

**CROSSVILLE MEMORIAL AIRPORT  
RUNWAY LIGHTING  
Work Authorization Number 06-12**

Date: October 17, 2012

Atkins No. 100000000.00  
(Project Identification No.)

It is agreed to undertake the following work pursuant to the terms and condition of the Agreement For Professional Airport Services between the City of Crossville (OWNER) and Atkins (ENGINEER) dated the 10<sup>th</sup> day of June 2008, and which is incorporated herein by reference and whose terms and conditions shall govern and control this Contract unless stated herein.

---

**Scope of Services:**

The ENGINEER shall provide professional services for the *Runway Lighting* at the Crossville Memorial Airport (the Project). Services of the ENGINEER are more particularly described in Attachment A, "Engineer's Scope of Services".

**Time of Performance:**

The ENGINEER shall immediately begin work upon receipt of a fully executed Work Authorization and submit the Project Deliverables to the OWNER and the Tennessee Department of Transportation – Aeronautics Department (TAD) no later than 60 calendar days following receipt of an executed Work Authorization. In conducting the work the ENGINEER shall keep the OWNER informed as to the status of the project, anticipated activities, schedule changes, and any known problem areas by submitting weekly project progress reports. Submittal of final Project Deliverables shall be no later than 30 calendar days following receipt of OWNER/TAD comments.

**Compensation:**

The OWNER shall compensate the ENGINEER under the herein described Scope of Services a lump sum amount of **fifty-two thousand eight hundred and forty dollars (\$52,840.00)** for Basic Services as estimated by the ENGINEER and set forth in Attachment B-1, "Engineer's Estimate of Compensation". Progress payments to the ENGINEER for Basic Services shall be by an estimate of percent complete.

In addition the OWNER shall compensate the ENGINEER an amount not to exceed **seventeen thousand one hundred and sixty dollars (\$17,160.00)** for Special Services as estimated by the

ENGINEER and set forth in Attachment B-2, "Engineer's Estimate of Compensation". Payments to the ENGINEER for Special Services shall be made monthly and include charges accumulated the preceding month.

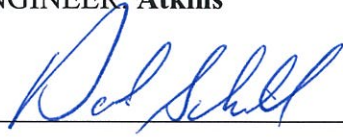
It is agreed that the ENGINEER's Special Services compensation is based on an estimate of the Projects construction duration and associated efforts of the ENGINEER. In the event the construction duration is longer, or requires effort beyond that which is estimated herein the ENGINEER shall be due consideration of additional compensation.

Agreed as to Scope of Services, Time of Performance and Compensation:

OWNER: **City of Crossville**

ENGINEER: **Atkins**

\_\_\_\_\_

  
\_\_\_\_\_

Date: \_\_\_\_\_

Date: 10/17/12

## **ATTACHMENT A**

### **ENGINEER'S SCOPE OF SERVICES**

#### **WORK AUTHORIZATION NO. 06-12 RUNWAY LIGHTING CROSSVILLE MEMORIAL AIRPORT October 17, 2012**

#### **PROJECT DESCRIPTION AND GENERAL SCOPE OF SERVICES**

Due to the age and condition of the existing runway lighting system at the Airport, this Project is intended replace the existing high intensity edge lighting system. The Project design will be based on applicable FAA Advisory Circulars and compliance with the standards for aircraft meeting FAA Airport Reference Code (ARC) B-II.

Other project element considerations or assumptions include:

- The existing runway lighting will remain a high intensity edge lighting system to maintain existing approach minimums.
- Existing base cans will be reused whenever possible to maximize project funding.
- A new home run will be installed to ensure the entire system is functioning as intended.
- The existing regulator is in good condition as it is intended to be reused under this project.
- Guidance signs will be installed.
- Drains will be provided at existing edge lighting cans where grades allow to aid in keeping the edge lighting system dry.
- Edge lighting will be placed in conduit to provide for ease of future maintenance.
- The remote pilot controlled radio system will be replaced under this project.
- Project will be phased to minimize disruptions to existing airport operations.

