Legislation Details (With Text)

File #:	19-0651	**Version:**	1	**Name:**	Utilis Satellite Imagery
Type:	Agenda Item			**Status:**	Approved
File created:	11/19/2019			**In control:**	Public Works
On agenda:	12/3/2019			**Final action:**	12/3/2019
Title:	Consider and take action on a resolution authorizing an agreement with Utilis Inc. for Satellite Imagery Leak Detection Analysis and follow-up Acoustic Detection in an amount not to exceed $187,000 (Director of Public Works)				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	1. Data Sheet, 2. Proposed Resolution, 3. Exhibit A - Agreement with Utilis Inc_, 4. Utilis Satellite Case Study and Program Description, 5. FY20 New Program Request Form, 6. Utilis Sole Source Provider Letter				

Date	Ver.	Action By	Action	Result
12/3/2019	1	City Council	Approved	Pass

Consider and take action on a resolution authorizing an agreement with Utilis Inc. for Satellite Imagery Leak Detection Analysis and follow-up Acoustic Detection in an amount not to exceed $187,000 (Director of Public Works)

Approval of this resolution will authorize an agreement with Utilis Inc. for satellite imagery leak detention analysis and follow-up acoustic detection in an amount not to exceed $187,000.

The implementation of this new program will provide data which will help identify water leaks that otherwise would go undetected for long periods of time, contributing to Unavoidable Real Water Loss.

The water leak detection method selected is an innovative technology that utilizes propriety satellite imagery to scan broad areas of concern. Satellites orbiting the earth will be utilized to perform multiple scans of the 54 square mile boundary of League City to detect treated drinking water leaking from urban distribution and transmission network piping. Further details available in the Utilis Satellite Case Study, which is attached. The advantages of the proposed method over traditional leak detection technologies is the satellite imagery's ability to narrow down areas of concern. This allows "boots on the ground" and associated resources to be focused on the most productive potential leak locations, thus creating an opportunity for substantial savings in the most labor-intensive step (acoustic ground detection) in successful leak detection. The following cities; San Antonio, Austin, and New Braunfels are currently utilizing this technology in their on-going leak detection programs. Water leak detection is considered a "Best Practice" according to the Texas Water Development Board's list of Best Practices, to help the City reduce annual water loss revenue.

The City's 2019 revised Water Conservation Plan identified a five-year history of unavoidable real water loss totals ranging from nine (9) percent to near 15 percent. The goal of implementing the proposed water leak detection program provides an effective tool to reach the ultimate goal of a consistent five (5) to 10 percent unavoidable real water loss of the City's annual water production.

The Harris-Galveston Subsidence District (HGSD) approved the creation of a Water Conservation Grant Program. The objective of this new program is to assist in funding priority projects and programs that could include the development and implementation of residential, commercial and other best management practices, water loss control and water efficiency measures. The City is currently working through the grant application process, requesting a 50/50 cost share partnership up to the amount of ninety-three thousand five hundred dollars ($93,500). HGSD will evaluate and award

grants sometime in the 2020 calendar year. HGSD confirmed that the award can be a reimbursement of an on-going project. Due to time constraints of the grant application submission process, staff will bring the formal grant request to council for consideration sometime in the first or second quarter of the 2020 calendar year.

Attachments:
1. Data Sheet
2. Proposed Resolution
3. Exhibit A - Agreement with Utilis Inc.
4. Utilis Satellite Case Study and Program Description
5. FY20 New Program Request Form
6. Utilis Sole Sorce Provider Letter

FUNDING
{X} Funds in the amount of $187,000 are available from Water Production Department's Professional Services Account #10207300-53050 ($150,000) and Utilities System Repair and Maintenance Account #10207300-52620 ($37,000)

STRATEGIC PLANNING
{X} Develop and Maintain Infrastructure