prime consultant, Kimley-Horn and Associates Inc., ACAI was chosen to provide architectural services under this General Engineering Aviation Consultant Services contract for the City of Fort Lauderdale Executive Airport and John H. Fuhrer Downtown Helistop. The desired services may include engineering design and construction management of Airport Capital Improvement Plan, surveying, structural, mechanical, electrical engineering services, geotechnical testing services, grant support services (including providing Disadvantaged Business Enterprise (DBE) support services), site plan review and analysis, related engineering support functions, environmental services, bidding services, and architectural services.

c.

(1) TITLE AND LOCATION *(City and State)*
BROWARD COUNTY AVIATION DEPARTMENT AIRPORTS PLANNING SERVICES
Broward County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

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

☒ Check if project performed with current firm

Working with the prime consultant, Leigh Fisher, Inc., ACAI was chosen to provide continuing Planning and Design services for the Broward County Aviation Department. Work includes the development of Design Guidelines for Fort Lauderdale - Hollywood International Airport. The scope of services included the production of Design Standards for the Terminal Areas of Fort Lauderdale International Airport. The goal of these standards is to establish a general direction for all future development of the Terminal areas; create a descriptive criteria regarding appearance, cost and maintenance goals; establish a format for the Guidelines, and establish a process for the implementation of the Guidelines.

d.

(1) TITLE AND LOCATION *(City and State)*
FORT LAUDERDALE EXECUTIVE AIRPORT
AIR RESCUE AND FIRE FIGHTING TRAINING FACILITY (ARFF)
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2008	2008

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

☒ Check if project performed with current firm

The ARFF is a consolidation of the city's multiple Fire Fighting activities under one roof. Housed in 24,000 sq. ft. of space the facility includes apparatus area, the City's west Emergency Operations Center, and Fire and Rescue Training Facilities. The two story structure contains fire department related offices, kitchen facilities, and sleeping quarters for 12 firefighters. The facility has been designed to handle airport runway emergencies as well as landside and City fire emergencies and is serviced by an emergency generator to prevent any disruption of service to the community. ACAI's scope of services included the design criteria, programming, architecture, engineering and construction management.

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
W. RANDY SCOTT	Project Manager	28	6

15. FIRM NAME AND LOCATION *(City and State)*
ACAI Associates, Inc.; Fort Lauderdale, Florida

19. RELEVANT PROJECTS

e.

(1) TITLE AND LOCATION *(City and State)*
FORT LAUDERDALE HOLLYWOOD INTERNATIONAL AIRPORT LAND USE STRATEGY & PLANNING STUDY
Fort Lauderdale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2012	N/A

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

☒ Check if project performed with current firm

ACAI is providing data collection, review of land use plans, participation in workshops and project support as it relates to the Fort Lauderdale-Hollywood International Airport properties Land Use Strategy and Planning. It is important to note that ACAI's scope is only a portion of the entire scope of the project reflected in the Leigh Fisher Task Authorization from BCAD. Time spent on this project must be recoreded on timesheets provided by BCAD. This is a NTE contract therefore the true raw rate for personnel working on this project must be used in lieu of our maximum rate by contract.

f.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

h.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

i.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

j.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

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

☐ Check if project performed with current firm

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: 1

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

Air Rescue Fire Fighting Facility (ARFF)
Fort Lauderdale Executive Airport
Ft. Lauderdale, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2008	2008

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Fort Lauderdale	Fernando Blanco, Project Engineer	(954) 828-6536

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

The ARFF is a consolidation of the city's multiple Fire Fighting activities under one roof. Housed in 24,000 sq. ft. of space the facility includes apparatus area, the City's west Emergency Operations Center, and Fire and Rescue Training Facilities. The two story structure contains fire department related offices, kitchen facilities, and sleeping quarters for 12 firefighters.

The facility has been designed to handle airport runway emergencies as well as landside and City fire emergencies and is serviced by an emergency generator to prevent any disruption of service to the community.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1). FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	ACAI ASSOCIATES, INC.	Fort Lauderdale, Florida	Programming, Design Criteria, Preliminary, Architecture, Engineering, Construction Management.
b.			
c.			
d.			
e.			
f.			

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)*

ADMINISTRATION COMPLEX
Fort Lauderdale Executive Airport
Fort Lauderdale, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2004	2008

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Fort Lauderdale	Fernando Blanco, Project Engineer	954/ 828.6536

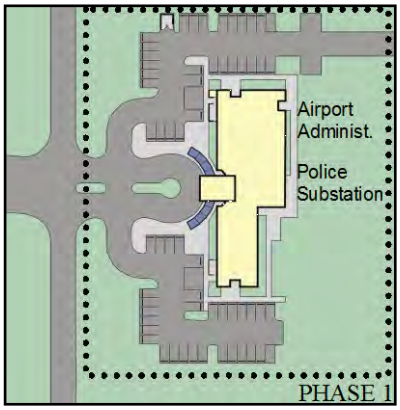
24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Delivered as part of a General Consulting Contract with Kimley-Horn & Associates, ACAI is the Design Criteria Professional and Design Architect for this first phase of a multiple phase project to house the City's Executive Airport Administration functions.

The building houses a police substation, an interior emergency operations center and offices for the airport's Director and staff.

Phase two, currently in Construction Administration, will include the Airport's Air Rescue Fire Fighting Facility along with its Training Center, Fire Station and the City's permanent Emergency Operations Center. This facility is envisioned to be in the 30,000 square foot range and is scheduled to be constructed in the Design/Bid/Build method of project delivery.

As part of ACAI's responsibility, the firm represents the Owner in all matters related to project delivery and conduct inspection services during construction.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1). FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	ACAI Associates, Inc.	Ft. Lauderdale, Florida	Architecture, Master Planning, Programming, Design Criteria Documents, Construction Management
b.			
c.			
d.			
e.			

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: 3

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

BROWARD COUNTY AVIATION DEPARTMENT BIM STANDARDS

Broward County, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
2013	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Broward County Aviation Department	Mike Adiefe, P.E., Vice President	(305) 264-2557

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

Selected by the prime consultant EAC Consulting, Inc., to create the Fort Lauderdale/Hollywood International Airport (FLL) Building Information Modeling Standards (BIM Standards) and BIM Execution Plan (BEP) for implementation at the facilities owned and maintained by the Broward County Aviation Department (BCAD).

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1). FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	ACAI ASSOCIATES, INC.	Fort Lauderdale, Florida	BIM Standards, BIM Execution Plan
b.			
c.			
d.			
e.			
f.			

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: 4

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

BROWARD COUNTY RAVENSWOOD BUS MAINTENANCE FACILITY

Fort Lauderdale, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
On-going	Est. 2014

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Broward County Florida	Jamil Jalloul, Project Manager	(954) 357-5641

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

ACAI Associates was selected by Broward County, Florida to provide programming, design and construction administration services for the replacement of facilities at the Ravenswood Bus Maintenance Facility. The 9-acre site will be re-configured, replacing the existing 1970's structures with new state-of-the-art facilities for current and future needs. When completed, the facility will accommodate up to 150 fleet vehicles including (130) 40-foot buses and (20) 60-foot articulated buses along with staff and visitor parking, the majority of which will be provided by a new 268 - space multi-level parking garage. As part of Broward County's ongoing efforts to provide more energy efficient, environmentally sustainable building, the new Ravenswood Maintenance Facility will pursue a LEED® Gold Certification.

In addition we are also providing BIM services for the replacement of facilities at the Ravenswood Bus Maintenance Facility. Integrated 4D modeling is part of the deliverables for analyzing project phasing, tenant sequencing, and construction scheduling.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1). FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	ACAI Associates, Inc.	Ft. Lauderdale, Florida	Master Planning, Programming, Architecture, Engineering, BIM Consulting and Construction Administration
b.			
c.			
d.			
e.			

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
Adolfo J. Cotilla, AIA	Principal in Charge	X	X	X	X						
Donald M. Wilkin, RA	Project Architect				X						
W. Randy Scott	Project Manager	X			X						
H. Alix Loiseau, CM-BIM	BIM Manager			X	X						
S. Peck Sukphisit	BIM Coordinator			X	X						

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	FORT LAUDERDALE EXECUTIVE AIRPORT AIR RESCUE AND FIRE FIGHTING TRAINING FACILITY	6	
2	FORT LAUDERDALE EXECUTIVE AIRPORT ADMINISTRATIVE COMPLEX	7	
3	BROWARD COUNTY AVIATION DEPARTMENT BIM STANDARDS	8	
4	BROWARD COUNTY RAVENSWOOD BUS MAINTENANCE FACILITY	9	
5		10	

H. ADDITIONAL INFORMATION

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

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31 SIGNATURE	32 DATE
	01/31/2014

33. NAME AND TITLE

Adolfo J. Cotilla, Jr., President

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: RFQ #946-11333

PART II – GENERAL QUALIFICATONS

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

2a. FIRM (OR BRANCH OFFICE) NAME: ACAI Associates, Inc.	3. YEAR ESTABLISHED: 1985
	4. DUNS NUMBER: 161188289
2b. STREET: 2937 W. Cypress Creek Road, Suite 200	5. OWNERSHIP
	a. TYPE: Corporation
2c. CITY: Fort Lauderdale; 2d. STATE: FL; 2e. ZIP CODE: 33309	b. SMALL BUSINESS STATUS: FDOT DBE / FL MBE
6a. POINT OF CONTACT NAME AND TITLE: Adolfo J. Cotilla, Jr.	7. NAME OF FIRM *(If block 2a is a branch office)*
6b. TELEPHONE NUMBER: (954) 484-4000; 6c. E-MAIL ADDRESS: adolfo@aecmworld.com	
8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED; 8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
02	Administrative	6	
06	Architect	6	
08	CADD Technician	13	
12	Civil Engineer	1	
15	Construction Inspector	2	
16	Construction Manager	2	
37	Interior Designer	1	
39	Landscape Architect	1	
48	Project Manager	5	
57	Structural Engineer	1	
	Total	38	

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

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
A06	Airports; Terminals & Hangars; Freight Handling	4
A11	Auditoriums & Theaters	5
C09	Cold Storage; Refrigeration & Fast Freeze	2
C15	Construction Management/Administration	4
E02	Educational Facilities; Classrooms	6
F02	Field Houses; Gyms; Stadiums	1
G02	Gas Systems (Propane; Natural, etc.)	1
H09	Hospitals & Medical facilities	6
H10	Hotels; Motels	1
I05	Interior Design; Space Planning	5
J01	Judicial and Courtroom Facilities	5
L01	Laboratories; Medical Research Facilities	6
L03	Landscape Architecture	3
L04	Libraries; Museums; Galleries	2
001	Office Buildings; Industrial Parks	3
P06	Planning (Site, Installation & Project)	3
P13	Public Safety Facilities	5
R04	Recreation Facilities (Parks, Marinas, etc.)	5
R06	Rehabilitation (Bldgs; Structures; Facilities)	3
R12	Roofing	4
W03	Water Supply; Treatment and Distribution	5

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

(Insert revenue index number shown at right)

a. Federal Work	12 - 1, 11 - 1, 10 – 1
b. Non-Federal Work	12 - 6, 11 - 6, 10 – 6
c. Total Work	12 - 6, 11 - 6, 10 - 6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: Adolfo J. Cotilla

b. DATE: January 31st, 2014

c. NAME AND TITLE: Adolfo J. Cotilla, Jr., AIA - President

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	
Peter Moore, P.E., LEED AP	Civil Engineer	a. TOTAL: 16	b. WITH CURRENT FIRM: 14

15. FIRM NAME AND LOCATION *(City and State)*
Chen Moore and Associates, Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science / Civil Engineering Master of Engineering / Civil Engineering	FL / Professional Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
As the President of the firm, Mr. Moore is ultimately responsible for all day to day operations of the firm. Mr. Moore works as the Client Project Manager for work in Broward County, Pompano Beach and Deerfield Beach and continues to be involved in the successful completion of projects. These projects include sanitary collection improvements, pump station rehabilitation, transportation engineering enhancements, water and reclaimed water consulting along with all other phases of civil engineering design and neighborhood improvements.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Fort Lauderdale, FL	PROFESSIONAL SERVICES: 2009	CONSTRUCTION *(If Applicable)*: N/A

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

Principal. Under Phase 1 of this project, Broward County Aviation Department (BCAD) retained 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. The stormwater model was used to run rainfall scenarios for the comparison of pre-development (existing) conditions versus post-development (future) conditions from a water quantity (runoff) and water quality (storage) perspective. Fee: $350,950

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Sanitary Sewer at Pompano Air Park Pompano Beach, FL	PROFESSIONAL SERVICES: 2007	CONSTRUCTION *(If Applicable)*: 2010

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

Principal. CMA was contracted by the City of Pompano Beach for the landside 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. Due to the urgency from the Pompano Airpark, the project was divided in two bids. The first bid was for the Pompano Airpark Water Service which included 4000 linear feet of water main and roadway reconstruction. Once completed, the new FBO development began construction. The second bid package was for Pompano Airpark Sewer System, which included a small grinder station, 1500 linear feet of gravity mains and 760 linear feet of reuse water, along with the parking lot improvements. Cost: $675,000, Fee: $36,865

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Stormwater Master Plan Update Hollywood, FL	PROFESSIONAL SERVICES: 2011	CONSTRUCTION *(If Applicable)*: N/A

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

Principal. CMA 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. Fee: $103,220

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Stormwater Master Plan Pompano Beach, FL	PROFESSIONAL SERVICES: 2011	CONSTRUCTION *(If Applicable)*: N/A

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

Principal. CMA prepared Stormwater Master Plans (SWMP) and Stormwater Master Plan Updates for various municipalities throughout South Florida, including the City of Pompano Beach, the Town of Lauderdale-By-The-Sea, and the City of Hollywood. The purpose of these SWMPs was to identify any deficiencies in the existing stormwater management systems in regards to flood control and water quality treatment. Cost: $1.2 million, Fee: $661,360

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Stormwater Master Plan Lauderdale by the Sea, FL	PROFESSIONAL SERVICES: 2010	CONSTRUCTION *(If Applicable)*: N/A

