

**TASK ORDER No. 05**

**Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2015**

**CITY PROJECT No. 11998**

**FORT LAUDERDALE PUBLIC WORKS DEPARTMENT**

**FORT LAUDERDALE EXECUTIVE AIRPORT  
DESIGN SERVICES FOR PAVEMENT REHABILITATION OF  
RUNWAYS 9/27 & 13/31**

**PROFESSIONAL SERVICES**

This Task Order is pursuant to the Agreement between the City of Fort Lauderdale (CITY) and HDR Engineering, Inc. (CONSULTANT), a Nebraska corporation authorized to transact business in the State of Florida for general engineering aviation consultant services, dated August 19, 2014, and expiring on August 18, 2016, between CITY and CONSULTANT ("MASTER AGREEMENT").

**PROJECT BACKGROUND**

Runway 9/27 is a 6,002 foot long by 100 foot wide asphalt paved runway and Runway 13/31 is a 4,000 foot long by 100 foot wide asphalt paved runway used by landing and departing aircraft at Fort Lauderdale Executive Airport (FXE) (Exhibit B).

The Florida Department of Transportation (FDOT) initiated a Statewide Airfield Pavement Management Program in order to support maintenance and rehabilitation activities for airports within Florida. In May 2013, the FDOT conducted an inspection of the runway and taxiway pavements at FXE. The report recommended a combination of seal coat, crack/joint sealing, and/or overlay be applied to both runways to extend the pavement life and reduce the rate of pavement deterioration.

**SPECIFIC SCOPE OF SERVICES**

The project requires professional engineering services for preparation of plans and technical specifications in order to rehabilitate the airfield pavement for both runways. Based on the condition of the pavement surfaces the treatment could be either of the following methods in accordance with Federal Aviation Administration Advisory Circular 150/5380-6B:

1. Fog Seal
2. Slurry Seal
3. Coal-Tar Sealer

The application will be the full length of the runways but will not include any pavements beyond the end of each runway. CONSULTANT will perform a preliminary inspection of both runways to determine the extent and magnitude of any surfaces that meet the conditions to require crack sealing during the design phase.

## **Task 1.0 Pre-design Services**

CONSULTANT shall develop a construction phasing plan and preliminary typical sections for the runway rehabilitation, undertake preliminary coordination, define the necessary pre-design field survey and geotechnical investigation, and will establish communications with the parties and agencies known to CONSULTANT that will be involved or affected by the project. Specific tasks shall consist of the following:

1. Meet with the CITY to fully define project elements, phasing requirements, and project issues.
2. Field review of project site and existing pavement condition.
3. Define and list design criteria applicable to the project.
4. Develop preliminary phasing plans.
5. Meet with City and stakeholders to review phasing options.
6. Identify preliminary construction access, MOT, and staging options.
7. Based on selected phasing options, prepare an order of magnitude opinion of probable construction cost for the project.

### **Deliverables:**

CONSULTANT shall provide the following for CITY review and written approval:

- Design criteria listing
- Phasing alternatives
- Preliminary access, MOT and staging plan
- Order of magnitude opinion of probable construction cost

## **Task 2.0 Conceptual Design (30% Plans)**

CONSULTANT shall develop the preliminary plan necessary to achieve approximately 30% design completion for the project. Drawings will be in AutoCAD Civil 3D based on CITY's current CAD standards. Technical specifications, the Engineer's report, and other written documents will be in Microsoft Word. Designs will be in accordance with Federal Aviation Administration (FAA) Regulations and Advisory Circulars, and will conform to FDOT guidelines. The Engineer's report will conform to the FAA format. Specific tasks shall consist of the following:

1. Refine project phasing plan and define construction project limits by phase.
2. Develop a construction safety plan concept.
3. Prepare draft outline technical specifications for the project.
4. Prepare draft outline of the Engineer's Report.
5. Prepare an order of magnitude opinion of probable construction cost based on the 30% plans.
6. Prepare a conceptual construction schedule.
7. Submit conceptual plans to the CITY for review.

8. Conduct concept design review and coordination meetings with the CITY.

**Deliverables:**

CONSULTANT shall provide the following for CITY review and written approval:

- Cad files of 30% plans to verify conformance with current CITY CAD standards along with plot files (24"x36") in pdf format.
- Outline of Technical Specifications.
- Outline of Engineer's Report.
- Conceptual construction schedule.
- Order of Magnitude Opinion of Probable Construction Cost.

