

## Legislation Details (With Text)

**File #:** BILL NO. 17-82  
**Name:**  
**Type:** Other Business - Ordinance  
**Status:** Passed  
**File created:** 3/6/2017  
**In control:** City Council - Regular Session  
**On agenda:** 4/6/2017  
**Final action:** 4/6/2017  
**Title:** AN ORDINANCE AUTHORIZING THE EXECUTION OF ADDENDUM NO. 1 TO AN AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND HDR ENGINEERING, INC. FOR THE DESIGN OF THE SCADA RADIO COMMUNICATIONS SYSTEM IN THE AMOUNT OF \$103,108 AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AND EXECUTE AN AGREEMENT FOR THE SAME WITH HDR ENGINEERING, INC BY AND ON BEHALF OF THE CITY OF LEE'S SUMMIT, MISSOURI.

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** 1. Ordinance, 2. 2016-042-1 Addendum No 1, 3. Exhibit A - Radio System Scope

Date	Ver.	Action By	Action	Result
4/6/2017	2	City Council - Regular Session	adopted and numbered	Pass

AN ORDINANCE AUTHORIZING THE EXECUTION OF ADDENDUM NO. 1 TO AN AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND HDR ENGINEERING, INC. FOR THE DESIGN OF THE SCADA RADIO COMMUNICATIONS SYSTEM IN THE AMOUNT OF \$103,108 AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AND EXECUTE AN AGREEMENT FOR THE SAME WITH HDR ENGINEERING, INC BY AND ON BEHALF OF THE CITY OF LEE'S SUMMIT, MISSOURI.

Key Issues:

- The current SCADA communications system is in need of replacement as AT&T is providing a reduced level of support and reliability for the leased copper communication lines.
- The Water Utilities Department will spend nearly \$450,000 this year on the leased copper lines.
- The Water Utilities Department is scheduled to move into the new facility this fall and AT&T has indicated it will not relocate the leased copper line service to the new facility.
- The Water Utilities Department engaged HDR Engineering, Inc to create a SCADA Master Plan which evaluated the future needs of our SCADA program as well as various methods of communications.
- HDR reviewed several possible options for communicating with the remote sites and determined that radio communications are the most cost effective and reliable way to provide this communication.
- The radio system will be augmented with fiber connections at the largest facilities to support the increased level of data and opportunity for expansion at those sites.
- This contract will fund the full design of the SCADA communications system as recommended in the SCADA Master Plan

Proposed City Council Motion:

FIRST MOTION: I move for a second reading of AN ORDINANCE AUTHORIZING THE EXECUTION OF ADDENDUM NO. 1 TO AN AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND HDR ENGINEERING, INC. FOR THE DESIGN OF THE SCADA RADIO COMMUNICATIONS SYSTEM IN THE AMOUNT OF \$103,108 AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AND EXECUTE AN AGREEMENT FOR THE SAME WITH HDR ENGINEERING, INC BY AND ON BEHALF OF THE CITY OF LEE'S SUMMIT, MISSOURI.

SECOND MOTION: I move for approval of AN ORDINANCE AUTHORIZING THE EXECUTION OF ADDENDUM NO. 1 TO AN AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND HDR ENGINEERING, INC. FOR THE DESIGN OF THE SCADA RADIO COMMUNICATIONS SYSTEM IN THE AMOUNT OF \$103,108 AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AND EXECUTE AN AGREEMENT FOR THE SAME WITH HDR ENGINEERING, INC BY AND ON BEHALF OF THE CITY OF LEE'S SUMMIT, MISSOURI.

Background:

The SCADA System was originally constructed using AT&T leased POTs (Plain Old Telephone) lines for its communications backbone to all the remote water and waste water sites. These lines have worked well for many years but over time the utility's systems have become more complex and the data files are now larger and more numerous than ever before which is causing the lines to reach their limit at several of the larger remote sites.

To compound this issue AT&T is moving towards retiring these lines and encouraging the utility to seek other alternatives by increasing the lease rates while decreasing support. Water Utilities has been reviewing alternatives for several years to find the correct technology to replace the leased copper lines. The utility has worked with public safety to review microwave transmission, has reviewed the possibility of fiber connections, has piloted a cellular communication option and had a varieties of issues with consistency and potential costs with all of those options.

The proposed radio communications will operate a lower licensed commercial frequency in the 173-450 mhz range and provide good coverage to all the remote facilities. This type of communication has been used for years and is quite reliable and cost effective. The draw back to the use of radio frequencies is bandwidth and speed of the signal, which is why this plan will also employ the use of fiber at the larger facilities.

Presenter: Jeff Thorn, P.E. Assistant Director of Engineering Services, Lee's Summit Water Utilities

Staff Recommendation: Staff recommends approval of AN ORDINANCE AUTHORIZING THE EXECUTION OF ADDENDUM NO. 1 TO AN AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND HDR ENGINEERING, INC. FOR THE DESIGN OF THE SCADA RADIO COMMUNICATIONS SYSTEM IN THE AMOUNT OF \$103,108 AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AND EXECUTE AN AGREEMENT FOR THE SAME WITH HDR ENGINEERING, INC BY AND ON BEHALF OF THE CITY OF LEE'S SUMMIT, MISSOURI.

Committee Recommendation: The Public Works Committee March 21 meeting was cancelled for lack of quorum. This item has been approved by Chairman Mosby to be sent straight to City Council.