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

Principal. CMA completed the Stormwater Master Plan which is fully developed with chiefly residential properties mixed with commercial properties. The project area includes approximately 640 acres of land which are separated into 1,618 properties, which encompasses approximately 1.5 square miles of land area. Fee: $89,241

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	
Jason McClair, P.E., CFM, LEED AP	Civil Engineer	a. TOTAL: 17	b. WITH CURRENT FIRM: 12

15. FIRM NAME AND LOCATION *(City and State)*
Chen Moore and Associates, Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science / Civil Engineering	FL / Professional Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mr. McClair is a senior civil engineer with experience in utility infrastructure design, regulatory permitting, geotechnical engineering, and computer aided flow modeling for stormwater collection, water distribution, and sanitary transmission systems. He is currently the project manager for the Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update and the Pompano Beach Stormwater Master Plan.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Phase 2 Fort Lauderdale, FL	PROFESSIONAL SERVICES: 2012	CONSTRUCTION *(If Applicable)*: N/A

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

Principal. The purpose of Phase 2 is 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 will be based on progress design submittals for the South Runway Expansion Project and approved design plans for other new development at FLL, which will enhance the accuracy of the stormwater model. Phase 1 & 2 Fee: $735,000

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Sanitary Sewer at Pompano Air Park Pompano Beach, FL	PROFESSIONAL SERVICES: 2007	CONSTRUCTION *(If Applicable)*: 2010

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

Project Engineer, Mr. McClair provided QA/QC review services for the project plans. CMA was contracted by the City of Pompano Beach for the landside 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. Due to the urgency from the Pompano Airpark, the project was divided in two bids. The first bid was for the Pompano Airpark Water Service which included 4000 linear feet of water main and roadway reconstruction. Once completed, the new FBO development began construction. The second bid package was for Pompano Airpark Sewer System, which included a small grinder station, 1500 linear feet of gravity mains and 760 linear feet of reuse water, along with the parking lot improvements. Cost: $675,000, Fee: $36,865

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Stormwater Master Plan Pompano Beach, FL	PROFESSIONAL SERVICES: 2011	CONSTRUCTION *(If Applicable)*: N/A

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

Principal. CMA prepared Stormwater Master Plans (SWMP) and Stormwater Master Plan Updates for various municipalities throughout South Florida, including the City of Pompano Beach, the Town of Lauderdale-By-The-Sea, and the City of Hollywood. The purpose of these SWMPs was to identify any deficiencies in the existing stormwater management systems in regards to flood control and water quality treatment. Cost: $1.2 million, Fee: $661,360

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Westchester Stormwater Study Coral Springs, FL	PROFESSIONAL SERVICES: 2012	CONSTRUCTION *(If Applicable)*: N/A

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

Project Manager CMA conducted a stormwater study of the Westchester Neighborhood, which has historically encountered some extensive flooding during and after significant rainfall events. CMA analyzed the expected performance of the existing stormwater management system, identified problem areas where flooding is expected and recommend stormwater improvements within these flooding areas. Fee: $17,000

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Stormwater Master Plan Update Hollywood, FL	PROFESSIONAL SERVICES: 2011	CONSTRUCTION *(If Applicable)*: N/A

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

Principal. CMA 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. Fee: $103,220

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
Jennifer Smith, P.E.	Civil Engineer	7	7

15. FIRM NAME AND LOCATION *(City and State)*
Chen Moore and Associates, Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science / Civil Engineering	FL / Professional Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Ms. Smith is currently serving as a senior engineer with Chen Moore and Associates. Her six years of 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 Dania Beach, Drainage Design for the City of Pompano Beach and the Design of GIS Utility Atlases. Current duties include water main, sanitary sewer and lift station design and permitting, drainage design and permitting as well as GIS modeling.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Stormwater Master Plan Pompano Beach, FL	2011	N/A

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

Principal. CMA prepared Stormwater Master Plans (SWMP) and Stormwater Master Plan Updates for various municipalities throughout South Florida, including the City of Pompano Beach, the Town of Lauderdale-By-The-Sea, and the City of Hollywood. The purpose of these SWMPs was to identify any deficiencies in the existing stormwater management systems in regards to flood control and water quality treatment. Cost: $1.2 million, Fee: $661,360

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Westchester Stormwater Study Coral Springs, FL	2012	N/A

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

Project Manager. CMA conducted a stormwater study of the Westchester Neighborhood, which has historically encountered some extensive flooding during and after significant rainfall events. CMA analyzed the expected performance of the existing stormwater management system, identified problem areas where flooding is expected and recommend stormwater improvements within these flooding areas. Fee: $17,000

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Stormwater Master Plan Update Hollywood, FL	2011	N/A

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

Principal. CMA 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. Fee: $103,220

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Fort Lauderdale Beach Park Fort Lauderdale, FL	2012	2012

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

Principal. The purpose of this project was to provide the restoration and enhancement of the City-owned 6.5-acre "South Beach" parking lot, located along SR A1A, south of Las Olas Boulevard. The scope of work included bringing the parking lot into ADA compliance per requirements of consent decree, replacing a deteriorating low profile wall and sidewalk approximately 2100 feet in length, replacing existing lighting with turtle-compliant fixtures, and designing additional landscaping.
Cost: $3.4 million, Fee: $198,780

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Sunrise Key Drainage Improvements Fort Lauderdale, FL	2008	N/A

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

Consultant. The entrance to Sunrise Key is located at the intersection of NE 6th Court and NE 19th Avenue in the City of Fort Lauderdale. This area has a history of severe flooding due mainly to a lack of storage for stormwater runoff and back flow from the Intracoastal Waterway through the existing outfall pipes during high tides. Some of the proposed improvements in this area included the construction of swales along the west side of NE 19th Avenue and along both sides of NE 6th Court, as well as the installation of additional drainage piping and larger inlet structures. The swales were constructed to provide additional water quality treatment volume and additional storage volume for the storm water runoff from the roadway. Chen Moore and Associates also utilized a “tidal valve” to help alleviate any back flow from the intracoastal through the outfall pipes.
Fee $11,687

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	
Cristobal Betancourt, RLA	Landscape Architecture and Planning	a. TOTAL: 18	b. WITH CURRENT FIRM: 2

15. FIRM NAME AND LOCATION *(City and State)*
Chen Moore and Associates, Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science / Landscape Architecture	FL / Registered Landscape Architect NJ / Registered Landscape Architect NY / Registered Landscape Architect

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mr. Betancourt is Chen Moore and Associates' Director of Landscape Architecture and Planning. He has experience providing planning and landscape architecture design solutions for public and private sector clients. Mr. Betancourt provides a full range of services starting with due diligence and master planning culminating in detailed site design. He is well versed in the use of low-impact development techniques applied to site planning.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: Fort Lauderdale-Hollywood International Airport Greenbelt, Fort Lauderdale, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2012; CONSTRUCTION *(If Applicable)*: N/A

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

Landscape Architect. Greenbelt Park, located at Fort Lauderdale-Hollywood International Airport, is the 30-acre park along Griffin Road that buffers the airport property from the residential neighborhood to the South. Broward County Aviation Department (BCAD) tasked CMA with identifying options which would reduce or eliminate the use of potable water for park irrigation. The CMA team has compiled a report of the opportunities and constraints of utilizing water sources such as reclaimed water, stormwater collection ponds, and brackish ground water. Additionally, the team identified several other opportunities to significantly reduce overall water usage through improved irrigation efficiencies and technology as well as made recommendations on native and salt tolerant landscape plant palette. The report concludes with an opinion of probable costs, future maintenance costs and projected water usage for each of the provided alternatives. Fee: $15,000

b.

(1) TITLE AND LOCATION *(City and State)*: E. Commercial Blvd Streetscape & Drainage Improvements, Lauderdale-by-the-Sea, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2012; CONSTRUCTION *(If Applicable)*: 2013

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

Landscape Architect. CMA provided utility coordination; roadway and stormwater design; government permitting; and bidding assistance for the development of the design of streetscape and stormwater improvements to the downtown core and adjacent areas east of Bougainvilla Drive in the Town of Lauderdale by the Sea. The goals of this project were to create an urban gathering place that provides beautiful vistas of the sea, provides increased shade from the intense sun and heat, enhances the pedestrian environment and safety while maintaining vehicular access to the businesses located on the street and improving vehicular circulation and parking, provides for expansion of outdoor dining areas, and pays tribute to the Town's history. Fee $74,000; Cost $1,870,000

c.

(1) TITLE AND LOCATION *(City and State)*: Pompano Beach Stormwater Master Plan, Pompano Beach, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2011; CONSTRUCTION *(If Applicable)*: N/A

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

Landscape Architect. CMA prepared Stormwater Master Plans (SWMP) and Stormwater Master Plan Updates for various municipalities throughout South Florida, including the City of Pompano Beach, the Town of Lauderdale-By-The-Sea, and the City of Hollywood. The purpose of these SWMPs was to identify any deficiencies in the existing stormwater management systems in regards to flood control and water quality treatment. Cost: $1.2 million, Fee: $661,360

d.

(1) TITLE AND LOCATION *(City and State)*: Downtown Coral Springs Streetscaping, Coral Springs, FL

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

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

Project Manager. CMA has been contracted by the City of Coral Springs to assist the Coral Springs CRA in the planning, design, permitting and construction support of various streetscaping improvements in Downtown Coral Springs. As the prime consultants, CMA is providing civil engineering, landscape architecture, environmental permitting and construction engineering and inspection services for the project. Fee: $ 273,579

e.

(1) TITLE AND LOCATION *(City and State)*: Fort Lauderdale Beach Park, Fort Lauderdale, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2012; CONSTRUCTION *(If Applicable)*: 2012

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

Landscape Architect. The purpose of this project was to provide the restoration and enhancement of the City-owned 6.5-acre "South Beach" parking lot, located along SR A1A, south of Las Olas Boulevard. The scope of work included bringing the parking lot into ADA compliance per requirements of consent decree, replacing a deteriorating low profile wall and sidewalk approximately 2100 feet in length, replacing existing lighting with turtle-compliant fixtures, and designing additional landscaping. Cost: $3.4 million, Fee: $198,780

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	
Eric Harrison, RLA	Landscape Architecture	a. TOTAL: 11	b. WITH CURRENT FIRM: 1

15. FIRM NAME AND LOCATION *(City and State)*
Chen Moore and Associates, Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science / Landscape Architecture Associate of Arts /	FL / Registered Landscape Architect

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mr. Harrison has over 10 years of landscape architecture experience with several municipalities throughout South Florida. He has provided design services for parks and recreation, campuses, K-12 education, corporate executive office, retail commercial development and healthcare facilities.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: Fort Lauderdale-Hollywood International Airport Greenbelt, Fort Lauderdale, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2012; CONSTRUCTION *(If Applicable)*: N/A

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

Landscape Architect. Greenbelt Park, located at Fort Lauderdale-Hollywood International Airport, is the 30-acre park along Griffin Road that buffers the airport property from the residential neighborhood to the South. Broward County Aviation Department (BCAD) tasked CMA with identifying options which would reduce or eliminate the use of potable water for park irrigation. The CMA team has compiled a report of the opportunities and constraints of utilizing water sources such as reclaimed water, stormwater collection ponds, and brackish ground water. Additionally, the team identified several other opportunities to significantly reduce overall water usage through improved irrigation efficiencies and technology as well as made recommendations on native and salt tolerant landscape plant palette. The report concludes with an opinion of probable costs, future maintenance costs and projected water usage for each of the provided alternatives. Fee: $15,000

b.

(1) TITLE AND LOCATION *(City and State)*: Mullins Park Pathways, Coral Springs, FL

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

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

Landscape Architect. Chen Moore and Associates developed a master plan for a new pathway system for Mullins Park in the City of Coral Springs. CMA is providing final design and construction administration. The project requires the development of paving, grading, and landscape plans for DRC approval and permitting through the Sunshine Water Control District and SFWMD. The pathways are made of a flexible surface to prevent injuries for pathway users. The layout required that the path be developed sensitively through the park to connect to existing features, such as baseball fields, children's play areas, other existing sports fields and to limit disturbance to existing mature canopy trees. Fee: $16,894; Cost: $85,000

c.

(1) TITLE AND LOCATION *(City and State)*: Downtown Coral Springs Streetscaping, Coral Springs, FL

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

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

Landscape Architect. CMA has been contracted by the City of Coral Springs to assist the Coral Springs CRA in the planning, design, permitting and construction support of various streetscaping improvements in Downtown Coral Springs. As the prime consultants, CMA is providing civil engineering, landscape architecture, environmental permitting and construction engineering and inspection services for the project. Fee: $ 273,579

d.

(1) TITLE AND LOCATION *(City and State)*: Coconut Creek Parkway, Margate, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2012; CONSTRUCTION *(If Applicable)*: 2013

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

Landscape Architect. CMA provided professional services to the Margate CRA to coordinate survey and set up base drawings of Coconut Creek Parkway between SR7 and Banks Road. CMA coordinated with Broward County Traffic Engineering to determine the possibility of installing a median with turning lanes in the existing center suicide lane. Coordination was also required with Broward County Highway Construction Engineering Division, the Florida Department of Transportation, and Broward County Environmental Protection and Growth Management Division for surface water management permitting. Fee: $59,291; Cost: $750,000

e.

(1) TITLE AND LOCATION *(City and State)*: Westside Park Baseball Field, Deerfield Beach, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2013 (phase 1); CONSTRUCTION *(If Applicable)*: 2013 (phase 1)

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

Landscape Architect. CMA is providing design, permitting and construction engineering inspection services for the conversion of an existing football field to one little league baseball field and one practice baseball field for the City of Deerfield Beach Parks and Recreation Department. The project is located in Westside Park, which is a 15 acre park located south of Hillsboro Boulevard, offering two lighted basketball courts, a football field with concession stand, two lighted tennis courts, a full service recreation center, full size gym, picnic areas and a newly renovated playground. Fee: $72,865; Cost: $800,000

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
Joel Brownsey	Planning	12	8

15. FIRM NAME AND LOCATION *(City and State)*
Chen Moore and Associates, Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Arts / Urban Planning Associate of Science / Surveying and Mapping	

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mr. Brownsey has over 11 years of experience in the Civil Engineering field where he has worked alongside engineers in a variety of disciplines such as site design, utility infrastructure design, and surveying. His experience in south Florida to date includes detailed design work on two neighborhood right of way infrastructure improvement projects for the City of Miami Beach, and on several Engineering projects for the City of Fort Lauderdale. He also provides technical solutions for the Fort Lauderdale and Miami Beach offices.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update
Fort Lauderdale, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2009	N/A

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

[X] Check if project performed with current firm

Planner. Under Phase 1 of this project, Broward County Aviation Department (BCAD) retained 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. The stormwater model was used to run rainfall scenarios for the comparison of pre-development (existing) conditions versus post-development (future) conditions from a water quantity (runoff) and water quality (storage) perspective. Fee: $350,950

b.