The Scope of Services encompassed under this Work Authorization includes Basic Services related to Preliminary Design, Final Design, Bid and Award, Construction Administration, and Close-Out. Special Services of the ENGINEER for Resident Project Representation and Materials Acceptance Testing are included within this Work Authorization.

The ENGINEER shall perform professional services as hereinafter stated that include customary civil and materials testing incidental thereto.

## I. BASIC SERVICES

### 1. PRELIMINARY DESIGN PHASE

- A. Consult with OWNER to clarify and define OWNER's requirements for the Project and review available data.
- B. Advise OWNER as to the necessity of OWNER's providing or obtaining from others data or services required for the Project other than those provided for herein by the ENGINEER and act as OWNER's representative in connection with any such services.
- C. Provide analyses of OWNER's needs to perform planning surveys, site evaluations and comparative studies of prospective alternatives and solutions.
- D. Prepare schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate clearly the considerations involved and the solutions available to OWNER and setting forth ENGINEER's findings.
- E. Examine viable alternatives and advise the OWNER of those that are compatible with the budget and schedule requirements.
- F. Attend a pre-design conference/project kick-off meeting at the Project site with the OWNER, State, and other interested parties to review the requirements and schedule for the Project.
- G. Perform field reconnaissance/investigation of the Project site to determine the location, extent and method of the grading effort and geotechnical investigations.
- H. Prepare preliminary design documents consisting of final design criteria, preliminary drawings and outline specifications.
- I. Based on the information contained in the preliminary design documents and data from site investigations, submit an updated opinion of Project quantities and an Engineer's opinion of probable construction cost.
- J. Furnish three (3) copies of the above preliminary design documents and present and review them with OWNER and state.

### 2. FINAL DESIGN PHASE

- A. OWNER will review and accept preliminary design documents as to concept. On the basis of the acceptance of the preliminary design documents ENGINEER will

prepare for incorporation in the Contract Documents final drawings to show the character and extent of the Project (hereinafter called "Drawings") and all related Specifications.

- B. Furnish to OWNER such documents and design data as may be required for, and assist in the preparation of, the required documents so that OWNER may apply for approvals of such governmental authorities as have jurisdiction over design criteria applicable to the Project, and assist in obtaining such approvals by participating in submissions to and negotiations with appropriate authorities.
- C. Advise OWNER of any adjustments to the latest Project quantities caused by changes in scope or design requirements of the Project and furnish a revised opinion of probable quantities and opinion of probable construction cost based on the Drawings and Specifications.
- D. Prepare bid forms for review and approval as to form and concept by OWNER, its legal counsel and other advisors. As appropriate, the agreement and bond forms, general provisions, special provisions, (invitations to bid and instructions to bidders will be provided to the ENGINEER by the OWNER). All of the above documents, plus bid documentation, bond(s), and the drawings and specifications constitute the Contract Document.
- E. Furnish five copies of the above documents and present and review them with OWNER, State, and other interested parties.

3. BID AND AWARD PHASE

- A. Assist OWNER in advertising for and obtaining bids from prime contractors for construction, materials, equipment and services for the Project.
- B. Assist OWNER in conducting and attend a pre-bid conference at the Project site.
- C. Consult with and advise OWNER as to the acceptability of subcontractors and other persons and organizations proposed by the prime contractor(s) (hereinafter called "Contractor(s)") for those portions of the work as to which such acceptability is required by the bidding documents.
- D. Consult with and advise OWNER as to the acceptability of substitute materials and equipment proposed by Contractor(s) when substitution prior to the award of contracts is allowed by the bidding documents.
- E. Assist OWNER in evaluating bids or proposals and in assembling and awarding contracts.
- F. Recommend to the OWNER based on ENGINEER's review of the bids, the Contractor that is most responsive to the Project requirements.
- G. Prepare conformed documents incorporating addendum(s), if any issued during the bidding phase, and final contract documents to be issued for construction.