**Task 3.0 – Preliminary Design (60% Plans)**

CONSULTANT shall continue designs and contract documents to 60% completion that shall consist of construction drawings, technical specifications, and Engineer's report. Tasks shall consist of the following:

1. Prepare 60% schematic design drawings based on comments received from Task 2.0.
2. Perform preliminary quantity take off.
3. Prepare preliminary opinion of probable construction cost.
4. Prepare preliminary construction safety plan with details and notes.
5. Prepare draft Engineer's report.
6. Prepare draft technical specifications.
7. Prepare draft construction schedule.
8. Submit plans, bid documents, Engineer's report, construction schedule, and opinion of probable construction cost to the CITY for review and comment.
9. Conduct one (1) design review meeting(s) with Airport staff and address comments.

**Deliverables:**

CONSULTANT shall provide the following for CITY review and written approval:

- Cad files of 60% plans to verify conformance with current CITY CAD standards along with plot files (24"x36") in pdf format.
- Engineer's Report.
- Opinion of Probable Construction Cost and Schedule
- Bid Documents

Agenda and minutes of all meetings

**Task 4.0 – Contract Document Preparation (100% Plans)**

CONSULTANT shall complete designs and contract documents that consist of construction drawings, technical specifications, and Engineer's report. Tasks shall consist of the following:

1. Finalize design drawings to 100% completion.
2. Finalize technical specifications.

3. Finalize Engineer's report in accordance with FDOT's Guideline for Plan Development, latest edition.
4. Finalize construction schedule.
5. Develop bid forms with final quantities.
6. Prepare supplemental provisions.
7. Provide plans, construction documents, and certifications for the CITY to submit to FDOT for approval and authorization to advertise for bids.
8. Conduct one (1) review meeting with Airport staff and address comments.

**Deliverables:**

CONSULTANT shall provide the following for CITY review and written approval:

- Final (100%) completion
  - Plan set – One copy signed and sealed
  - Bid Documents (electronic)
  - Engineering Report – One copy signed and sealed
  - Opinion of Probable Construction Cost and Schedule
  - CD containing CAD files of 100% plans and plot files (24"x36") in PDF in conformance with current CITY CAD standards.

The anticipated sheets to be included in the construction drawings are as follows:

Construction Set	Description
1	Cover Sheet
2	Notes (2 Sheets)
3	MOT (2 Sheets)
4	Phasing (4 Sheets)
5	Limits of Sealing (8 Sheets)
6	Striping (8 Sheets)
7	Striping Details (2 Sheets)

**Task 5.0 –Bidding Phase Services**

CONSULTANT shall assist the CITY in advertising and bidding the project. Upon receipt of authorization to advertise, CONSULTANT will do the following tasks:

1. Attend and conduct (1) pre-bid meeting with potential bidders and affected agencies and provide meeting minutes.
2. Respond in writing to bidders questions in the form of written addenda, as needed, to interpret, clarify, or expand the Bid Documents.

**Task 6.0 – Special Services**

**GEOTECHNICAL INVESTIGATION & MATERIALS TESTING**

CONSULTANT shall utilize their sub-consultant, Tierra South Florida, Inc., (TSF) to perform testing services on the runway pavements as directed by the CONSULTANT and create reports on the results of those tests.

1. At locations identified by the CONSULTANT's site inspection, TSF will perform pavement cores and perform analysis of the retrieved sections in a report format.
2. At locations identified by the CONSULTANT's site inspection, TSF will perform 10' deep bores under the runway pavement and perform testing of the strata to create a bore log and report.

### **PROJECT ASSUMPTIONS**

1. Plans will be prepared on CAD overlays of the aerial files and will be in conformance with the CITY's current CAD standards. The CONSULTANT shall work with the CITY to provide modifications to CAD standards to be used.
2. Front-end documents, advertisement, general provisions and related documents will be provided by the CITY. CONSULTANT will provide actual bid proposal forms, technical specifications, the Engineer's report, and other written documents in Microsoft Word. The Engineer's report will conform to the FAA format. Designs will be in accordance with FAA Regulations and Advisory Circulars, and will conform to FDOT guidelines. Certification of the above will be provided.
3. The CITY will provide existing plan data, and previous construction plans as required for the project upon which the CONSULTANT may rely on.

### **ADDITIONAL SERVICES**

If authorized in writing by the CITY as an amendment to this Task Order, the CONSULTANT shall furnish, or obtain, Additional Services of the types listed in Article 8 of the Master Agreement. The CITY, as indicated in the Master Agreement, will pay for these services.

### **PERFORMANCE SCHEDULE**

The CONSULTANT shall perform the services identified in Tasks 1 through 4 and 6 inclusive within 60 working days of written Notice to Proceed, not inclusive of CITY review time. Services for Task 5-Bidding Phase Services will be dependent on CITY bidding schedule.

### **PROJECT FUNDING**

Performance of this project is at the City's discretion and may be contingent upon receipt by the CITY of funding from the Florida Department of Transportation (FDOT) under the applicable Joint Participation Agreement (JPA), and the Airport's approved CIP, respectively, and work shall not begin until funding sources for this project are in place.

