TASK ORDER No. 03

Dated this _____ day of _____, 2015

CITY PROJECT No. 11997

FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

FORT LAUDERDALE EXECUTIVE AIRPORT DESIGN SERVICES FOR AIRFIELD LIGHTING REHABILITATION

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

This project includes a visual review of the existing airfield lighting and guidance signs, and perform an operational and code assessment of the airfield lighting vault followed by final design of a comprehensive program to upgrade and refurbish the existing lighting systems serving Fort Lauderdale Executive Airport (FXE) (Exhibit B). The goal of the project will be to evaluate the existing airfield lighting and signs, and address the requirements for upgrades or enhancements to the various lighting systems, and to prepare a comprehensive design for the implementation of the rehabilitation of the lighting system. The goal of the lighting vault assessment will be to perform an operational evaluation of the lighting equipment, evaluate code compliance issues and provide a recommendation for any required future improvements to the vault. The design of the proposed vault improvements is not included in this project.

The last substantial upgrade to the Airport's lighting and signage systems was completed in 2002. Since that time, the aviation industry has begun to replace and upgrade the airfield lighting systems using more current LED technology as opposed to the quartz lights. This technology has allowed for substantially more efficient and low-energy lighting fixtures and signs. It is the Airport's intention to replace the existing airfield lighting system with new LED lights that will improve visibility of the airfield, reduce maintenance costs, and increase the life-cycle compared to the existing lights.

SPECIFIC SCOPE OF SERVICES

The project requires professional engineering services for design of the airfield lighting and guidance signage rehabilitation along selected taxiways at Fort Lauderdale Executive Airport and their corresponding connectors as well as the evaluation of the airfield electrical vault. Services shall be provided by CONSULTANT and their sub-consultant, AVCON and shall include the following tasks:

Task 1.0 Airfield Electrical Vault Assessment Report

The airfield lighting vault assessment will identify the incoming power system, regulators, emergency generator, airfield lighting control system, and general overview of building conditions to provide a framework for long-term implementation.

The existing airfield lighting vault will be evaluated to establish a baseline of performance for its intended use supporting the new lighting upgrades for not less than the next 20-year life cycle. It will build on recent modifications incorporated into the vault under previously completed projects at the airport. CONSULTANT, in coordination with their sub-consultant, AVCON, shall perform the following specific work elements:

- 1. Obtain and review available record documents for the vault.
- 2. Prepare investigation forms, and conduct visual and electrical evaluation of primary switchgear, all constant current regulators emergency generator and lighting controls to assess existing conditions of the vault, and determine whether the vault is code compliant with current NFPA criteria for safety of personnel operating in the vault. Create a photographic inventory of the airfield lighting vault equipment and facilities. Perform an overview of the existing interface from regulators to airfield lighting control system, including fiber and/or copper controls as appropriate.
- 3 Prepare a conceptual budget for the work to define the necessary tasks to upgrade or enhance the vault and vault equipment to establish the new standard equal to other new generator vaults.
- 4. Provide Airport staff with a narrative report, photos, estimate of probable construction cost, recommendations and conclusions based upon the technical review of the vault. The cost data will include standard traditional contractor markups and detailed pricing allowances used in conjunction with the HDR budgeting process.
- 5. Meet with Airport to review report.

Deliverables:

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

- Electrical vault generator report in Word and pdf format.
- Estimate of probable construction costs.

Task 2.0 Conceptual Design for Airfield Lighting Rehabilitation (30% Plans)

CONSULTANT, in coordination with their sub-consultant, AVCON, shall develop the preliminary plans necessary to achieve approximately 30% design completion of the airfield lighting rehabilitation for Taxiway's Echo, Foxtrot, Sierra, & Golf and their taxiway connectors, as well as Runways 9-27 and 13-31. Drawings will be in AutoCAD based on CITY's current CAD standards. Technical specifications, the engineering report, and other written documents will be in Word. Designs will be in accordance with Federal Aviation Administration (FAA) Regulations and Advisory Circulars, and will conform to Florida Department of Transportation (FDOT) guidelines. The engineering report will conform to a typical FAA format. Specific tasks shall consist of the following:

1. Attend a project initiation/kick-off meeting with Airport staff, HDR and others as deemed appropriate to review the project scope and schedule and establish the preliminary design goals and methods and provide meeting minutes.