(1) TITLE AND LOCATION *(City and State)*
Sanitary Sewer at Pompano Air Park
Pompano Beach, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2007	2010

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

[X] Check if project performed with current firm

Planner. CMA was contracted by the City of Pompano Beach for the landside 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. Due to the urgency from the Pompano Airpark, the project was divided in two bids. The first bid was for the Pompano Airpark Water Service which included 4000 linear feet of water main and roadway reconstruction. The second bid package was for Pompano Airpark Sewer System, which included a small grinder station, 1500 linear feet of gravity mains and 760 linear feet of reuse water, along with the parking lot improvements. Cost: $675,000, Fee: $36,865

c.

(1) TITLE AND LOCATION *(City and State)*
Fort Lauderdale Beach Park
Fort Lauderdale, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2012	2012

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

[X] Check if project performed with current firm

Design/project coordination. The purpose of this project was to provide the restoration and enhancement of the City-owned 6.5-acre "South Beach" parking lot, located along SR A1A, south of Las Olas Boulevard. The scope of work included bringing the parking lot into ADA compliance per requirements of consent decree, replacing a deteriorating low profile wall and sidewalk approximately 2100 feet in length, replacing existing lighting with turtle-compliant fixtures, and designing additional landscaping. Cost: $3.4 million, Fee: $198,780

d.

(1) TITLE AND LOCATION *(City and State)*
Stormwater Master Plan
Pompano Beach, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2011	N/A

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

[X] Check if project performed with current firm

Planner. Principal. CMA prepared Stormwater Master Plans (SWMP) and Stormwater Master Plan Updates for various municipalities throughout South Florida, including the City of Pompano Beach, the Town of Lauderdale-By-The-Sea, and the City of Hollywood. The purpose of these SWMPs was to identify any deficiencies in the existing stormwater management systems in regards to flood control and water quality treatment. Cost: $1.2 million, Fee: $661,360

e.

(1) TITLE AND LOCATION *(City and State)*
Westchester Stormwater Study
Coral Springs, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2012	N/A

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

[X] Check if project performed with current firm

Planner. CMA conducted a stormwater study of the Westchester Neighborhood, which has historically encountered some extensive flooding during and after significant rainfall events. CMA analyzed the expected performance of the existing stormwater management system, identified problem areas where flooding is expected and recommend stormwater improvements within these flooding areas. Fee: $17,000

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: 1

21. TITLE AND LOCATION *(City and State)*
Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update
Fort Lauderdale, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2008	2012

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Broward County Aviation Department	Carlos Hernandez	(954) 359-2255

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

Under Phase 1 of this project, 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. The stormwater model was used to run rainfall scenarios for the comparison of pre-development (existing) conditions versus post-development (future) conditions from a water quantity (runoff) and water quality (storage) perspective. The stormwater model was used to analyze the performance of the existing Primary Stormwater Management System (PSMS). Phase 1 for this project included the following work items:

- Review and verify of earlier work by other consultants during 2001-2005
- Convert previous SWMM stormwater model to ICPR model
- Obtain updated topographic data for TIN development
- Calculate updated hydrologic parameter for drainage basins
- Conduct analysis of various system improvement alternatives
- Prepare Stormwater Master Plan Update

The purpose of Phase 2 is 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 will be based on progress design submittals for the South Runway Expansion Project and approved design plans for other new development at FLL, which will enhance the accuracy of the stormwater model. Phase 2 for this project includes the following work items:

- Prepare a Stormwater Capital Improvement Plan for FLL
- Certify existing permits at FLL
- Provide ongoing stormwater permitting assistance to BCAD
- Ongoing coordination with the design team for South Runway Expansion Project
- Complete drainage review of various developments throughout FLL
- Develop drainage design standards manual
- Prepare application package for stormwater conceptual permit for FLL

Fee: $735,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime - Civil Engineering

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)*
Stormwater Infrastructure Assistance
Fort Lauderdale, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2013	N/A

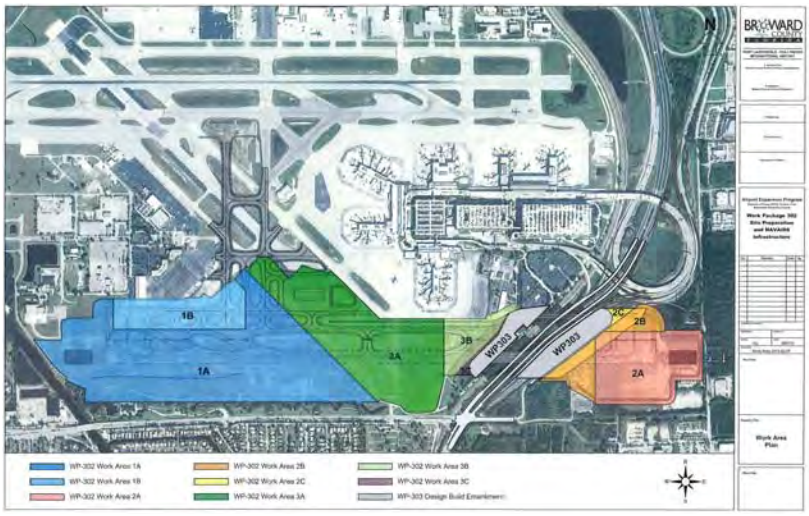
23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Odebrecht Central	Rodrigo Ariza	(305) 704-5810

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

Chen Moore and Associates was retained by Odebrecht Central to provide stormwater consulting during the construction phase of the South Runway Expansion Project at Fort Lauderdale-Hollywood International Airport (FLL). Odebrecht Central was the contractor for the FLL Site Preparation and NAVAIDS Infrastructure Project, which include the earthwork and utility upgrades under the South Runway Expansion Project. Since CMA was responsible for maintaining the overall ICPR stormwater model of the stormwater management system at FLL, CMA used the ICPR stormwater model to analyze the impact of any temporary system modifications during the construction phase on its performance throughout FLL. Odebrecht Central needed to implement some temporary modifications to the existing stormwater management system at FLL during the construction phase of the FLL Site Preparation and NAVAIDS Infrastructure Project. CMA assisted Odebrecht Central with assessing the proposed temporary modifications to the existing stormwater management system on an as-needed basis. CMA used the ICPR model to the potential impacts of these system modifications. For example, some existing stormwater pipes needed to be temporarily converted into an open channel connection during the dynamic compaction operations.

Fee: $6,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime - Civil Engineering

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: 3

21. TITLE AND LOCATION *(City and State)*
Sanitary Sewer at Pompano Air Park
Pompano Beach, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2007	2010

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Pompano Beach	Helen Gray	(305) 792-1913

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

Chen Moore and Associates was contracted by the City of Pompano Beach for the landside 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. Due to the urgency from the Pompano Airpark, the project was divided in two bids. The first bid was for the Pompano Airpark Water Service which included 4000 linear feet of water main and roadway reconstruction. Once completed, the new FBO development began construction. The second bid package was for Pompano Airpark Sewer System, which included a small grinder station, 1500 linear feet of gravity mains and 760 linear feet of reuse water, along with the parking lot improvements.

Fee: $ 36,865; Cost: $675,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime – Civil Engineering

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: 4

21. TITLE AND LOCATION *(City and State)*
Stormwater Master Plan
Lauderdale-By-The-Sea, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2010	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Lauderdale-By-The-Sea	Don Prince	(954) 776-5119

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

Chen Moore and Associates completed the Stormwater Master Plan for the Town of Lauderdale-by-the-Sea. Like other coastal communities in South Florida, the Town of Lauderdale-By-The-Sea is fully developed with chiefly residential properties mixed with commercial properties. The project area includes approximately 640 acres of land which are separated into 1,618 properties, which encompasses approximately 1.5 square miles of land area. The Town of Lauderdale-By-The-Sea maintains its own stormwater facilities. Existing drainage facilities within the Town include catch basins connected by pipe of various materials and sizes to either exfiltration trench or positive outfalls into the Intracoastal Waterway and canals. Private drainage systems also discharge into the Intracoastal Waterway and canals. Unpaved swales are found within right-of-way areas for additional stormwater storage.

The purpose of this Stormwater Master Plan was to:

- Identify any deficiencies in the existing stormwater management system
- Recommend system improvements to meet regulatory level of service criteria
- Provide an estimated cost to construct these upgrades to the stormwater management system

This project included the following tasks:

- Gathering all existing information available from previous drainage plans, utility atlases, regulatory permits, reports, and studies
- Confirming accuracy for use in the existing conditions model
- Updating the digital stormwater atlas in GIS
- Utilizing LIDAR data to create a TIN surface model of the Town limits
- Collecting resident complaints in regards to flooding
- Preparing the existing conditions model with Interconnected Pond Routing (ICPR) Software
- Identifying areas with flooding issues
- Recommending and prioritizing stormwater improvements

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime – Civil Engineering

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: 5

21. TITLE AND LOCATION *(City and State)*
Stormwater Master Plan
Pompano Beach, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2011	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Pompano Beach	Robert McCaughan	(954) 786-4106

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

Chen Moore and Associates has prepared Stormwater Master Plans (SWMP) and Stormwater Master Plan Updates for various municipalities throughout South Florida, including the City of Pompano Beach, the Town of Lauderdale-By-The-Sea, and the City of Hollywood. The purpose of these SWMPs was to identify any deficiencies in the existing stormwater management systems in regards to flood control and water quality treatment. To assess this, existing information was gathered including previous master plans, atlases, permits, reports and studies; digital stormwater atlas in GIS; LIDAR data for the creation of a TIN surface model; resident complaints regarding flooding; and Client Staff observations regarding flooding. The SWMPs allow the municipalities to understand the necessary drainage improvements over the next few years and to budget accordingly. As part of each SWMP, CMA recommended system improvements to meet regulatory Level of Service (LOS) criteria in regards to peak flood stage, peak discharge, and water quality. Within the SWMPs, CMA provided recommendations for improvements to the system that will eliminate or reduce the ponding currently encountered within right-of-way areas during or after rainfall events. The SWMPs defined the existing stormwater management system; summarized the results of the stormwater model for the existing conditions; prioritized the proposed improvements to the stormwater management systems; and provided estimated costs to construct these upgrades to the stormwater management systems.

As part of these documents, CMA has also assisted the Client with the documentation of how the Floodplain Management Plan was prepared per the requirements of FEMA under the CRA program and complied with the requirements of FDEP under the SRF program.

Fee: $661,360; Cost: $1.2 million

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime – Civil Engineering

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)*: Drainage Improvement Program, Pompano Beach, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2004	Ongoing

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Pompano Beach	Alessandra Delfico	(954) 786-4144

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

Chen Moore and Associates was selected by the City of Pompano Beach to serve as the design engineer for various drainage improvement projects:

Sub-basin NC 2-1 - The project area encompassed 14 acres of completely residential land use. Chen Moore and Associates has designed the drainage improvements, following the recommendation of the Stormwater Management Master Plan (SMMP) and Alternatives Development and Conceptual Design of Basins Ranked 21-40 (ADCDBR). The permits are completed and the construction improvements to Sub-basin NC 2-1 are currently underway.

NW 1-3 - Chen Moore and Associates was selected by the City of Pompano Beach to serve as the design engineer for Sub-basin NW 1-3. The project area encompasses 0.8 acres for completely commercial/industrial area. Chen Moore and Associates has designed the drainage improvements also, following the recommendation of the Stormwater Management Master Plan (SMMP) and Alternatives Development and Conceptual Design of Basins Ranked 21-40 (ADCDBR). The permits are completed and bid documents have been provided along with the associated materials for the construction of improvements of Sub-basin NW 1-3.

NC 2-3 and CT 3-3 - Chen Moore and Associates was responsible for the design and permitting of drainage improvements for the CT3-3 and NC 2-3 sub-basins. Chen Moore and Associates has designed the drainage improvements, following the recommendation of the Stormwater Management Master Plan (SMMP) and Alternatives Development and Conceptual Design of Basins Ranked 21-40 (ADCDBR). The project was successfully designed and permitted.

CT 3-1 - Chen Moore and Associates was selected by the City of Pompano Beach to serve as the design engineer for a 47-acre drainage improvement project. Chen Moore and Associates has designed the drainage improvements, following the recommendation of the Stormwater Management Master Plan (SMMP) and Alternatives Development and Conceptual Design of Basins Ranked 21-40 (ADCDBR). The project area is nearly completely commercial/industrial in nature. Chen Moore and Associates conducted a proactive public relations campaign to keep the businesses informed for coordination purposes in the construction phase. Chen Moore and Associates also carefully studied the existing utilities in the area to avoid unnecessary relocations during the drainage retrofit.

