

## CITY COUNCIL MEMORANDUM

### AGENDA ITEM

**BID RECOMMENDATION - BID NO. 16-26,  
RUNWAY END IDENTIFIER LIGHT (REIL)  
SYSTEM INSTALLATION AT SKYLARK FIELD**

### ORIGINATING DEPARTMENT

**Aviation**

### BACKGROUND INFORMATION

Federal Aviation Administration (FAA) grant assurances require the City of Killeen maintain the runway protection zone (RPZ) of Skylark Field in such a manner as to not allow the creation of obstructions to aerial navigation for aircraft approaching or departing the runway.

In 1977, the FAA installed a localizer instrument landing system and a Medium Intensity Approach Lighting System (MALS) at what was then known as Killeen Municipal Airport. Runway Alignment Indicator Lights (RAIL) and a glide slope transmitter were added in 1984 and 1986, respectively. The combined MALS and RAIL is known as a MALSR. The sum of these provide a necessary component to the precision instrument landing system (ILS) that allows aircraft to land with visibility as low as three-fourths of a mile. All this equipment was paid for, installed, and maintained by the FAA at no cost to the City of Killeen. The original Memorandum of Agreement between the FAA and the City of Killeen included provisions that the City would not erect, or allow to be erected, any structure or obstruction that would interfere with the safe and proper operation of equipment installed by the FAA.

On January 26, 2010, the City Council approved and authorized the Pass-Through Toll Agreement between the Texas Department of Transportation (TxDOT) and the City of Killeen to construct an overpass at Rosewood Drive and to make roadway improvements to FM 2410.

It was known at the time the Rosewood project would elevate the US 190 roadway surfaces by approximately sixteen feet within a portion of the RPZ at the approach end of Runway 01 at Skylark Field. Initial aeronautical studies determined the increased elevation would meet minimum obstacle clearance standards for visual operations to Runway 01, but determined there would be conflicting issues with the ILS system and the MALSR (approach lights) which would need to be further studied and resolved. Funding was identified and approved within the Rosewood project to address the mitigation issues to the Airport caused by the highway work.

A number of studies completed by the FAA and various third parties determined the operational parameters of both the MALSR and the ILS glide slope component would be compromised and had to be replaced with suitable systems that would preserve the capability of the Airport to land aircraft during reduced visibility conditions.

Negotiation with the FAA proceeded with the intent of replacing the original ILS system at the expense of the City. After several months of negotiation, this solution proved economically prohibitive. Eventually, it was determined that a GPS-based instrument approach procedure

could be developed by the FAA to replace the function of the ILS system. This new approach procedure became effective on September 15, 2016.

The MALSR approach lights were initially intended to be replaced with a new updated approach lighting system. However, during design, it was determined that approximately 300' of critical runway length would be lost in order to adapt this new lighting system to the runway. Further design investigation determined that installation of a Runway End Identifier Light (REIL) system would be a suitable replacement for the MALSR and could provide similar safety functions to aircraft/aircrew landing during reduced visibility conditions.

On May 24, 2016, Council approved a professional services contract with Garver, LLC to perform the professional services associated with the design, bidding, and construction support for the REIL system.

### **DISCUSSION/CONCLUSION**

The request for bids for the installation/construction of the REIL system was advertised in the Killeen Daily Herald and posted on the City, Demand Star, and Ion Wave web sites. A non-mandatory pre-bid conference was conducted on site at Skylark Field on August 31, 2016, that was attended by two potential bidders. Bids were due on September 14, 2016; the three bids received are summarized in the following table:

<b>Bidder</b>	<b>Bid Amount</b>
F & W Electrical Contractors, Inc. Floresville, TX	\$54,453.00
Rural Electric, Inc. Mesa, AZ	\$73,950.00
Prater Electric, LLC Denton, TX	\$84,590.00

The bids were evaluated by representatives of Garver, LLC, the engineer of record, on behalf of staff. It was determined the bid from F&W Electrical Contractors, Inc. in the amount \$54,453.00 was the lowest responsive and responsible bid for this project. The engineer's estimate of cost for the construction phase of the project was \$65,500.

### **FISCAL IMPACT**

Funding for this project is available in account number 341-3490-800.58-23 US 190/ROSEWOOD/FM 2410. The remaining balance in this account is \$239,557 prior to the deduction of this project.

### **RECOMMENDATION**

City Council award a construction contract for the installation of the REIL system at Skylark Field to F&W Electrical Contractors, Inc. in the amount of \$54,453.00. Additionally, that it authorize the City Manager to execute all necessary contract documents and all change orders or supplemental agreements for the project within the amounts set by state and local law.