### **METHOD OF COMPENSATION**

The services performed will be accomplished using the Not-to-Exceed method of compensation. Reimbursable expenses associated with these services are not included in the fees and will be itemized separately, subject to an established Not-to-Exceed limit. Payment for reimbursable expenses shall be based on actual costs for items in accordance with Section 7.2 of the Master Agreement. The total hourly rates payable by the CITY for each of the CONSULTANT's employee categories, reimbursable expenses and sub-consultant fees are shown on Exhibit "A" attached hereto and made a part hereof.

**TERMS OF COMPENSATION**

Services will be provided for the following Not-to-Exceed amounts:

Task No	Task Title	Labor Fees		Total
		Consultant	Sub consultant	
1	Pre-Design Services	\$8,083.50	\$0.00	\$8,083.50
2	Conceptual Design (30%)	\$11,806.50	\$0.00	\$11,806.50
3	Preliminary Design (60%)	\$13,217.50	\$0.00	\$13,217.50
4	Contract Documents (100%)	\$8,194.50	\$0.00	\$8,194.50
5	Bidding Services	\$2,448.00	\$0.00	\$2,448.00
6	Geotechnical Services		\$7,990.00	\$7,990.00
	<b>Sub-Total:</b>	<b>\$43,749.50</b>	<b>\$7,990.00</b>	
			<b>TOTAL</b>	<b>\$ 51,740.00</b>

**CITY CONTACTS**

Requests for payments should be directed to City of Fort Lauderdale Accounts Payable via e-mail to [AcctsPayable@FortLauderdale.gov](mailto:AcctsPayable@FortLauderdale.gov). All other correspondence and submittals should be directed to the attention of Fernando Blanco, Airport Engineer, at the address shown below. **Please be sure that all correspondence refers to the City project number and title as stated above.**

City of Fort Lauderdale  
City Hall, 4<sup>th</sup> Floor Engineering  
100 North Andrews Avenue  
Fort Lauderdale, FL 33301

**CONSULTANT CONTACTS**

HDR Engineering, Inc.  
3250 West Commercial Blvd.  
Suite 100  
Fort Lauderdale, FL 33309  
John Neff, P.E., Senior Project Manager  
Email: [John.Neff@hdrinc.com](mailto:John.Neff@hdrinc.com)  
Phone: 954-233-4915  
Fax: 954-233-4953

IN WITNESS WHEREOF, the parties execute this Task Order as follows:

WITNESSES:

CITY OF FORT LAUDERDALE, a Florida  
municipal corporation:

\_\_\_\_\_  
\_\_\_\_\_  
Print Name

By: \_\_\_\_\_  
LEE R. FELDMAN,  
City Manager

\_\_\_\_\_  
\_\_\_\_\_  
Print Name

ATTEST:

\_\_\_\_\_  
JEFFREY A. MODARELLI,  
City Clerk

Approved as to form:

\_\_\_\_\_  
RHONDA MONTOYA HASAN,  
Assistant City Attorney

CONSULTANT:

WITNESESS:

HDR ENGINEERING, INC.,  
A Nebraska Corporation authorized to  
transact business in the State of Florida

\_\_\_\_\_  
Print Name:

By: \_\_\_\_\_  
Charles T. Sinclair  
Sr. Vice President

\_\_\_\_\_  
Print Name:

ATTEST:

\_\_\_\_\_  
Bonnie J. Kudron  
Assistant Secretary

(CORPORATE SEAL)

STATE OF \_\_\_\_\_:  
COUNTY OF \_\_\_\_\_:

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2015, by Charles T. Sinclair as Sr. Vice President for HDR Engineering, Inc., a Nebraska corporation authorized to transact business in the State of Florida.

(SEAL)

\_\_\_\_\_  
Notary Public, State of Florida  
(Signature of Notary Public)

\_\_\_\_\_  
Name of Notary Typed, Printed or Stamped

Personally Known \_\_\_\_ OR Produced Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_