Fee: $350,000; Cost: $1.5 million

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime - Civil Engineering

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: 7

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Stormwater Improvements Lauderdale By The Sea, FL	2010	2013

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Lauderdale-By-The-Sea	Don Prince	(954) 776-5119

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

Chen Moore and Associates has completed the following stormwater improvement projects for the Town of Lauderdale-by-the-Sea: Flamingo Avenue - Chen Moore and Associates developed engineering drawings for stormwater improvements along Flamingo Avenue between North Ocean Drive and the beach area within the Town of Lauderdale-By-The-Sea. The drainage improvements included the installation of new exfiltration trench which were interconnected with existing drainage structures. Since a portion of the project area is located seaward of the Coastal Construction Control Line (CCCL), Chen Moore and Associates was responsible for permitting the project through FDEP. Fee: $29,500

West Tradewinds Avenue - Chen Moore and Associates developed construction documents for stormwater improvements along West Tradewinds Avenue from Miramar Avenue to South Tradewinds Avenue, which is located within a low lying residential area adjacent to the Intracoastal Waterway. The existing flooding within the project area was chiefly caused by the existing outfall pipes which are undersized. In order to provide additional storage capacity for stormwater runoff, the proposed drainage improvements included the installation of new exfiltration trench system within the public right of way which interconnects with the existing outfall pipes. The existing outfall pipes were also rehabilitated or replaced during the completion of this project. Fee: $20,833

Harbor Drive - Chen Moore and Associates was retained by the Town of Lauderdale-By-The-Sea to develop engineering plans for stormwater improvements along Harbor Drive. The stormwater improvements are necessary along Harbor Drive to meet the level of service criteria for flood protection. The project area includes Harbor Drive between West Tradewinds Avenue and Sea Grape Drive along with East Tradewinds Avenue between Commercial Boulevard and Harbor Drive. The existing conditions model identified the public right-of-way areas along Harbor Drive to be prone to extensive ponding during heavy rainfall events. The ponding issues along Harbor Drive were confirmed based on our observations during heavy rainfall along with the historical knowledge of the Town staff. The ponding issues along Harbor Drive are due to a chiefly impervious ground surface within the right-of-way areas which receives stormwater runoff from the adjacent private properties. Due to the existing conditions of the ground surface, it is not feasible to completely prevent the flow of stormwater runoff from adjacent properties. The proposed stormwater improvements for this project include the installation of underground exfiltration trench which will be interconnected with existing and proposed catch basin inlets in order to provide additional flood protection within the public right-of-way areas. Fee: $16,523

19th Street - The stormwater improvements were necessary along 19th Street to provide additional flood protection to this very low lying area. The project area includes the full length of 19th Street to the west of US A1A, which includes approximately 2,000 linear feet of 50 feet wide public right of way. The flooding along 19th Street has been observed by Town staff during past rainfall events. The flooding issues along 19th Street are chiefly due to the low ground surface elevation relative to the groundwater table and tidal levels at the existing outfalls, which limits the infiltration of stormwater runoff into the ground surface and the flow of stormwater runoff via the existing outfalls. The flooding issues are further compounded by the poor condition of the existing drainage piping along 19th Street. According to recent television inspections, portions of the existing drainage piping are cracked and partially collapsed, which restrict the flow of stormwater runoff to the existing outfalls and prolongs the flooding duration within the right of way areas. Stormwater improvements were necessary to reduce the extent of flooding during and after heavy rainfall events. The stormwater improvements for this project included the replacement of any existing damaged drainage piping to allow stormwater runoff to flow to the existing two outfalls. This project will also include the regrading of grass swale areas in the public right of way areas to provide additional storage volume for stormwater runoff. Due to the low ground surface elevation of 19th Street, the installation of exfiltration trench will not be a feasible option for stormwater improvements. Fee: $30,134

H.A.T. - Chen Moore and Associates was retained by the Town of Lauderdale-By-The-Sea to develop engineering plans for stormwater improvements within the H.A.T. neighborhood: Hibiscus Avenue, Allenwood Drive and Tropic Drive. The project area consists of a residential neighborhood along Hibiscus Avenue, Allenwood Drive and Tropic Drive, bounded to the west by Seagrape Drive. Tropic Drive is the lowest elevation of this neighborhood and is prone to flooding during heavy rainfall as observed by the Town staff. The ponding issues are due to the low ground elevations, undersized outfall pipes and amount of impervious ground surface within the right-of-way areas. The proposed stormwater improvements for this project include the installation of pipe to interconnect the two existing outfalls, the upsize of one outfall pipe and the installation of swales throughout the public right-of-way in the neighborhood.

H.A.T. Neighborhood Improvements. Chen Moore and Associates was retained by the Town of Lauderdale-By-The-Sea to develop engineering plans for stormwater improvements within the H.A.T. neighborhood: Hibiscus Avenue, Allenwood Drive and Tropic Drive. The project area consists of a residential neighborhood along Hibiscus Avenue, Allenwood Drive and Tropic Drive, bounded to the west by Seagrape Drive. Tropic Drive is the lowest elevation of this neighborhood and is prone to flooding during heavy rainfall as observed by the Town staff. The ponding issues are due to the low ground elevations, undersized outfall pipes and amount of impervious ground surface within the right-of-way areas. The proposed stormwater improvements for this project include the installation of pipe to interconnect the two existing outfalls, the upsize of one outfall pipe and the installation of swales throughout the public right-of-way in the neighborhood. Fee: $20,313

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime - Civil Engineering

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: 8

21. TITLE AND LOCATION *(City and State)*
Westchester Stormwater Study
Coral Springs, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2012	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Coral Springs	Rich Michaud	(954) 344-1165

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

The City of Coral Springs has requested that Chen Moore and Associates conduct a stormwater study of the Westchester Neighborhood, which has historically encountered some extensive flooding during and after significant rainfall events. The general boundaries of the neighborhood are Sample Road to the north, Royal Palm Boulevard to the south, NW 123rd Avenue to the west, and Coral Ridge Drive to the east. The study area will also include adjacent areas which are hydraulically connected to the Westchester Neighborhood. Since there is a history of past flooding within the study area, the CITY is interested in implementing stormwater improvements for the purpose of reducing the extent of flooding. The purpose of this study is listed below:

- Analyze the expected performance of the existing stormwater management system
- Identify problem areas where flooding is expected
- Recommend stormwater improvements within these flooding areas
- Estimate implementation costs for any recommended stormwater improvements
- Develop a phasing plan for any recommended stormwater improvements

Fee: $17,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime – Civil Engineering

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)*
Stormwater Master Plan Update
Hollywood, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2011	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Hollywood	Francois Domond	(954) 921-3930 x 8957

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

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. The City of Hollywood operates and maintains its own stormwater facilities to provide flood control and water quality treatment within the City limits. Existing drainage facilities within the City include storm inlets, gravity pipes, pump stations, pressure mains, injection wells, outfalls and canals that connect to the Intracoastal Waterway.

The Stormwater Master Plan Update was intended to be a guide for improving the performance of the City's stormwater management system while meeting regulatory requirements for flood control, peak stages, peak discharge, and water quality of stormwater runoff. The City of Hollywood will use this Stormwater Master Plan Update to develop a preliminary schedule and budget for priority capital improvements to the stormwater management system. The purpose of this Stormwater Master Plan Update for the City of Hollywood can be defined as follows:

Drainage System Extension

- Review 2004 Stormwater Master Plan prepared by previous consultant
- Update the existing stormwater model with new LIDAR topographic data, enhanced hydrologic parameters, and recent drainage projects
- Identify any deficiencies in the existing stormwater management system from a water quantity and water quality perspective under various scenarios
- Recommend system improvements to address "problem areas" while meeting regulatory level of service (LOS) criteria
- Prepare a budget level cost estimate to implement these upgrades to the stormwater management system
- Develop a long range budget of Capital Improvement Projects (CIP) for the stormwater management system
- Comply with requirements of FEMA under CRS Program
- Comply with requirements of FDEP under SRF Program

Fee: $103,220

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime – Civil Engineering

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: 10

21. TITLE AND LOCATION *(City and State)*
Fort Lauderdale Beach Park
Fort Lauderdale, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2012	2012

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Fort Lauderdale	Earl Prizlee	(954) 828-6522

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

The purpose of this project was to provide the restoration and enhancement of the City-owned 6.5-acre "South Beach" parking lot, located along SR A1A, south of Las Olas Boulevard. The scope of work includes bringing the parking lot into ADA compliance per requirements of consent decree, replacing a deteriorating low profile wall and sidewalk approximately 2100 feet in length, replacing existing lighting with turtle-compliant fixtures, and designing additional landscaping. Chen Moore and Associates prepared the required DRC submittal, which included all required public purpose approvals, as well as a conceptual layout of a new entrance at the southern end of the parking lot. This project was a joint effort between various City departments, including the City of Fort Lauderdale Beach Community Redevelopment Agency and Parking Services.

Fee: $198,780; Cost: $3.4 million

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Chen Moore and Associates	Fort Lauderdale, FL	Prime – Civil Engineering

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
Peter Moore, P.E., LEED AP	Civil Engineer	X		X	X	X	X			X	X
Jason McClair, P.E., CFM, LEED AP	Civil Engineer	X	X	X	X	X	X	X	X	X	X
Jennifer Smith, P.E.	Civil Engineer	X	X	X		X	X	X	X	X	X

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Fort Lauderdale-Hollywood International Airport Stormwater Master Plan Update Phase 2	6	Drainage Improvement Program
2	Stormwater Infrastructure Assistance	7	Stormwater Improvements
3	Sanitary Sewer at Pompano Air Park	8	Westchester Stormwater Study
4	Stormwater Master Plan	9	Stormwater Master Plan Update
5	Stormwater Master Plan	10	Fort Lauderdale Beach Park

H. ADDITIONAL INFORMATION

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

Chen Moore and Associates (CMA) is a multi-discipline consulting firm with offices in Broward, Miami-Dade, Palm Beach, Martin and Alachua Counties. Founded in 1986, Chen Moore and Associates specializes in civil and environmental engineering, landscape architecture, planning, GIS analysis and mapping, and construction engineering inspection. We are a Florida state and locally certified small business enterprise firm. Dr. Chen founded CMA believing that relationships are critical to planning, designing and constructing successful projects. The firm commits to providing responsive quality services while meeting the schedules and specific project needs of our clients.

CMA actively supports various community organizations including Habitat for Humanity, Toys for Tots, the Cooperative Feeding Program, and Ocean Watch, a non-profit group focused on cleaning and preserving South Florida's Beaches. Firm staff participates in local professional society events including the American Society of Civil Engineers, Florida Engineering Society, American Society of Landscape Architects, Irrigation Association, Florida Recreation and Park Association, International Society of Arboriculture and the United States Green Building Council. We proudly support our industry and the communities in which we live, play and work.

Our services include the following:

- Infrastructure Master Planning
- Pump Station Design and Rehabilitation
- Water Supply, Treatment and Distribution Design
- Stormwater Management System Design and Master Plans
- Environmental Engineering
- Roadway Design and Streetscape
- Traffic Calming Design
- Circulation & Roundabout Design
- Government Permitting
- Land Development
- Site Development
- Site Planning
- Landscape Architecture
- Hardscape Design
- Irrigation Design
- Park Design
- Greenway & Trails Design
- Pedestrian & Bicycle Pathway Design
- Habitat Restoration
- Wayfinding
- GIS Analysis and Mapping
- Project and Program Management
- Sustainable Design and LEED Solutions
- Value Engineering
- Utility Rate and Infrastructure Valuation Studies
- Resident Coordination and Stakeholder Meetings

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE

32. DATE
1/30/14

33. NAME AND TITLE
Peter Moore, P.E., LEED AP, President

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(IF ANY)*
946-11333

PART II –GENERAL QUALIFICATIONS

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

2a. FIRM (OR BRANCH OFFICE) NAME **Chen Moore and Associates**	3. YEAR ESTABLISHED 2011
2b. STREET 500 W. Cypress Creek Rd., Suite 630	4. DUNS NUMBER 859459547
2c. CITY Fort Lauderdale	2d. STATE FL
2e. ZIP CODE 33309	5. OWNERSHIP a. TYPE Corporation
6a. POINT OF CONTACT NAME AND TITLE **Peter Moore, PE, LEED AP, President and CEO**	b. SMALL BUSINESS STATUS **Small Business**
6b. TELEPHONE NUMBER (954) 730-0707, ext 1002	6c. E-MAIL ADDRESS pmoore@chenmoore.com
	7. NAME OF FIRM *(If block 2a is a branch office)*
8a. FORMER FIRM NAME(S) *(if any)* Chen and Associate Consulting Engineers, Inc.	8b. YEAR ESTABLISHED 1986
	8c. DUNS NUMBER 859459547

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	(2) Branch
02	Administrative	5	5
08	CADD Technician	9	6
12	Civil Engineer	18	6
15	Construction Inspector	1	1
16	Construction Manager	2	1
39	Landscape Architect	3	0
	Total	**38**	**19**

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

a. Profile Code	b. Experience	c. Revenue Index No. *(see below)*
C10	Commercial Building; (low rise); Shopping Centers	1
C15	Construction Management	1
C18	Cost Estimating; Cost Engineering and Analysis; Parametric Costing; Forecasting	2
E02	Education Facilities; Classrooms	2
E09	Environmental Impact Studies, Assessments or Statements	1
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

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

(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	6
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE 1/30/14
c. NAME AND TITLE Peter Moore, PE, LEED AP, President	

AUTHORIZED FOR LOCAL REPRODUCTION

MANDATORY USE DATE OF FORM 6/2004

STANDARD FORM 330 (1/2003) PAGE 6

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
Rebecca Mainardi	Project Manager	14	4

15. FIRM NAME AND LOCATION *(City and State)*

Panther International, LLC, Clearwater, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.S. Aviation Sciences, Lyn University MBA, Florida Atlantic University	

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Development, Implementation, & Maintenance of the Florida Aviation Database, Tallahassee, FL	2004 Continuing	

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

Ms. Mainardi served as the project manager working with the client, as well as the FAA to define hardware/software requirements, data standards, data collection methods, development, system training, and maintenance. This project also required the definition and programming of a customized grant management system, an aviation inspection and licensing module, and a flexible contact management module with an emergency notification overlay. Project Cost: $1,800,000

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Automated Joint Participation Agreement Builder, Tallahassee, FL	2008 Continuing	

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

Ms. Mainardi served as the client manager, working with the Florida DOT and Public Transportation Office to define necessary components of each agency to create a uniformed process of sharing, analyzing, and storing data. Ms. Mainardi identified new applications to be designed, managed flow of information, and set standards for training and maintenance. Project Cost: $ 140,000

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Customization and Implementation of TransCIP (BlackCat Grant Management System) Tampa/Ft. Lauderdale, FL	2008 Continuing	

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

TransCIP is an implementation of the BlackCat Grant Management System for the Florida DOT and the transit industry managing all federal and state transit grants statewide. Ms. Mainardi served as the client manager, overseeing the communication of client requirements to the project management and design teams to ensure the seamless delivery and implementation of a customized solution. Ms. Mainardi coordinated training of users and system maintenance with client to provide ease of use and up to date information. Project Cost: $1,200,000

d.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Rail / Highway Crossing Inventory System (BlackCat Rail Data Management System)	2011 Continuing	