- 2. Review additional record drawings, make detailed inventory and evaluation of the existing conditions including nighttime circuit verification.
- 3. Preliminary site investigation and team walk-thru of the field conditions to include electrical facilities and signage to verify existing conditions. The condition of light fixtures, base cans, and conductors will be evaluated at this time.
- 4. Prepare preliminary construction phasing plans and define construction project limits by phase.
- 5. Develop a construction safety plan concept.
- 6. Prepare draft outline of technical specifications for the project.
- 7. Prepare draft outline of the Engineer's Report.
- 8. Prepare an order of magnitude opinion of probable construction cost based on the 30% plans.
- 9. Prepare a conceptual construction schedule.
- 10. Submit conceptual plans to the CITY for review.
- 11. Conduct one (1) concept design review and coordination meetings with Airport staff.

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.
- 30% Conceptual drawings.
- Outline of Technical Specifications.
- Outline of Engineer's Report.
- Conceptual construction schedule.
- Order of Magnitude Opinion of Probable Construction Cost.
- Agenda and minutes of all meetings.

Task 3.0 – Design Development (60% Plans)

CONSULTANT, in coordination with their sub-consultant, AVCON, shall continue designs and contract documents to 60% completion that shall consist of construction drawings, technical specifications, and engineering report. Tasks shall consist of the following:

- 1. Prepare 60% schematic design drawings for the airfield lighting rehabilitation based on comments received from Task 2.0.
- 2. Perform preliminary quantity take off.
- 3. Prepare preliminary opinion of probable construction cost.
- 4. Prepare construction safety plan and schedule with details and notes.
- 5. Prepare draft Engineer's report.
- 6. Prepare draft technical specifications.
- 7. Submit plans, bid documents, Engineer's report, and opinion of probable construction cost to the CITY for review and comment.
- 8. 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.
- Bid Documents.
- Opinion of Probable Construction Cost and Schedule.
- Agenda and minutes of all meetings.

Task 4.0 – Contract Document Preparation (100% Plans)

CONSULTANT, in coordination with their sub-consultant, AVCON, shall complete designs and contract documents that shall 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 bid forms with final quantities.
- 5. Provide plans, construction documents, and certifications for the CITY to submit to FDOT for approval and authorization to advertise for bids.
- 6. Conduct one (1) additional 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)
 - Engineer's Report One copy signed and sealed and pdf file
 - 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
2	General Notes and Drawing Index
3	Quantity Summary & Utility Contacts
4	Electrical Notes & Legend
5	Key Plan and Project Limits
6	Airfield Electrical Phasing and Temporary Circuiting
7	Airfield Lighting, Circuiting, and Signage Plan (14 Sheets)
8	Lighting Installation Details (2 Sheets)
9	Cable Connections and Details (2 Sheets)
10	Airfield Lighting and Sign Details (2 Sheets)

Task 5.0 – Bidding Phase Services

CONSULTANT shall assist the CITY in advertising and bidding the project. CONSULTANT shall perform the following tasks:

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

PROJECT ASSUMPTIONS

- 1. Plans 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.
- 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 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 as-built drawings of utilities, fiber optic and previous construction plans as required for the project upon which the CONSULTANT may rely.

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 inclusive within 70 working days of written Notice to Proceed, not inclusive of CITY review time. Services for Task 5 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 Federal Aviation Administration (FAA) and/or the Florida Department of Transportation (FDOT) under the applicable federal grant and/or Joint Participation Agreement (JPA), 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. 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	T = = 1, T ¹ (1),	Lab	Tatal		
	Task Title	Consultant	Sub consultant	Total	
1	Elec. Vault Assessment	\$0.00	\$13,130.00	\$13,130.00	
2	Conceptual Design (30%)	\$0.00	\$15,235.00	\$15,235.00	
3	Design Development (60%)	\$0.00	\$29,020.00	\$29,020.00	
4	Contract Documents (100%)	\$0.00	\$19,815.00	\$19,815.00	
5	Bidding Services	\$0.00	\$2,780.00	\$2,780.00	
			TOTAL	\$ 79,980.00	

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

CITY CONTACTS

Requests for payments should be directed to City of Fort Lauderdale Accounts Payable via email to <u>AcctsPayable@FortLauderdale.gov</u>. 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, 4th 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 Phone: 954-647-4542 Fax: 954-233-4953

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

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

WITNESSES:

Print Name:

CITY OF FORT LAUDERDALE

By:____

Lee R. Feldman, City Manager

Print Name:

JONDA K. JOSEPH, City Clerk

Approved as to form:

Rhonda Montoya Hasan Assistant City Attorney

CONSULTANT:

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

By:___

Charles T. Sinclair Sr. Vice President

Print Name:

WITNESESS:

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

Position:	PROJECT		SENIOR		JUNIOR		CLERICAL			TOTAL	
AVCON	MANA	GER	ENGINEER		ENGINEER						
Rate (\$/Hour):	\$150		\$125		\$85		\$50				Avg. Hourly
	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Rate
Task 1.0											
Obtain and review available record documents for the vault;	2	\$300	2	\$250	8	\$680		\$0	12	\$ 1,230.0	0 \$103
Prepare investigation forms, and conduct visual condition, code											
compliance review, and electrical evaluation of primary switchgear, al											
CCR's, emergency generator and lighting controls to assess existing											
conditions of the vault. Create a photographic inventory of the airfield lighting vault equipment and facilities. Perform an overview of the											
existing interface from regulators to airfield lighting control system											
including fiber and/or copper controls as appropriate.	2	\$300	20	\$2,500	20	\$1,700		\$0	42	\$ 4,500.0	0 \$107
						. ,				. ,	
Prepare a conceptual budget for the work to define the necessary	r										
tasks to upgrade or enhance the vault and vault equipment to											
establish the new standard equal to other new generator vaults.	1	\$150	8	\$1,000	8	\$680		\$0	17	\$ 1,830.0	0 \$108
										,	
Provide a narrative report, photos, estimate of probable costs											
recommendations and conclusions based upon the technical reviews	5										
presented in the vault section of our project report. The cost data will											
include standard traditional contractor markups and detailed pricing allowances used in conjunction with the HDR budgeting process.	9										
anowances used in conjunction with the HDR budgeting process.	2	\$300	16	\$2,000	32	\$2,720		\$0	50	\$ 5,020.0	0 \$100
Attend one (1) Review Team Meeting to present CONSULTANT's report and receive comments.	2	\$300	2	\$250		\$0		\$0	4	\$ 550.0	0 \$138
		φ300	2	φ230		ψU		ψυ		φ 350.0	\$150
Sub-Total - Task 1.0	9	\$1,350	48	\$6,000	68	\$5,780	0	\$0	125	\$13,1	\$105
	, i	\$1,000	40	\$0,000		\$0,100		\$		\$10,1	\$100
Task 2.0											
1994 N. 4-9- CONTRACTOR CONT			*****************	**********		*************	*****	***********			
Coordinate and attend a project initiation/kick-off meeting with CITY											
staff and others as deemed appropriate. The meeting shall review the											
project scope and schedule and establish the preliminary design											
goals and methods. The meeting agenda shall be developed and distributed 48 hours in advance. The minutes from the meeting shall											
be prepared and distributed to each attendee within 48 hours following											
the meeting.	2	\$300	2	\$250	2	\$170		\$0	6	\$ 720.0	0 \$120
Review additional record drawings, make detailed inventory and evaluation of the existing conditions pertinent to the PROJECT; the											
data from record drawings of previous related projects shall be											
collected, reviewed, compiled and summarized. HDR shall provide											
prepared base files based on the civil portions of the project.	4	\$600	8	\$1,000	8	\$680		\$0	20	\$ 2,280.0	0 \$114
Prepare project preliminary phasing plans on base map at appropriate											
scale showing electrical work and all pertinent existing electrica											
facilities both within and immediately adjacent to construction limits											
as appropriate for referencing construction sequencing. Include											
applicable notes to contractor concerning required phasing and staging during construction.			8	\$1,000	16	\$1,360		\$0	24	\$ 2,360.0	0 \$98
Develop a construction safety plan concept.			8	\$1,000	8	\$680		\$0	16	\$ 1,680.0	0 \$105
Prepare 30% schematic drawings.	2	\$300	7	\$875	18	\$1,530		\$0	27	\$ 2,705.0	0 \$100
Prepare a list of technical specifications and special provisions for the											
project.			4	\$500	4	\$340		\$0	8	\$ 840.0	0 \$105
Conduct an in-house quality control review of the preliminary design			L		L						+
plans, specifications list, and 30% estimate of probable cost.	4	\$600	4	\$500	4	\$340	1	\$0	12	\$ 1,440.0	0 \$120
	1										
Prepare initial draft of Engineer's Report	1	\$150	4	\$500	8	\$680		\$0	13	\$ 1,330.0	0 \$102
					-			1			
Prepare draft of construction schedule for review by CITY	1	\$150	4	\$500	8	\$680		\$0	13	\$ 1,330.0	0 \$102
Conduct one (1) Project Coordination meeting with airport staff	2	\$300	2	\$250				\$0	4	\$ 550.0	0 \$138
conduct one (1) Project coordination meeting with anport stan	2	φ000	2	\$200				φ0			
	2	4000	2	\$230				40		¢ 000.0	
Sub-Total Task 2.0	16		51	\$6,375	76	\$6,460	0		143		