4. CONSTRUCTION ADMINISTRATION PHASE

During the Construction Phase ENGINEER shall:

- A. Consult with and advise OWNER and act as his representative as provided in the Contract Documents.
- B. Make visits to the Project site as appropriate to the various stages of construction to observe as an experienced and qualified design professional the progress and quality of the executed work of Contractor(s) and to determine in general if such work of Contractor(s) is proceeding in accordance with the Contract Documents. Each visit will result in a written evaluation that will be included in a report to the OWNER. ENGINEER shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by Contractor(s) or the safety precautions and programs incident to the work of Contractor(s). ENGINEER shall work in conjunction with Resident Project Representative to endeavor to determine that the

completed work of Contractor(s) will conform to the Contract Documents, but ENGINEER shall not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Documents. On the basis of on-site observations, ENGINEER shall keep OWNER informed of the progress of the work, shall notify OWNER immediately upon his determination of the Contractor's failure to follow the Contract Documents, and shall disapprove or reject work failing to conform to the Contract Documents and notify OWNER of said disapproval.

- C. Review and approve (or take other appropriate action in respect of) Shop Drawings as that term is defined in the Contract Documents and samples, the result of tests and inspections and other data which each Contractor is required to submit, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents (Such review and approval or other action shall not extend to means, methods, sequences, techniques or procedures of construction or to safety precautions and programs incident thereto); determine the acceptability of substitute materials and equipment proposed by Contractor(s); and receive and review (for general content as required by the Specifications) maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection which are to be assembled by Contractor(s) in accordance with the Contract Documents. It is agreed to here that the ENGINEER will not be required to review more than two submittals from the Contractor for each item requiring a submittal without additional compensation.
- D. Value engineering evaluations will be considered a submittal for that particular item and evaluation will be limited to review of conformance to design concept and acceptability of the proposed item to the Project and all of its parts in the same manner as any other submittal.
- E. Issue necessary interpretations and clarifications of the Contract Documents and in connection therewith prepare change orders as required; notify OWNER of the need for any special inspection or testing of the work and advise OWNER of the cost thereof and; upon approval, to require special inspection or testing of the work; act as initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder and make recommendations on all claims of Contractor(s) relating to the acceptability of the work or the interpretation of the

requirements of the Contract Documents pertaining to the execution and progress of the work. ENGINEER shall not be liable for the results of any such interpretations or recommendations rendered by him in good faith.

- F. Based on ENGINEER's on-site observations as an experienced and qualified design professional, and from information provided by the Resident Project Representative and/or survey data, determine the amounts owing to Contractor(s) and recommend in writing payments to Contractor(s) in such amounts. Such recommendations of payment will constitute a representation to OWNER, based on such observations and review, that the work has progressed to the point indicated, and that, to the best of ENGINEER's knowledge, information and belief, the quality of such work is in accordance with the Contract Documents (subject to a final evaluation upon completion, to the results of any subsequent tests called for in the Contract Documents, and to any qualifications stated in his recommendation), and that payment of the amount recommended is due Contractor(s).
- G. Conduct an inspection to determine if the Project is substantially complete and a final inspection to determine if the work has been completed in accordance with the Contract Documents and if each Contractor has fulfilled all of his obligations thereunder so that ENGINEER may recommend, in writing, final payment to the Contractor(s) and may give written notice to OWNER and the Contractor(s) that the work is acceptable (subject to any conditions therein expressed), but any such recommendation and notice shall be subject to the limitations expressed in paragraph 5F above.
- H. Prepare for OWNER a set of reproducible record Drawings showing as-constructed conditions of the Project based on field plans provided by the Contractor and Resident Project Representative.
- I. ENGINEER shall not be responsible for the acts or omissions of any Contractor, or subcontractor, or any of the Contractor(s)' or subcontractors' agents or employees or any other persons (except ENGINEER's own employees and agents) at the site or for otherwise performing any of the Contractor(s)' work; however, nothing contained in the above paragraphs 5A through 5H, inclusive, shall be construed to release ENGINEER from liability for failure to properly perform duties undertaken by him in the Contract Documents.