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

Ms. Mainardi has been Project Manager of the RHCI System for the Florida Department of Transportation. This system tracks and maintains inventory, equipment, operations, and safety data for the more than 14,000 at grade rail crossings in the State of Florida. The system interfaces with the Federal Rail Administration and allows for tracking of every capital project planned, executed, and completed at each crossing. Project Cost $250,000

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ 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	14. YEARS EXPERIENCE b. WITH CURRENT FIRM
Chase C. Stockon	President / Principal In Charge	25	20

15. FIRM NAME AND LOCATION *(City and State)*

Panther International, LLC, Clearwater, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MBA International Transportation B.S. International Business	

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

Leadership Tampa, Leadership Tampa Bay, Leadership Florida
Florida Airports Council - Corporate Eagle Award (2-Time Recipient)
Parke Wright III Leadership Award, 2007

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED PROFESSIONAL SERVICES	(2) YEAR COMPLETED CONSTRUCTION *(if applicable)*
Development, Implementation, & Maintenance of the Alaska Aviation System Plan, Anchorage, AK	2009 Continuing 2013 Reselected	

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

Mr. Stockon served as the senior project manager and principal in charge, working with the client to define the concept, hardware/software requirements, functionality requirements, information applications, and implementation standards. Customized applications for viewing graphical components such as GIS and CAD were created, along with solutions to manage planning processes and analysis. Project Cost $300,000 (2009) and $300,000 (2013 est)

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED PROFESSIONAL SERVICES	(2) YEAR COMPLETED CONSTRUCTION *(if applicable)*
Customization, Implementation, & Maintenance of the Airport Improvement Program, Port Authority New York & New Jersey	2000-2006	

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

Mr. Stockon served as senior project manager and principal in charge, working with the FAA and Port Authority to customize an implementation of Panther's BlackCat Grant Management System. Mr. Stockon defined custom application requirements, implementation schedules, training, and maintenance requirements. The solution was designed to interface with existing FAA systems. Project Cost $240,000

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED PROFESSIONAL SERVICES	(2) YEAR COMPLETED CONSTRUCTION *(if applicable)*
Development, Implementation & Maintenance of the Florida Aviation Database Tallahassee, Florida	2004 Continuing	

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

Mr. Stockon served as senior project manager and senior analyst working with the client, as well as the FAA to define hardware/software requirements, data standards, data collection methods, development, system training and maintenance. This project also required the definition and programming of a customized grant management system, an aviation inspection and licensing module, and a flexible contact management module with an emergency notification overlay. Project Cost $1,800,000

d.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED PROFESSIONAL SERVICES	(2) YEAR COMPLETED CONSTRUCTION *(if applicable)*
Customization, Implementation & Maintenance of the Digital Capital Improvement Tracking System, San Juan, Puerto Rico	2005-2009	

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

Mr. Stockon served as senior project manager and principal in charge, working with the client to develop a customized implementation of Panther's BlackCat Grant Management System. Mr. Stockon defined design, development schedule, programming requirements, and training process. Application requirements were defined to interface with existing FAA and Oracle systems. Project Cost $250,000

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED PROFESSIONAL SERVICES	(2) YEAR COMPLETED CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ 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
J. Scott Entin	Vice President / Implementation Manager	25	8

15. FIRM NAME AND LOCATION *(City and State)*

Panther International, LLC, Clearwater, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.S. Psychology and Philosophy, University of Texas, Austin	

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

Leadership Tampa

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Development, Implementation & Maintenance of Sarasota Bradenton International Airport Website, Sarasota, Florida	2007 Continuing	

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

Mr. Entin served as senior project manager and senior analyst working with the client to define design specs, hardware/software requirements, applications/components to be developed, data standards, data collection methods, system training and maintenance options. This project required new branding and design, Section 508 ADA Compliance, Flight Information Display (FIDs), OAG integrated "Flight Planner", a consumer comment form, e-signup for their newsletter, Emergency Alert Notification component, and a full-site customized Content Management System Project Cost: $75,000

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Customization and Implementation of TransCIP (BlackCat Grant Management System) Tampa/Ft. Lauderdale, FL	2008 Continuing	

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

Mr. Entin served as senior implementation and product manager working with the client, as well as the FTA and FDOT to define hardware/software requirements, data standards, data collection methods, development, system training, and maintenance. This project included the complete implementation of a transportation grant management system for use in managing federal and state transit projects. Users of the system include all of the transit agencies statewide as well as the DOT district and central office staff. Project cost: $1,200,000

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Customization and Implementation of SeaCIP (BlackCat Grant Management System),Tallahassee, FL	2006 Continuing	

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

Mr. Entin served as senior product manager working with the client to define hardware/software requirements; necessary application designs to be developed; data standards, collection, and management methods; interfacing capabilities; system training; and maintenance. This project required the customization of the BlackCat Grant Management system to include an Emergency Alert Notification application, customized contact management system, and importation of historical archives for Florida's 14 deepwater seaports. Project Cost: $440,000

d.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
BlackCat Grant Management System Implementation – Tennessee Aeronautics	2012 Continuing	

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

Mr. Entin, as Implementation Lead, has overseen the implementation of the BlackCat Grant Management System for the entire State of Tennessee's Aeronautics bureau. Tennessee is an FAA identified block grant state therefore the system handles all State and Federal aviation grant funds. The system manages the entire lifecycle of every grant from ACIP planning, to allocation, drawdown, invoicing and closeout. Project Cost $240,000

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
BlackCat Grant Management System Implementations – Transit/Multimodal: Ohio, Massachusetts, and Alaska	2012 Continuing	

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

Mr. Entin, as Implementation Lead, has overseen the implementation of the BlackCat Grant Management System for the Transit/Multimodal systems in Ohio, Massachusetts, and Alaska. Each of these implementations require matching the grant system to state laws and regulations while still retaining federal pass-through requirements. Project Cost $400,000 each

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

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

Digital Capital Improvement Tracking System (DCIT)
San Juan, Puerto Rico

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2005-2012	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Puerto Rico Ports Authority	**Ibsen Santiago** **Federal Funds Coordinator**	**(787) 729-8836**

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

Description:

The Digital Capital Improvement Tracking (DCIT) system is a web-based capital improvement grant tracking system developed for the Puerto Rico Ports Authority to manage their Federal Grants. Panther is responsible for all design, development, programming, integration with existing FAA and internal Oracle systems, and user training for the DCIT system.

DCIT provides a complete grant management system that manages the entire life cycle of a project including CIP development, board approval, federal pre-application and application, grant award, contract solicitation and award, contractor invoicing, DBE monitoring, reimbursement / drawdown, amendments, and grant closeout. The DCIT also interfaces with JACIP so the Orlando Airports District Office (ADO) can review and manage the projects as well. An update to manage PFC's is currently planned.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (*City and State*)	(3) ROLE
a.	**Panther International, LLC**	**Clearwater, Florida**	**Sub-Consultant**

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

21. TITLE AND LOCATION (*City and State*)
Florida Aviation Database
Tallahassee, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2007 - 2014	

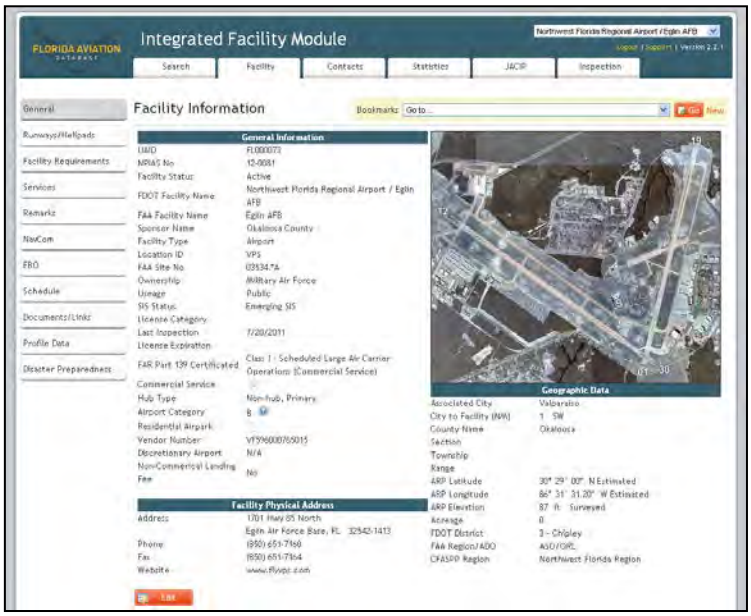
23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Florida Department of Transportation Aviation Systems and Support Office	**Aaron Smith P.E., State Aviation Manager**	**(850) 414-4500**

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

Description:

The Florida Aviation Database (FAD) is a comprehensive, online aviation database and application system that allows those that need and use aviation information to access it in an efficient and up-to-date manner. It provides an effective method of collecting, storing, retrieving, accessing, analyzing, and reporting in a digital format. Applications and data residing in the FAD include Contact Management, Airport Inspection & Licensing, Joint Automated Capital Improvement Program (JACIP) and the Facility Information Directory.



Highlights:

FAD's "Contact Manager Module with its Emergency Notification Overlay" was used by the Florida Department of Transportation (FDOT) in coordination with the Federal Aviation Administration (FAA) and Florida Department of Law Enforcement (FDLE) to immediately close all of Florida's airports following the events of Sept 11. "People are talking about the terrific program we have that let us produce a broadcast notification to so many airports than a few seconds!" FDOT Aviation Office (September 12, 2001)

FAD's Joint Automated Capital Improvement Program (JACIP) is a grant management system that allows the State of Florida and the FAA to better coordinate and manage their aviation grants. The accurate and dynamic listing of aviation needs has increased the federal grants to the state's airports.

Florida Aviation Inspection and Licensing – Every public airport in Florida is inspected and licensed by the State utilizing the inspection and licensing application in FAD. Other online applications of the FAD utilize the inspection data to update not only the license, but the Facility Information Directory, the published airport directory, mailing lists, system plans, and the National Flight Data Center.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (*City and State*)	(3) ROLE
a.	**Panther International, LLC**	**Clearwater, Florida**	**Sub-Consultant**

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

21. TITLE AND LOCATION (*City and State*)
Sarasota Bradenton International Airport
Sarasota, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2006-2014	

23. PROJECT OWNER'S INFORMATION

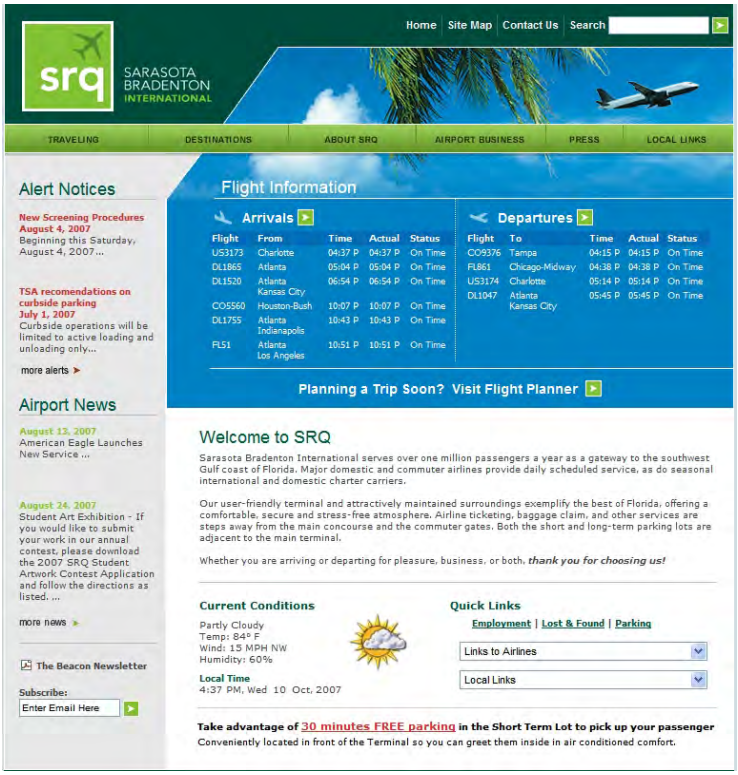
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Sarasota Manatee Airport Authority	**Fredrick J. Piccolo, A.A.E.** **President / CEO**	**941-359-2770**

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

Description:

The Sarasota Manatee Airport Authority requested a new state-of-the-art website be designed and developed to provide the traveling public with a clean new look and consumer-friendly navigation making pertinent information easy to find when traveling to and from Sarasota Bradenton International Airport (SRQ).

The site is fully Section 508 ADA Compliant and consists of many features including an up to the minute Flight Information Display (FIDs) on the home page for travelers checking on current flights and an OAG integrated "Flight Planner" that allows future travelers to explore available airline flights and connections to anywhere in the world. There is easy access airline information for departing and arriving flights, map and directions to SRQ, a consumer comment form, e-signup for the quarterly Beacon Newsletter, and many additional features.