EXHIBIT A

EXHIBIT NO. A TO FORM OF CONTRACT							
			Sr. Project Manager	Senior Engineer	Eng. Intern	Sr. Admin. Asst.	Total Hours
HDR Engineering, Inc.							
			\$212.50	\$178.50	\$72.25	\$63.75	0
TASK DESCRIPTION							
Task 1- Predesign Services							
1	Meeting with City to fully define project elements		1	1			2
2	Field Review Project Site & Pavement Condition		4	4	4		12
3	Define and List Design Criteria for Project		2	4	2		8
4	Develop preliminary phasing plans		2	2	8		12
5	Meetings with City and stakeholders to Review Phasing Options		1	1			2
6	Identify Preliminary Construction Access, MOT and Staging Options		0.5	4	8	1	13.5
7	Prepare an Order of Magnitude Opinion of Probable Const. Cost		0.5	2	2	1	5.5
8	Define Geotech Requirements and Obtain those investigations		0.5	2	2	1	5.5
Subtotal			11.5	20	26	3	61
Task 2- Conceptual Design (30% Submittal)							
1	Refine project phasing plan and define const. project limits by phase		1	8	20		29
2	Develop Construction Safety Plan - Conceptual		1	8	16		25
3	Prepare Outline Technical Specifications		0.5	4	4	1	9.5
4	Prepare Outline of Engineer's Report		1	4	4	1	10
5	Prepare Order of Magnitude Opinion of Probable Cost		1	1	12		14
6	Prepare Conceptual Construction Schedule		1	4	4		9
7	Submit Plans to City for Review		0.5	2	2		4.5
8	Design Review Meeting with City		1	1			2
Subtotal			7	32	62	2	103
Task 3 - Preliminary Design (60% Submittal)							
1	Prepare Preliminary Pavement Marking Plans		1	4	20		25
3	Prepare Preliminary Opinion of Probable Construction Cost		1	4	4		9
4	Prepare Preliminary Const. Safety Plan with Details and Notes		1	8	20		29
5	Prepare Draft Engineering Report		1	6	8	2	17
6	Prepare Draft Technical Specifications		1	8	12	2	23
7	Prepare Draft Construction Schedule		1	2	4		7
8	Submit Plans and Documents to City for Review		0.5	2	2	1	5.5
9	Design Meeting with City		1	1			2
Subtotal			7.5	35	70	5	117.5
Task 4 - Contract Document Preparation (100% Plans)							
1	Finalize Design Drawings (100%)		1	4	4		9
2	Finalize Technical Specifications		2	8	8	2	20
3	Finalize Engineers Report		1	2	8	2	13
4	Finalize Construction Schedule		1	2	2		5
5	Develop Bid Forms and Final Quantities		1	2	2	2	7
6	Prepare supplemental provisions		1	2	2	1	6
7	Provide plans, const docs, certifications to City for FDOT approval		0.5	1	1	1	3.5
8	Conduct 1 review meeting with City		1	1			2
Subtotal			8.5	22	27	8	64
Task 5 - Bidding Assistance							
1	Attend Pre-Bid Conference		1	1			2
2	Responses to Bidder's Questions		2	6	6	2	16
Subtotal			3	7	6	2	18
Raw Labor Subtotal			38	116	191	20	363
DIRECT EXPENSES							
A. Specialty Subconsultants-Design							
Tierra, Inc							\$7,990.00
TOTAL SUBCONSULTANT EXPENSES							\$7,990.00
TOTAL DESIGN FEE							\$ 51,740.00

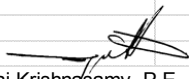
TIERRA SOUTH FLORIDA, INC.						
UNIT RATE FEE SCHEDULE						
NIGHT RATES						
		Unit	# of Units	Unit Price		Total
I.	FIELD INVESTIGATION					
	Mobilization of Men and Equipment					
	Truck-Mounted Equipment	LS	1	\$	350.00	\$ 350.00
	Support Vehicle	DAY	1	\$	150.00	\$ 150.00
	Standard Penetration Test Borings (By Truck-Mounted Equipment)					
	Land: 0 - 50 ft depth	L.F.	50	\$	12.00	\$ 600.00
	50 - 100 ft depth	L.F.	0	\$	14.00	\$ 0.00
	Grout-Seal Boreholes (By Truck-Mounted Equipment)					
	Land: 0 - 50 ft depth	L.F.	50	\$	4.50	\$ 225.00
	50 - 100 ft depth	L.F.	0	\$	5.50	\$ 0.00
	Pavement Cores, Asphalt	Each	25	\$	150.00	\$ 3,750.00
II.	LABORATORY TESTING					
	Natural Moisture Content Tests	Test	5	\$	10.00	\$ 50.00
	Grain-Size Analysis - Full Gradation	Test	2	\$	65.00	\$ 130.00
	Organic Content Tests	Test	2	\$	35.00	\$ 70.00
III	ENGINEERING/COORDINATION/MANAGEMENT					
	Project Manager	Hour	1	\$	165.00	\$ 165.00
	Senior Engineer	Hour	2	\$	125.00	\$ 250.00
	Project Engineer	Hour	12	\$	100.00	\$ 1,200.00
	Senior Technician	Hour	10	\$	75.00	\$ 750.00
	CADD	Hour	4	\$	75.00	\$ 300.00
						\$ 7,990.00
The unit rates provided are those for both public and private sectors.						
<div> Raj Krishnasamy, P.E Principal Geotechnical Engineer</div>						

EXHIBIT B