5. CLOSE-OUT PHASE

During the Close-Out Phase ENGINEER shall:

- A. Coordinate with the contractor to gather final As-Built information and close-out documents.
- B. Consolidate all close-out documents and incorporate contractor As-Built information into a final set of As-Built construction documents.
- C. Assist the Owner in filling out all necessary grant close-out forms required by the state or the FAA.

**II. ADDITIONAL SERVICES OF THE ENGINEER**

1. RESIDENT PROJECT REPRESENTATIVE: - Limitation of Authority:

- A. Shall not authorize any deviation from the contract documents or substitution of materials or equipment.
- B. Shall not exceed limitations of OWNER or ENGINEER as set forth in the contract documents.
- C. Shall not undertake any of the responsibilities of Contractors, Subcontractors, or Contractor's superintendents.
- D. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences, or procedures of construction unless such advise or directions are specifically required by the contract documents.
- E. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the work.
- F. Shall not accept shop drawings or sample submittals from anyone other than Contractor.
- G. Shall not authorize the OWNER to occupy the Project in whole or in part.
- H. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized.

### III. OWNER'S RESPONSIBILITIES

OWNER shall:

- A. Provide all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacities, and performance requirements, flexibility and expendability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the drawings and specifications.
- B. Assist ENGINEER by placing at his disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.
- C. Furnish to ENGINEER upon his request, as required for performance of ENGINEER's Scope of Services, any existing available data in the OWNER's possession prepared by the OWNER or by others, including without limitation core borings, probes and subsurface explorations, hydrographic surveys, laboratory tests and inspections of samples, materials and equipment; appropriate professional interpretations of all of the foregoing; environmental assessment and impact statements; property, boundary, easement, right-of-way, topographic and utility surveys; property description; zoning, deed and other land use restriction; and other special data or consultations, all of which ENGINEER may rely upon in performing his services.
- D. Arrange for access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform his services.
- E. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by ENGINEER, obtain advice as OWNER deems appropriate and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER.
- F. Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project with the assistance of the ENGINEER and pay any permit fees.

- G. Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such legal services as OWNER may require pertaining to the Project.
- H. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of any development that affects the scope or timing of ENGINEER's services, or any defect in the work of Contractor(s).
- I. Bear all costs incident to compliance with the requirements of this Section.

**END OF ATTACHMENT A**

ATTACHMENT B-1

ENGINEER'S ESTIMATE OF COMPENSATION  
BASIC SERVICES  
WORK AUTHORIZATION NO. 06-12  
RUNWAY LIGHTING  
CROSSVILLE MEMORIAL AIRPORT

October 17, 2012

**1. PRELIMINARY DESIGN**

<u>Labor</u>	<u>Hours</u>	<u>Labor Rate</u>	<u>Total</u>
Project Manager	20	\$140.00	\$2,800.00
Engineer	90	\$85.00	\$7,650.00
Sr. CADD Technician	80	\$75.00	\$6,000.00
Administrative Assistant	20	\$45.00	\$900.00
	Subtotal Labor:		\$17,350.00
 <u>Expenses</u>			
Travel to / from Airport to Attend Pre Design Meeting			\$150.00
Printing, Copying, Postage & Shipping:			\$150.00
	Subtotal Expense:		\$300.00
	<b>Sub-Total Preliminary Design Phase:</b>		<b>\$17,650.00</b>