Not only does the website provide travel information to consumers, it offers easy to navigate selections such as Top Twenty Destinations and links to tourism related sites in Manatee and Sarasota Counties. In addition, the site offers information for the airlines, airport tenants, and employees including job opportunities, airport rates and fees, and general aviation information.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (*City and State*)	(3) ROLE
a.	**Panther International, LLC**	**Clearwater, Florida**	**Sub-Consultant**

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
Chase C. Stockon	*Project Director*	x	x								
Rebecca Mainardi	*Project Manager*	x									
J. Scott Entin	*Project Manager*			x							

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Florida Aviation Database Tallahassee, FL	6	
2	Digital Capital Improvement Tracking Program (DCIT) San Juan, Puerto Rico	7	
3	Sarasota Bradenton International Airport Sarasota, FL	8	
4		9	
5		10	

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	3. YEAR ESTABLISHED	4. DUNS NUMBER
Panther International, LLC	1994	

2b. STREET	5. OWNERSHIP
2841 Executive Drive, Second Floor	a. TYPE: LLC

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Clearwater	FL	33762	

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Chase C. Stockon, President / CEO	

6b. TELEPHONE NUMBER	6c. E-MAIL ADDRESS
727-556-0990 x1010	Chase@PantherInternational.com

8a. FORMER FIRM NAME(S) *(if any)*	8b. YEAR ESTABLISHED	8c. DUNS NUMBER
	1994	

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
02	Administrative	3	
48	Project Manager	4	
58	Technician/Analyst	2	
14	Computer Programmer	4	
29	Geographic Information System Specialist	1	
	Total		

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

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
N/A	Transportation Grant Management Services	5
N/A	Other Technical Services	4

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

(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	5
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
Chase C Stockon	1/14/2014

c. NAME AND TITLE: Chase C. Stockon, President / CEO

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
Gabino Cuevas, P.E., LEED-AP	Sr. Project Manager (LEED-AP) / Project Principal	25	11

15. FIRM NAME AND LOCATION *(City and State)*
Cherokee Enterprises, Inc. , Miami Lakes, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Master of Business Administration Bachelor of Science in Chemical Engineering	Florida Professional Engineer (PE#42530) Georgia, Professional Engineer (PE#030271) Florida, LEED-AP (17832)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
National Society of Professional Engineers; National Groundwater Association; US Green Building Council; OSHA 40 Hour HAZWOPER, OSHA 8 Hour; Bio-remediation Engineering Workshop

19. RELEVANT PROJECTS

a.
(1) TITLE AND LOCATION *(City and State)*: Miami-Dade County, DERM E03 DERM-01, Groundwater, Surface Water & Soil Contamination Cleanup Services, Miami-Dade, Florida
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2009 — CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Project Principal; Cost: $1,500,000.00; Brief Scope/Size: CEI received assignments from DERM to perform environmental investigations/rehabilitation and related tasks; perform services related to modification, repair, removal, replacement, installation, and/or abandonment of any underground/aboveground storage systems; perform services as design professionals; and, perform environmental work necessary for the prevention of contamination.

b.
(1) TITLE AND LOCATION *(City and State)*: Miami-Dade County, DERM E04 DERM-01, PSA for Groundwater, Surface Water & Soil Contamination Cleanup Services, Miami, Florida
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2009 — CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Project Principal; Cost: $1,050,000.00; Brief Scope/Size: CEI received assignments from DERM to perform 16 projects relating to design and permitting of landfill gas collection system; installation of Odor Control Misting System; removal of 2 single-wall 10,000 gallon USTs and installation of new double-wall USTs; Jet-A fuel line removal and assessment; and, other environmental services.

c.
(1) TITLE AND LOCATION *(City and State)*: Miami-Dade County, DERM E08 DERM-01, PSA for Environmental Cleanup, Compliance and Related Services, Miami-Dade County, FL
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010 — CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Project Principal; Cost: contract maximum allowed-$3,000,000.00. Scope/Size: Provided Groundwater, surface water, and soil contamination cleanup services, and construction services for various municipal agencies in Miami-Dade County. As of today, CEI has completed more than 16 projects under the above contract. CEI's performance was exemplary resulting in the awarding of the succession contract (E09-DERM-01) for an additional three (3) year period.

d.
(1) TITLE AND LOCATION *(City and State)*: Coca-Cola Enterprises, Inc. , Brevard County, Cocoa, Florida
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2007 — CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Project Principal; Cost: $340,000.00. Scope/Size: Took over dormant and inactive petroleum cleanup site. Conducted complete Supplemental Site Assessment and engineering review of existing treatment system. Determined existing groundwater treatment system was unsalvageable. Designed new air sparging and soil vapor extraction system.

e.
(1) TITLE AND LOCATION *(City and State)*: City of Miami / Liberty City Community Revitalization Trust (LCT), Brownfield Assessment & Cleanup, Miami, Florida
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010 — CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Project Principal; Cost: $500,000.00. Scope/Size: Maximized grant monies for the City of Miami's LCT for assessment and remediation for targeted Brownfield redevelopment.

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
Amanuel Worku, P.E.	Contract Manager / Sr. Project Manager	14	11

15. FIRM NAME AND LOCATION *(City and State)*
Cherokee Enterprises, Inc. , Miami Lakes, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science in Environmental Engineering	Florida Professional Engineer (PE#61885)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Florida Engineering Society; Air & Waste Management Association; American Society of Civil Engineers; National Groundwater Association; OSHA 40 Hour HAZWOPER, OSHA 8 Hour; US Army Corp- Contractor Management

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
US Department of Homeland Security / Federal Law Enforcement Training Center (FLETC), Environmental Remediation	2006	

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

Role: Sr.Project Manager; Cost: $3,400,000.00. Scope/Size: Lead assessment and abatement project at 4 firing ranges. Project involved preliminary lead assessment to delineate horizontal and vertical extent of lead-impacted soil. Then excavated impacted soils, sifted the soil for larger lead particles, and then treated it with an additive to bind remaining lead and prevent leachate characterized as hazardous - resulting in a savings of millions of dollars to the federal government.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Miami-Dade County, DERM E04 DERM-01, Environmental Cleanup, Compliance and Related Services, Miami-Dade County, Florida	2009	

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

Role: Sr. Project Manager; Cost: $1,050,000.00; Brief Scope/Size: CEI received assignments from DERM to perform 16 projects relating to design and permitting of landfill gas collection system; installation of Odor Control Misting System; removal of 2 single-wall 10,000 gallon USTs and installation of new double-wall USTs; Jet-A fuel line removal and assessment; and, other environmental services.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Miami-Dade County, DERM E08 DERM-01, PSA for Environmental Cleanup, Compliance and Related Services, Miami, Florida	2010	

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

Role: Sr. Project Manager; Cost: contract maximum allowed-$3,000,000.00. Scope/Size: Provided Groundwater, surface water, and soil contamination cleanup services, and construction services for various municipal agencies in Miami-Dade County. As of today, CEI has completed more than 16 projects under the above contract. CEI's performance was exemplary resulting in the awarding of the succession contract (E09-DERM-01) for an additional three (3) year period.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Coca-Cola Enterprises, Inc. , Brevard County, Cocoa, Florida	2007	

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

Role: Sr. Project Manager; Cost: $340,000.00. Scope/Size: Took over dormant and inactive petroleum cleanup site. Conducted complete Supplemental Site Assessment and engineering review of existing treatment system. Determined existing groundwater treatment system was unsalvageable. Designed new air sparging and soil vapor extraction system.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
US Department of Homeland Security / Federal Law Enforcement Training Center (FLETC), Mold Remediation	2010	

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

Role: Project Principal / Sr. Project Manager; Cost: $194,000.00. CEI provided the necessary management, quality control, labor, materials, and equipment for abatement of mold from Building at Bldg 46.

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
Jeff Northrup, P.G.	Asst. Contract Manager / Sr. Technical Advisor	28	8

15. FIRM NAME AND LOCATION *(City and State)*
Cherokee Enterprises, Inc. , Miami Lakes, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science in Chemistry	Florida, Professional Geologist (PG#1717) Georgia, Professional Geologist (PG#1998) Kentucky, Professional Geologist (PG#2136) Florida, Pollutant Storage System Cont. (PCC1256800) Certified Hazardous Materials Manager (#1575)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
American Institute of Professional Geologists; OSHA 40 Hour HAZWOPER, OSHA 8 Hour; FDEP Field Sampling Courses

19. RELEVANT PROJECTS

a.
(1) TITLE AND LOCATION *(City and State)*: SHAW Environmental/FDOT, District VI District-wide Contamination Assessment & Remediation Services
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: On-going, various sites; CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Sr. Technical Advisor; Cost: $294,263.86; Scope/Size: On-going role to provide miscellaneous consulting work for various DOT sites as a sub-consultant to Nova Consulting. Consulting work entails: investigations, sampling, the review of drawings/plans and memorandums for FDOT.

b.
(1) TITLE AND LOCATION *(City and State)*: Miami-Dade County, DERM E08 DERM-01, PSA for Environmental Cleanup, Compliance and Related Services, Miami-Dade County, Florida
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010; CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Sr. Scientist / Sr. Technical Advisor; Cost: contract maximum allowed-$3,000,000.00. Scope/Size: Provided Groundwater, surface water, and soil contamination cleanup services, and construction services for various municipal agencies in Miami-Dade County. As of today, CEI has completed more than 16 projects under the above contract. CEI's performance was exemplary resulting in the awarding of the succession contract (E09-DERM-01) for an additional three (3) year period.

c.
(1) TITLE AND LOCATION *(City and State)*: Broward County Aviation Dept. FLL/HWD Airport, National Car Rental Center Remediation , Broward County, Florida
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010; CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Sr. Scientist / Sr. Technical Advisor; Cost: $760,000.00. Scope/Size: Performed site assessment activities and produced an approved Site Assessment Report (SAR); as well as- demolition, limited source removal, air sparging, soil vapor extraction, ozone sparging remediation, remedial action plan, installation of remediation system, and quarterly reporting.

d.
(1) TITLE AND LOCATION *(City and State)*: HDR Engineering / FLL HWD Airport Runway Expansion, Broward County, Florida
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010; CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Sr. Scientist / Sr. Technical Advisor; Cost: $35,194.29; Scope/Size: Completed Phase II testing, site investigation work with associated reporting; and, cleared area of suspected landfill excavated and remediated former NCR site.

e.
(1) TITLE AND LOCATION *(City and State)*: Remediation of Former NCR Quick Turnaround Facility at the Fort Lauderdale/Hollywood International Airport
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010; CONSTRUCTION (If applicable):
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐☑ Check if project performed with current firm
Role: Sr. Project Manager/Scientist; Cost: $720,403.00. Scope/Size: Installed and sampled monitoring wells, prepared plume maps, prepared remedial action plans, performed construction services for the installation of an air sparging /vapor extraction remediation system, prepared quarterly sampling and reporting.

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
	1

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Phase II ESA Work for Various FLL/HWD International Airport Facilities- Airport Runway Expansion Remediation, Fort Lauderdale, Florida	2010	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
HDR Engineering, Inc., Contract # RLI#20011017.0-AV-1	Mr. Anwar Kahn HDR Engineering, Inc.	(954) 647-4542 Chuck.sinclair@hdrinc.com

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

Scope/Size:

HDR Engineering, Inc. (HDR) was retained by Broward County Aviation Department (BCAD) to prepare a Phase II Environmental Site Assessment Report (ESA) for various facilities related to the Fort Lauderdale/Hollywood International Airport South Runway Expansion project. The Phase II ESA was requested by the BCAD, based on the findings of HDR's draft Phase I ESA. CEI performed the field work and prepared the Phase II ESA report under subcontract to HDR. This Phase II ESA documents the scope and findings of environmental assessment activities conducted at the site. The Phase II ESA was requested to document the soil and groundwater quality in the areas of the site, associated with the south runway expansion project. CEI performed environmental site assessment services for the following sites:

- Former Taylor Road Budget Rental Facility
- Gulfstream International Airlines
- Westside Marina

All sampling was conducted in accordance with the Florida Department of Environmental Protection's (FDEP) Standard Operating Procedures for Field Activities (DEP-SOP-001/01). HDR and CEI recommend no further environmental assessment of the sites.

Cost: Total contract - $35,194.29

Former Taylor Road Budget Rent-a-Car Facility

Gulfstream International Airlines

Westside Marina

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
	Cherokee Enterprises, Inc.	Miami Lakes, Florida	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)	20. EXAMPLE PROJECT KEY NUMBER 2

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Broward County Aviation Department (BCAD), Former National Car Rental Center Remediation, Fort Lauderdale, Florida	7/2013	

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Broward County Aviation Department, Contract # SC406AVC052306*079, SC400AVC082708*57, SC400AVC051509*53	Mr. Michael P. Pacitto, P.G. Broward County Aviation Department	(954) 359-6103 mpacitto@broward.org

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

Scope/Size:

Fort Lauderdale-Hollywood International Airport (FLL), which is currently undergoing over a billion dollars in renovations associated with terminal modernization and runway expansion programs, has such an environmental program in place. Therefore, in preparation of the planned expansion the Broward County Aviation Department (BCAD) tasked Cherokee Enterprises, Inc. (CEI) with investigating a former rental car facility in 2008 which was in the building footprint of the proposed Terminal 4 Expansion. The site was inactivated in 2008 and was then known as the National Car Rental (NCR) facility.

During CEI's preliminary investigation petroleum was discovered in the pathway of the proposed terminal expansion, which could jeopardize the construction schedule. The new terminal was targeted for construction in the fall of 2013, and BCAD requested that CEI obtain site closure before construction commenced to prevent delays or restrictions while the project was underway. Site closures in Florida fall into two categories: Conditional and non-Conditional. Non-conditional closures allow contractors to proceed with construction without restrictions, since soil and groundwater meet Florida cleanup target levels.

A budget was prepared for the site and a work order was issued, with the goal that CEI would complete the investigation and non-conditional closure by the fall of 2013. After the investigation was completed it was determined that a Methyl Tertiary Butyl Ether (MTBE) plume splintered from the main petroleum plume, and was found at a depth of 45 feet below land surface, influenced from a nearby commercial irrigation well which was drawing the plume deeper. The main petroleum plume was moving in another direction, following groundwater directional flow.

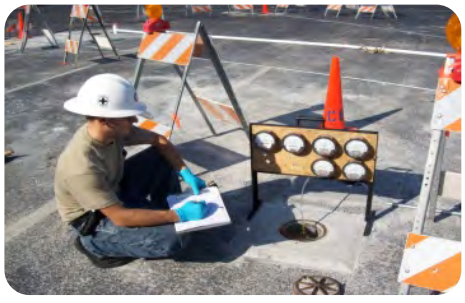
In 2009, CEI installed an Air Sparge/Soil Vapor Extraction (AS/SVE) System to treat the main petroleum plume, after a Remedial Action Plan (RAP) for the site was approved. An AS/SVE treatment system entails the injection of air via vertical wells beneath the contaminant plume. The air encourages volatile contaminants in the soil and groundwater to move into the vapor phase which is then captured by vacuum via SVE wells. The extracted vapors are then passed through activated carbon cells which are placed at the ground surface to recover the petroleum. AS/SVE treatment is very effective at removing drycleaner and petroleum contaminants in sand and limestone subsurface environments like South Florida. A treatment system was not installed in the MTBE plume since a 30-day ozone injection pilot study reduced MTBE contaminants to below natural attenuation levels.

