

Legislation Text

File #: BILL NO. 23-229, **Version:** 1

An Ordinance approving a Sole Source Agreement for Professional Engineering Services for the Installation of Precipitation Gauges by and between the City of Lee's Summit, Missouri, and Allgeier, Martin & Associates, Inc., for an amount not to exceed \$197,000, and authorizing the City Manager to execute an agreement for the same. (PWC 11/13/23)

Issue/Request:

An Ordinance approving a Sole Source Agreement for Professional Engineering Services for the Installation of Precipitation Gauges by and between the City of Lee's Summit, Missouri, and Allgeier, Martin & Associates, Inc., for an amount not to exceed \$197,000, and authorizing the City Manager to execute an agreement for the same.

Key Issues:

- The City of Lee's Summit Public Works Department has identified potential locations that would be beneficial to install precipitation gauges.
- Public Works Engineering staff recommends contracting with Allgeier, Martin & Associates to establish a reliable precipitation gauge network.
- Under the City's Procurement Policy, the requirement of competitive bids may be waived when "a firm has significant previous or specialized knowledge on a proposed project that would result in significant and/or time savings in completion of the project".
- The Engineer has expertise and knowledge of key components utilized in setting up the precipitation gauge network.
- The City and Engineer both desire to enter into a Sole Source Agreement for Professional Engineering Services for the Installation of Precipitation Gauges (hereinafter "Agreement");
- Funding for this project is authorized from the No Tax Increase Bond Issue and associated with Emergency Preparedness.

Proposed Committee Motion:

I move to recommend to City Council approval of an Ordinance approving a Sole Source Agreement for Professional Engineering Services for the Installation of Precipitation Gauges by and between the City of Lee's Summit, Missouri, and Allgeier, Martin & Associates, Inc., for an amount not to exceed \$197,000, and authorizing the City Manager to execute an agreement for the same.

Proposed City Council Motion:

FIRST MOTION: I move for a second reading of an Ordinance approving a Sole Source Agreement for Professional Engineering Services for the Installation of Precipitation Gauges by and between the City of Lee's Summit, Missouri, and Allgeier, Martin & Associates, Inc., for an amount not to exceed \$197,000, and authorizing the City Manager to execute an agreement for the same.

SECOND MOTION: I move for adoption of an Ordinance approving a Sole Source Agreement for Professional Engineering Services for the Installation of Precipitation Gauges by and between the City of Lee's Summit, Missouri, and Allgeier, Martin & Associates, Inc., for an amount not to exceed \$197,000, and authorizing the City Manager to execute an agreement for the same.

Background:

Stormwater management has been an ongoing discussion with the City for many years. Since the passage of the 15-year extension of the Capital Improvement (CIP) Sales Tax in April of 2017, the Public Works Department has installed improvements to the public storm sewer system at 12 locations. Five of the twelve locations have the added benefit of mitigating street flooding. However, there are still locations where street flooding occurs. Street flooding impedes emergency response and poses a threat to the safety of the traveling public remain.

By 2040 Lee's Summit is projected to have a population of 140,000 with approximately 59,000 dwelling units. Much of this growth is contributed to the sale of land owned by Property Reserve Incorporated. Growth of this magnitude will bring the construction of CIP and development projects. As with any project contractors are required to follow the Stormwater Pollution Prevention Plan (SWPPP). Within every SWPPP are requirements to properly inspect, maintain, and replace erosion control measures. Erosion control measures not only protect adjacent properties, streets, and the public storm sewer system but also streams located downgradient from the development.

Through conversations with other professionals, a precipitation gauge network can be used as a warning system to prepare for immanent street flooding. Public Works Operations is already aware of locations that are susceptible to flooding. With advanced notice of rainfall amounts, staff can be proactive with their response by mobilizing crews to place barricades along the right of way ahead of flooding. Should the storm continue to progress and conditions warrant a response, barricades can be placed. A second use for the network is calibration of storm sewer projects and analysis of existing infrastructure. We are able to look at individual storm events and determine if the designed improvements are functioning as designed. Along the same lines, staff can determine the level of protection for an existing bridge or culvert. A third use for the network is with regulation of erosion control practices. One regulation with a SWPPP is that when 0.5 inches of rain or more occurs, all erosion control measures are required to be inspected and an inspection form

turned in. CIP and development inspectors can notify contractors to turn in inspection forms. City staff can ensure that erosion control measures are being maintained throughout the project.

Staff has reached out to other departments and agencies to determine if they have gauges that can also be used in our efforts. The water utilities department has three precipitation gauges. One is located at their middle big creek excess flow basin SW of 150 HWY and Ward Rd. The second one is at their facility at NE Douglas Street and NE Chipman Road. The third one is located at their facility on NE Maybrook Road just north of the Lakewood Lake dam. The Army Corp of Engineers has a precipitation gauge located at the Longview Lake dam. The Little Blue Valley Sewer District has two gauges that could benefit the City. One gauge is located at their facility at I470 and Raytown Road, and the second gauge is near the Raintree Lake dam. The City of Kansas City also reported that they have gauges throughout their jurisdiction and are shown on the stormwatch website. Potentially, Lee's Summit's gauges could be a part of stormwatch as well. Even though KC gauges do not directly benefit Lee's Summit, they do indirectly benefit us due to the fact that the dominant weather patterns for the metro are in a SW to NE trajectory. KC gauges in the Little Blue River watershed would be in line with storms coming into Lee's Summit. By having our gauges on the same website as theirs, we can be all the more informed. Each of these agencies has expressed a desire to work with and combine efforts with Lee's Summit. Staff strongly believes that our efforts to implement such a project as this is but the "tip of the iceberg" and is excited to be a part of such an endeavor.

Installation of additional gauges would be done on City owned properties. Potential candidate locations include fire stations and LS Parks department properties.

Currently, staff relies on rain gauges tied to the Wundermap. Not only are the gauges located on private properties at locations beyond our control, but also, they have proven to be unreliable. It is uncertain whether individual gauges are located in an unobstructed open space, are functioning properly, and are not clogged with debris.

The primary purpose of this project is to set up a reliable precipitation gauge network that provides coverage for the City and provides the benefits identified above. The City of Lee's Summit covers approximately 65 square miles, consisting of 14 separate watersheds. Initially, the city will meet with Allgeier Martin and Associates (AMA) engineers to evaluate the types of gauges available and determine which gauges would be most suitable, discuss project needs, and coordinate with Information Technology Department staff to determine the need for internet, power and network services based on the recommended gauges. Once the City has determined the type of gauge to proceed with, AMA will assist with purchasing, installing, tracking and analyzing data. Data sensors such as these are included in the Emergency Preparedness No-Tax Increase Bond Question, Joint Operations Facility Project scope.

Impact/Analysis:

This is the City's standard agreement between the City and a consulting engineering firm with regard to engineering services. This agreement will allow Allgeier Martin to provide engineering services to the City.

Timeline:

Start Design: December 2023

City to Purchase and install Gauges: November 2024

Finish Design: Summer 2025

Other Information/Unique Characteristics:

Staff is working with the USGS on installation of stream gauges. Allgeier Martin has established a professional working relationship with the USGS, and will provide additional benefit to the City by coordinating efforts between the installed rain gauges and stream gauges.

George Binger, Deputy Director of Public Works/City Engineer

Staff recommends approval.

Committee Recommendation: [Enter Committee Recommendation text here]