Position:	PROJECT MANAGER		SENIOR ENGINEER		JUNI	OR	CLERI	CAL	TOTAL		
AVCON					ENGINEER						
Rate (\$/Hour):	\$150		\$125		\$85		\$50				Avg. Hourly
	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Rate
Task 3.0											
Prepare 60% schematic drawings.	13	\$1,950	42	\$5,250	108	\$9,180		\$0	163	\$ 16,380.00	\$100
Perform Preliminary Quantity Takeoff			8	\$1,000	16	\$1,360	8	\$400	32	\$ 2,760.00	\$86
Prepare Preliminary opinion of probable construction cost			4	\$500	4	\$340	4	\$200	12	\$ 1,040.00	\$87
Prepare construction safety plan and schedule with details and notes	4	\$600	4	\$500	8	\$680		\$0	16	\$ 1,780.00	\$111
Prepare Draft of Engineer's Report	2	\$300	4	\$500	8	\$680	4	\$200	18	\$ 1,680.00	\$93
Prepare draft technical specifications	2	\$300	4	\$500	16	\$1,360		\$0	22	\$ 2,160.00	\$98
Submit plans, bid documents, Engineer's report and opinion of probable cost to the CITY for review and comment		\$0	8	\$1,000	8	\$680	8	\$400	24	\$ 2,080.00	\$87
Conduct one (1) design review meeting(s) with Airport staff and address comments.	4	\$600	4	\$500	4	\$340		\$0	12	\$ 1,440.00	\$120
Sub-Total Schematic Task 3.0	25	\$3,750	78	\$9,750	172	\$14,620	24	\$1,200	299	\$ 29,320.00	\$98
Task 4:0											
Prepare 100% construction drawings.	7	\$1,050	21	\$2,625	54	\$4,590		\$0	82	\$ 8,265.00	\$101
Finalize Special Provisions, Bid Forms, Technical Specifications			8	\$1,000	16	\$1,360	16	\$800	40	\$ 3,160.00	\$79
Provide final Engineer's Report to be prepared in accordance with the Florida Department of Transportation's (Aviation Office) Guidelines for Plan Development, latest edition.			4	\$500	8	\$680	4	\$200	16	\$ 1,380.00	\$86
Finalize Bid Forms with Final Quantities			4	\$500	8	\$680	8	\$400	20	\$ 1,580.00	\$79
Conduct an in-house quality control review of the final design plans, specifications, and 100% estimate of probable cost and Engineer's Report	4	\$600	4	\$500	4	\$340		\$0	12	\$ 1,440.00	\$120
Submit plans, bid documents, Engineer's report and opinion of probable cost to the CITY for review and comment	2	\$300	2	\$250	8	\$680	4	\$200	16	\$ 1,430.00	\$89
Attend one (1) additional Meeting to receive CITV's review comments on the 100% documents, and provide written responses to comments received at the meeting.		\$0	8	\$1,000	16	\$1,360	4	\$200	28	\$ 2,560.00	\$91
Sub-Total Task 4.0	13	\$1,950	51	\$6,375	114	\$9,690	36	\$1,800	214	\$ 19,815.00	\$93
Task 5.0											
Prepare for and conduct one pre-bid conference in conjunction with the CITY staff to outline the project and provide minutes.	4	\$600	4	\$500		\$0		\$0	8	\$ 1,100.00	\$138
Respond to bidder's questions in the form of written addenda as needed to interpret, clarify, or expand the Bid Documents.	2	\$300	4	\$500	8	\$680	4	\$200	18	\$ 1,680.00	\$93
Sub-Total Task 5.0	6	\$900	8	\$1,000	8	\$680	4	\$200	26	\$ 2,780.00	\$107

Task Order No. 3 P11997 HDR Engineering, Inc.

EXHIBIT B



PROJECT LOCATION