By 2011, the shallow petroleum plume had been abated by the installed AS/SVE treatment system to below groundwater and soil cleanup target levels (GCTLs and SCTLs), and CEI implemented a groundwater monitoring program to evaluate whether contaminant rebound was going to occur. While the main petroleum plume was being treated by the AS/SVE system, CEI monitored the natural attenuation progress in the MTBE plume area and determined that it would not decline sufficiently to meet the 2013 construction schedule. Consequently, since the main petroleum plume had been successfully treated, the AS/SVE treatment system was diverted to the MTBE area.

By March of 2012, the MTBE and main petroleum areas no longer exhibited any contaminants above GCTLs or SCTLs. Therefore, CEI started the required one year of Post Active Remedial Monitoring (PARM) prior to closure. In March of 2013, the site showed four clean quarters, and the site was submitted for non-conditional closure. In July of 2013, the Florida Department of Environmental Protection issued a Site Rehabilitation Completion Order, and in September of 2013 the site was released to BCAD for construction of the new terminal after all the remedial equipment was removed from the site.

In closing, the success of this site can mostly be attributed to constantly monitoring the contaminant levels, and recognizing when changes were necessary to accomplish the goal. In addition, long range planning played a key role in providing sufficient time to accomplish the cleanup goals prior to construction.

Cost: Total contract - $760,000.00.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME Cherokee Enterprises, Inc.	(2) FIRM LOCATION *(City and State)* Miami Lakes, Florida	(3) ROLE Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: 3

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Miami-Dade County Department of Environmental Resources Management (DERM)- Groundwater, Surface Water, and Soil Contamination Cleanup Services, Miami, Florida	2009	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Miami-Dade DERM, Contract # E04-DERM-01	Ms. Julie Balogh Miami-Dade County Department of Environmental Resources Management	(305) 372-6700 balogj@miamidade.gov

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

Scope/Size:

CEI was awarded the Miami-Dade County E04-DERM-01 PSA Contract for Groundwater, Surface Water and Soil Contamination Cleanup Services for the Miami-Dade County Facilities. As of today, CEI has completed more than 16 projects under the above contract. CEI's performance was exemplary resulting in the awarding of the succession contract (E08-DERM-01) for additional three (3) years period in 2009. The above work assignments are related to the following environmental engineering works:

1) Performing environmental investigation and/or rehabilitation and related tasks in accordance with Chapters 62-770, 62-782 and 62-785 of the Florida Administrative Code (FAC), Chapter 24 of the Miami-Dade County Code, and all other applicable regulations;

2) Performing services related to the modification, repair, removal, replacement, installation and/or abandonment of any underground or aboveground storage systems, and any related tasks, in accordance with Chapters 62-761 and 62-762 FAC, Chapter 24 of the Miami-Dade County Code, and all applicable regulations;

3) Performing services as design criteria professionals and performing duties related to construction management for environmentally necessary construction tasks; and,

4) Performing other related environmental work not identified above, necessary for investigation and/or prevention of potential or known contamination, for compliance with applicable regulations, for protection of the environment and the public health and for cleanup of environmental contamination. **Cost:** Total contract - $1,050,000

Some of the projects completed under a lump sum contract include:

- Design and Construction of a Landfill Gas Collection System
- Removal of two (2) single-wall 10,000 gallon USTs and installation of new double-wall USTs
- Miami International Airport Jet-A Fuel Line Removal and Assessment

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
	Cherokee Enterprises, Inc.	Miami Lakes, Florida	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)	20. EXAMPLE PROJECT KEY NUMBER
	4

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City of Miami / Liberty City Community Revitalization Trust (LCT), Brownfield Assessment & Cleanup, Miami, Florida	4/2010	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Miami, Contract #903193/904606/92678-00	Mr. Harry James	(305) 416-1468 hjames@miamigov.com

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

Scope/Size: The Miami Livery City Community Revitalization District Trust was selected to receive two Brownfields cleanup grants. CEI proposed and received some additional measures that the former Model City Trust utilized to maximize the grant monies awarded and maximized the four site's eligibility in the Florida Department of Environmental Protection (FDEP) Petroleum Preapproval Program. The program, Preapproved Advanced Cleanup (PAC), was used by the former Model City Trust to maximize cleanup funds. It is essentially a "bidding" contest where contaminated site owners attempt to move their sites up the funding eligibility list by offering to pay for a minimum of 25% of the cleanup costs. The FDEP has been allotting approximately $10 million a year for this program, with two entry periods each year (May 1st to June 30th and November 1st to December 30th). Recent winning "bids" have ranged from 60% down to 25% of cleanup costs. Even supposing a 50% bid submittal is agreed upon to assure a win, this means that the EPA's grant monies are essentially doubled without any financial commitment from the Model City Trust. CEI, on behalf of the trust, submitted packages to enter the PAC program. These included a Limited Site Assessment Report (LSAR), completed application package, and a letter of credit or guarantee of funding for the "bid" portion of the anticipated cleanup cost. The package submitted by CEI was approved by FDEP and four (4) sites were admitted to the PAC program. CEI completed assessment and remediation activities for a **lump sum contract** on three of the sites through separate work orders. **Cost:** Total contract for all three sites - $500,000.00.

Former Star Station Assessment & Remediation
Removed ~ 799 tons of heavily petroleum contaminated soil from smear zone and removed free floating product (FFP) from an excavated trench during source removal activities. A total of ~ 5,102 gallons of FFP were disposed.

Former Gipson Station Remediation, Monitoring, Demolition & Restoration
CEI implemented a one year Post Active Remedial Monitoring (PARM). Contaminant levels were found within the Monitoring Only Plan (MOP). All parameters in the designated monitoring wells did not exceed Groundwater Cleanup Target. CEI recommended site closure, and as of April 2009, the remaining aboveground structures were demolished and the site restored with new sod and fencing for development of the formerly contaminated site.

Former Supreme Station Assessment & Remediation
CEI completed the initial soil and groundwater assessment activities by delineating the contaminants vertically & horizontally. CEI assisted the City of Miami in the preparation of a Brownfields Cleanup Grant from the Environmental Protection Agency (EPA). In April 2010, it was announced that the City of Miami was the recipient of this grant.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Cherokee Enterprises, Inc.	Miami Lakes, Florida	Prime

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below, before completing table. Place "X" under project key number for project participation same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Gabino Cuevas, PE, LEED-AP	LEED-AP Project Manager	X	X	X	X						
Amanuel Worku, PE	Sr. Project Manager/Project Principal			X	X						
Jeff Northrup, PG	Sr. Technical Advisor	X	X	X	X						

29. EXAMPLE PROJECT KEY

No.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	No.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1.	Phase II ESA FLL/HWD Airport Runway Expansion	6.	
2.	Broward County Aviation Dept. NCR Remediation	7.	
3.	Miami-Dade County E 04 DERM Contract	8.	
4.	City of Miami Brownfield	9.	
5.		10.	

H. ADDITIONAL INFORMATION

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

[Insert response here]

[These cells and rows are to facilitate the layout of your page. Rows can be added or deleted as needed.]	

PART II – GENERAL QUALIFICATIONS

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

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. DUNS NUMBER
Cherokee Enterprises, Inc. , Fort Lauderdale Brach Office, Florida	1999	070873836

2b. STREET	5. OWNERSHIP
14474 Commerce Way	a. TYPE: Corporation

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Miami Lakes	FL	33016	Small Disadvantaged Business

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Jeffrey S. Northrup, PG, PSSC, CHMM, VP of Sciences	Cherokee Enterprises, Inc.
6b. TELEPHONE NUMBER: (305) 828-3353	**6c. E-MAIL ADDRESS:** jn@cherokeecorp.com

8a. FORMER FIRM NAME(S) *(If any)*	8b.YR ESTABLISHED	8c. DUNS NUMBER
Not applicable	n/a	n/a

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
02	Administrative	9	1
08	CADD Technician	1	0
16	Construction Manager	1	0
23	Environmental	5	0
24	Environmental Scientists	3	0
30	Geologists	1	0
48	Project Manager	7	1
58	Technician	16	2
Total			

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

a. Profile Code	b. Experience	c. Revenue Index Number (see below)
A04	Air Pollution Control	1
C14	Conservation and Resource Management	1
C15	Construction Management	3
C18	Cost Estimating, Cost Engineering & Analysis	2
E09	Environmental Impact Studies	4
H03	Hazardous, Toxic, Radioactive Waste Remediation	5
P06	Planning (Site, Installation, and Project)	2
P07	Plumbing & Piping Design	2
S05	Soils & Geological Studies; Foundations	2
S13	Strom Water Handling & Facilities	2
C15	Construction Management	5
D04	Design/Build Preparation of Request for Proposals	6
E08	Engineering Economics	1
E11	Environmental Planning	5
E12	Environmental Remediation	6
E13	Environmental Testing & Analysis	2
P02	Petroleum & Fuel (Storage & Distribution)	5
W02	Water Resources; Hydrology; Ground Water	3
I03	Industrial Waste Remediation	2

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

(Insert revenue index number shown at right)

a. Federal Work	6
b. Non-Federal Work	7
c. Total Work	8

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

2. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
Jeffrey S. Northrup	2/07/2014

c. NAME AND TITLE: Jeffrey S. Northrup, PG, PSSC, CHMM, VP of Sciences

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	
Raj Krishnasamy, P.E.	**Principal Geotechnical Engineer**	a. TOTAL **25**	b. WITH CURRENT FIRM **13**

15. FIRM NAME AND LOCATION *(City and State)*
TIERRA SOUTH FLORIDA, INC., West Palm Beach, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS Civil Engineering, Christian Brothers University, 1987 MS Civil Engineering, University of Memphis, 1996	Professional Engineer, Florida No. 53567

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
American Society of Highway Engineers, Past President, Florida Engineering Society, Past Treasurer
Geotechnical Material Engineering Council, Past Chairman

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway Echo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	PROFESSIONAL SERVICES 2013	CONSTRUCTION *(If applicable)*

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

Mr. Krishnasamy was the principal in charge of the geotechnical exploration, pavement cores and laboratory testing for the rehabilitation which included reconstruction or milling and resurfacing of Taxiway Echo and connectors. Field study consisted of 25 Standard Penetration Test (SPT) borings, 3 BoreHole Permeability (BHP) tests, field CBR tests - Kessler Method, and 15 pavement cores. Performed limited laboratory testing on selected soil samples, including grain size analysis, organic content, and Modified proctor Tests. Also performed laboratory CBR tests (ASTM D1883). Provided subsurface information, soil profiles, and test results.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway Bravo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	PROFESSIONAL SERVICES 2008	CONSTRUCTION *(If applicable)*

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

Mr. Krishnasamy was the principal in charge of the geotechnical study for the rehabilitation of Taxiway Bravo at Ft. Lauderdale Executive Airport (FXE) in Broward County, Florida. The project was approximately 2 miles long. The rehabilitation included widening of Taxiway Charlie, Mike and November and milling and resurfacing Taxiway Bravo. Performed Standard Penetration Test (SPT) borings along Taxiway Bravo and exit ramps as well as pavement cores. Provided geotechnical report summarize findings as well as geotechnical recommendations regarding excavations, ground water control and pavement design.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway Delta & Charlie Rehabilitation Project - Fort Lauderdale Executive Airport, Broward County, Florida	PROFESSIONAL SERVICES 2010	CONSTRUCTION *(If applicable)*

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

Mr. Krishnasamy was the principal in charge of the geotechnical services for the milling and resurfacing of Taxiway Delta & Charlie. Performed Standard Penetration Test (SPT) borings and pavement cores. Provided a geotechnical services report discussing the subsurface conditions found, groundwater conditions at the site, and pavement core test results.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Western Expansion of Terminal 4 and Connector Bridge to Terminal 3, Fort Lauderdale–Hollywood International Airport, Broward County, Florida	PROFESSIONAL SERVICES 2011	CONSTRUCTION *(If applicable)*

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

Mr. Krishnasamy was the principal in charge of the geotechnical engineering study for proposed Western Expansion of Terminal 4 and a connector bridge to Terminal 3. Field work consisted of coordinating with BCAD authorities, drilling thirty (30) Standard Penetration Test (SPT) borings to a depth of 70 feet, and one (1) SPT boring to a depth of 60 feet below existing grade. Provided a geotechnical report summarizing subsurface conditions and groundwater information. TSF provided geotechnical recommendations regarding foundation design, including evaluating the use of Auger Cast-In-Place (ACIP) piles to support the proposed expansion. Provided ACIP pile design criteria and recommendations, site preparation recommendations, floor slab recommendations, and information regarding trench excavations.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Expansion of Runway 9R/27L (to be 10R-28L), Fort Lauderdale – Hollywood International Airport, Broward County, Florida	PROFESSIONAL SERVICES 2013	CONSTRUCTION *(If applicable)*

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

Mr. Krishnasamy was the principal in charge of the geotechnical study for the proposed expansion of Runway 9R-27L and associated US-1/FEC railroad structures, high fill embankment, and MSE walls. SPT soil borings and sampling are being performed for US-1/FEC Railroad structures, MSE walls and high embankments. Maximum MSE wall height is expected to be about 65 ft. which is significantly higher than the normal practice in Florida. Performed pile capacity analysis for bridge structures. Provided analysis and recommendations for MSE walls and embankment fill as well as other geotechnical engineering recommendations.