**2. FINAL DESIGN**

<u>Labor</u>	<u>Hours</u>	<u>Labor Rate</u>	<u>Total</u>
Project Manager	20	\$140.00	\$2,800.00
Engineer	90	\$85.00	\$7,650.00
Sr. CADD Technician	80	\$75.00	\$6,000.00
Administrative Assistant	20	\$45.00	\$900.00
	Subtotal Labor:		\$17,350.00
 <u>Expenses</u>			
Travel to / from Airport to Attend Design Review Meeting			\$150.00
Printing, Copying, Postage & Shipping			\$150.00
	Subtotal Expense:		\$300.00
	<b>Sub-Total Final Design Phase:</b>		<b>\$17,650.00</b>

ENGINEER'S ESTIMATE OF COMPENSATION  
 BASIC SERVICES  
 WORK AUTHORIZATION NO. 06-12  
 RUNWAY LIGHTING  
 CROSSVILLE MEMORIAL AIRPORT

October 17, 2012

**3. BID AND AWARD PHASE**

<u>Labor</u>			
Project Manager	10	\$140.00	\$1,400.00
Engineer	24	\$85.00	\$2,040.00
Administrative Assistant	4	\$45.00	\$180.00
	Subtotal Labor:		<u>\$3,620.00</u>

<u>Expenses</u>	
Travel to / from Airport to Attend Pre Bid	\$150.00
Printing (12 sets of Bid Plans), Copying, Postage & Shipping	\$570.00
	Subtotal Expense: <u>\$720.00</u>

**Sub-Total Bid and Award Phase: \$4,340.00**

**4. CONSTRUCTION ADMINISTRATION**

<u>Labor</u>	<u>Hours</u>	<u>Labor Rate</u>	<u>Total</u>
Project Manager	20	\$140.00	\$2,800.00
Engineer	60	\$85.00	\$5,100.00
Sr. CADD Technician	0	\$75.00	\$0.00
Administrative Assistant	30	\$45.00	\$1,350.00
	Subtotal Labor:		<u>\$9,250.00</u>

<u>Expenses</u>	
Travel to / from Airport (pre-construction meeting):	\$150.00
Progress Meetings (assume 2 trips)	\$300.00
Travel to / from Airport (closeout/final inspection):	\$150.00
Printing (7 sets of Construction Plans), Copying	\$350.00
	Subtotal Expense: <u>\$950.00</u>

**Sub-Total Construction Administration Phase: \$10,200.00**

**ENGINEER'S ESTIMATE OF COMPENSATION  
BASIC SERVICES  
WORK AUTHORIZATION NO. 06-12  
RUNWAY LIGHTING  
CROSSVILLE MEMORIAL AIRPORT**

**October 17, 2012**

**5. CLOSE-OUT PHASE**

<u>Labor</u>	<u>Hours</u>	<u>Labor Rate</u>	<u>Total</u>
Project Manager	4	\$140.00	\$560.00
Engineer	16	\$85.00	\$1,360.00
Sr. CADD Technician	12	\$75.00	\$900.00
Administrative Assistant	4	\$45.00	\$180.00
	Subtotal Labor:		\$3,000.00
	Sub-Total Close-out Phase:		\$3,000.00
	<b>TOTAL LUMP SUM COMPENSATION</b>		<b>\$52,840.00</b>

ATTACHMENT B-2

ENGINEER'S ESTIMATE OF COMPENSATION  
SPECIAL SERVICES  
WORK AUTHORIZATION NO. 06-12  
RUNWAY LIGHTING  
CROSSVILLE MEMORIAL AIRPORT

October 17, 2012

			<u>Total</u>
<b><u>3. RESIDENT PROJECT REPRESENTATIVE</u></b>			
<u>Labor</u>	<u>Hours</u>	<u>Labor Rate</u>	<u>Total</u>
RPR IV *	240	\$65.00	\$15,600.00
Adminstative Fee (10%)			\$1,560.00
* Assumes 30 calendar day construction schedule at 8 hrs / day			
Sub-Total Full-time Res. Project Representative			\$17,160.00
<b><u>TOTAL NOT-TO-EXCEED COMPENSATION</u></b>			<b><u>\$17,160.00</u></b>