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	
Francois Thomas, P.E.	**Principal Engineer**	a. TOTAL **21**	b. WITH CURRENT FIRM **5**

15. FIRM NAME AND LOCATION *(City and State)*
TIERRA SOUTH FLORIDA, INC., West Palm Beach, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MS in Geotechnical Engineering, 1993 BS in Civil Engineering, 1991	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

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway Bravo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)* 2012

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

Mr. Thomas was the principal in charge of the material testing and inspection services for the taxiway rehabilitation. Performed laboratory testing including LBRs, Proctors, and concrete breaks. Provided earthwork and concrete inspections during subgrade and base construction. During asphalt pavement rehabilitation (milling and resurfacing), provided field asphalt inspectors to observe placement of test strip, tack placement, and surface and leveling courses. TSF inspectors were also in charge of tracking all tonnage, waste quantities, tack and prime quantities, and based on those numbers the inspectors verified pay applications. Also provided all asphalt plant inspections prior to and during all asphalt field activities.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway Charlie West Settlement Study, Fort Lauderdale–Hollywood International Airport, Broward County, Florida	PROFESSIONAL SERVICES 2011	CONSTRUCTION *(If applicable)*

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

Mr. Thomas served as principal geotechnical engineer for the geotechnical engineering study to investigate the subsurface conditions at the project site, and provide site preparation recommendations for the pavement subgrade to minimize the rutting/settlement. Provided geotechnical engineering report discussing potential causes of rutting/settlement along with site preparation recommendations that the soil be densified and the pavement section reinforced to minimize the potential of rutting/settlement. Recommendations included utilizing geogrid as part of the site preparation.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway Echo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	PROFESSIONAL SERVICES 2013	CONSTRUCTION *(If applicable)*

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

Mr. Thomas served as principal geotechnical engineer for the geotechnical exploration, pavement cores and laboratory testing for the rehabilitation which included reconstruction or milling and resurfacing of Taxiway Echo and connectors. Field study consisted of 25 Standard Penetration Test (SPT) borings, 3 BoreHole Permeability (BHP) tests, field CBR tests - Kessler Method, and 15 pavement cores. Performed limited laboratory testing on selected soil samples, including grain size analysis, organic content, and Modified proctor Tests. Also performed laboratory CBR tests (ASTM D1883). Provided subsurface information, soil profiles, and test results.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Taxiway Delta & Charlie Rehabilitation Project - Fort Lauderdale Executive Airport, Broward County, Florida	PROFESSIONAL SERVICES 2010	CONSTRUCTION *(If applicable)*

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

Mr. Thomas served as a the principal geotechnical engineer for the geotechnical services for the milling and resurfacing of Taxiway Delta & Charlie. Performed Standard Penetration Test (SPT) borings and pavement cores. Provided a geotechnical services report discussing the subsurface conditions found, groundwater conditions at the site, and pavement core test results.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Runway 15-33 Rehabilitation and Taxiway C Reconstruction, Lantana Airport, Palm Beach County, Florida	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)* 2012

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

Mr. Thomas was the principal in charge of the construction material testing and inspection services for the rehabilitation of runway 15-33 and reconstruction of Taxiway C. Services include inspection of asphalt plant supplier, density tests, LBR test, inspection and asphalt testing (during initial test section and production), miscellaneous concrete tests, asphalt cores, mix design reviews, and certification. Project required working night and weekend shifts.

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
Kumar Vedula, P.E.	**Senior Geotechnical Engineer**	**18**	**5**

15. FIRM NAME AND LOCATION *(City and State)*

TIERRA SOUTH FLORIDA, INC. West Palm Beach, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Engineering, Andhra University, India, 1992 MS Civil Engineering, University of Memphis, 1995	Professional Engineer, Florida No. 54873

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

American Society of Civil Engineers, Past President

Augered Cast-in-Place and Driven Pre-stressed Concrete Pile Field Performance Comparison, Frizzi, R. P, & Vedula, R.V, Published in FHWA Resource Center, 83rd Annual Transportation Research Board Meeting, Washington D.C., January 2004

Improvement of soft clay using high pressure Jet Grout, Chang, T.S., Vedula, R. V., and Chang, K,P., 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, March 2001

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Expansion of Runway 9R/27L (to be 10R-28L), Fort Lauderdale – Hollywood International Airport, Broward County, Florida	2013	

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

Mr. Vedula was the senior geotechnical engineer for the geotechnical study for the proposed expansion of Runway 9R-27L and associated US-1/FEC railroad structures, high fill embankment, and MSE walls. SPT soil borings and sampling are being performed for US-1/FEC Railroad structures, MSE walls and high embankments. Maximum MSE wall height is expected to be about 65 ft. which is significantly higher than the normal practice in Florida. Performed pile capacity analysis for bridge structures. Provided analysis and recommendations for MSE walls and embankment fill as well as other geotechnical engineering recommendations.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
T4 West Fuel Hydrant System, Fort Lauderdale – Hollywood International Airport, Broward County, Florida	2011	

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

Mr. Vedula was the senior geotechnical engineer for the geotechnical engineering study to explore the subsurface conditions at the site to enable an evaluation of acceptable foundation for the construction. Provided a geotechnical report summarizing findings as well as geotechnical recommendations regarding foundation design and soil parameters.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Northside Renovations at Fort Lauderdale Jet Center, Fort Lauderdale–Hollywood International Airport, Broward County, Florida	2006	

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

Mr. Vedula was the senior geotechnical engineer for the geotechnical study for the construction of a hangar and office spaces, new pavement areas and resurfacing of existing pavement. Provided recommendations for site preparation, foundation design, floor slab design, lateral earth pressure, pavement design, and other construction considerations.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Taxiway Bravo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	2008	

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

Mr. Vedula was the senior geotechnical engineer for the geotechnical study for the rehabilitation of Taxiway Bravo at Fort Lauderdale Executive Airport (FXE) in Broward County, Florida. The project was approximately 2 miles long. The rehabilitation included widening of Taxiway Charlie, Mike and November and milling and resurfacing Taxiway Bravo. Performed Standard Penetration Test (SPT) borings along Taxiway Bravo and exit ramps as well as pavement cores. Provided geotechnical report summarize findings as well as geotechnical recommendations regarding excavations, ground water control and pavement design.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Mounting Structures and Travel Lane at Remote Parking, Fort Lauderdale–Hollywood International Airport, Broward County, Florida	2009	

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

Mr. Vedula was the senior engineer for the geotechnical engineering study to explore the subsurface conditions within or in close proximity to the proposed mounting structures and travel lane. Provided geotechnical engineering report with summary of groundwater and subsurface conditions. Also provided geotechnical recommendations and soil parameters for a drilled shaft foundation design system along with considerations for drilled shaft construction.

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 1

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Taxiway Bravo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	2008	2012

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Kimley-Horn & Associates, Inc	Mr. Dave Bardt, P.E.	(561) 845-0665

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

Performed a geotechnical study for the rehabilitation of Taxiway Bravo at Fort Lauderdale Executive Airport (FXE) in Broward County, Florida. The project was approximately 2 miles long. The rehabilitation included widening of Taxiway Charlie, Mike and November and milling and resurfacing Taxiway Bravo. Performed Standard Penetration Test (SPT) borings along Taxiway Bravo and exit ramps as well as pavement cores. Provided geotechnical report summarize findings as well as geotechnical recommendations regarding excavations, ground water control and pavement design.

During construction, provided material testing and inspection services for the taxiway rehabilitation. Performed laboratory testing including LBRs, Proctors, and concrete breaks. Provided earthwork and concrete inspections during subgrade and base construction. During asphalt pavement rehabilitation (milling and resurfacing), provided field asphalt inspectors to observe placement of test strip, tack placement, and surface and leveling courses. TSF inspectors were also in charge of tracking all tonnage, waste quantities, tack and prime quantities, and based on those numbers the inspectors verified pay applications. Also provided all asphalt plant inspections prior to and during all asphalt field activities.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	**Tierra South Florida, Inc.**	**West Palm Beach, FL**	**Geotechnical Engineering, Construction Material Testing and Inspection Services**
b.			
c.			
d.			
e.			
f.			

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)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Taxiway Echo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	2013	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Kimley-Horn & Associates, Inc	Mr. Dave Bardt, P.E.	(561) 845-0665

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

Performed geotechnical exploration, pavement cores and laboratory testing for the rehabilitation which included reconstruction or milling and resurfacing of Taxiway Echo and connectors. Field study consisted of 25 Standard Penetration Test (SPT) borings, 3 BoreHole Permeability (BHP) tests, field CBR tests - Kessler Method, and 15 pavement cores. Performed limited laboratory testing on selected soil samples, including grain size analysis, organic content, and Modified proctor Tests. Also performed laboratory CBR tests (ASTM D1883). Provided subsurface information, soil profiles, and test results.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	**Tierra South Florida, Inc.**	**West Palm Beach, FL**	**Geotechnical Engineering Services**
b.			
c.			
d.			
e.			
f.			

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
	3

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Taxiway Delta & Charlie Rehabilitation Project, Fort Lauderdale Executive Airport, Broward County, Florida	2010	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Kimley-Horn & Associates, Inc.	Mr. Dave Bardt, P.E.	(561) 845-0665

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

Performed geotechnical services for the milling and resurfacing of Taxiway Delta & Charlie. Performed Standard Penetration Test (SPT) borings and pavement cores. Provided a geotechnical services report discussing the subsurface conditions found, groundwater conditions at the site, and pavement core test results.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	**Tierra South Florida, Inc.**	**West Palm Beach, FL**	**Geotechnical Engineering Services**
b.			
c.			
d.			
e.			
f.			

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
Raj Krishnasamy, P.E.	Principal Engineer	X	X	X							
Francois Thomas, P.E.	Principal Engineer	X	X								

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Taxiway Bravo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	6	
2	Taxiway Echo Rehabilitation Project - Fort Lauderdale Executive Airport Broward County, Florida	7	
3	Taxiway Delta & Charlie Rehabilitation Project, Fort Lauderdale Executive Airport, Broward County, Florida	8	
4		9	
5		10	

ARCHITECT ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*
946-11333

PART II - GENERAL QUALIFICATIONS

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

2a. FIRM (OR BRANCH OFFICE) NAME TIERRA SOUTH FLORIDA, INC.			3. YEAR ESTABLISHED 2003 / 4. DUNS NUMBER 829296222
2b. STREET 2765 Vista Parkway, Suite 10			5. OWNERSHIP a. TYPE Corporation
2c. CITY West Palm Beach	2d. STATE FL	2e. ZIP CODE 33411	b. SMALL BUSINESS STATUS Broward County CBE FDOT DBE and SBE Florida Statewide OSD MBE
6a. POINT OF CONTACT NAME AND TITLE Raj Krishnasamy, P.E. / Principal Engineer, President			7. NAME OF FIRM *(If block 2a is a branch office)* N/A
6b. TELEPHONE NUMBER (561)687-8539	6c. E-MAIL ADDRESS Raj@TierraSF.com		

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

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
2	Administrative	7	7
8	CADD Technician	2	2
27	Foundation/Geotechnical Eng	5	5
58	Technician/Analyst	30	30
58	Technician/Inspector	6	6
	Total	50	50

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

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
S05	Soils and Geologic Studies; Foundations	5
T02	Testing and Inspection Services	6

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

(Insert revenue index number shown at right)

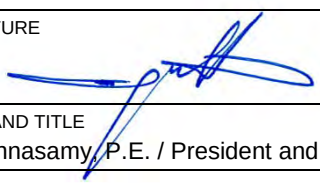
a. Federal Work	3
b. Non-Federal Work	5
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	February 11, 2014
c. NAME AND TITLE Raj Krishnasamy, P.E. / President and Principal Engineer	

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.

NAME	RELATIONSHIPS
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.

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 it's 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: Charles T. Sinclair _____ 02/13/2014

NAME SIGNATURE 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, 2013 THROUGH SEPTEMBER 30, 2014

DBA:
Business Name: HDR ENGINEERING INC

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

Owner Name: CHARLES THOMAS SINCLAIR PE
Business Location: 3250 W COMMERCIAL BLVD STE 10(
FT LAUDERDALE

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

Business Phone: 954-647-4542

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	3.00	0.00	0.00	0.00	0.00	48.00

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 #01C-12-00012343
Paid 08/07/2013 48.00

2013 - 2014

City of Fort Lauderdale • Procurement Services Division
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

RFQ 946-11333
GENERAL ENGINEERING AVIATION CONSULTANT SERVICES

ISSUED January 20, 2014

1. This addendum is being issued to make the following changes:

   A. Section 01 (RFQ Schedule) is being modified as indicated below:

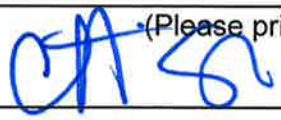
EVENT	DATE/TIME
Release of RFQ	01/21/2014
Deadline for Questions/Request for Clarifications	02/07/2014
Proposal Due Date/Time (Deadline)	03/19/2014
Committee Review and Shortlist (Estimated)	03/27/2014
Presentation by Shortlisted Firms (Estimated)	03/27/2014
Commission Approval to Begin Negotiations with 1st Ranked Firm	05/06/2014

2. The opening date of this Invitation to Bid has been changed to March 19, 2014.

3. All other terms, conditions, and specifications remain unchanged.

Kirk W. Buffington, CPPO, C.P.M. MBA
Deputy Director of Finance

Company Name: HDR Engineering, Inc.
(Please print)

Bidder's Signature: 

Date: 02/13/2014

City of Fort Lauderdale • Procurement Services Division
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 2

RFQ 946-11333
GENERAL ENGINEERING AVIATION CONSULTANT SERVICES

ISSUED January 20, 2014

1. This addendum is being issued to make the following changes:

   A. Adding Addendum No. 1 Bid Documents to BidSync.

2. All other terms, conditions, and specifications remain unchanged.

Kirk W. Buffington, CPPO, C.P.M. MBA
Deputy Director of Finance

Company Name: HDR Engineering, Inc.
(Please print)

Bidder's Signature: _____

Date: 02/14/2014

City of Fort Lauderdale • Procurement Services Division
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 3

RFQ 946-11333
GENERAL ENGINEERING AVIATION CONSULTANT SERVICES

ISSUED January 23, 2014

1. This addendum is being issued to make the following changes:

   A. Section 01 (RFQ Schedule) is being modified as indicated below:

EVENT	DATE/TIME
Release of RFQ	01/21/2014
Deadline for Questions/Request for Clarifications	02/07/2014
Proposal Due Date/Time (Deadline)	02/13/2014
Committee Review and Shortlist (Estimated)	02/24/2014
Presentation by Shortlisted Firms (Estimated)	03/13/2014
Commission Approval to Begin Negotiations with 1st Ranked Firm	04/15/2014

2. The opening date of this Invitation to Bid has been changed to February 13, 2014.

3. All other terms, conditions, and specifications remain unchanged.

Kirk W. Buffington, CPPO, C.P.M. MBA
Deputy Director of Finance

Company Name: HDR Engineering, Inc.
(Please print)

Bidder's Signature: _____

Date: 02/14/2014