AGENDA MEMORANDUM
Future Item for the City Council Meeting of March 19, 2019
Action Item for the City Council Meeting of March 26, 2019

DATE: March 14, 2019

TO: Keith Selman, Interim City Manager

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Master Services Agreement
Citywide Large-Size Water Line Assessment and Repairs
(Capital Improvement Program)

CAPTION:

Motion to authorize execution of a Master Services Agreement (MSA) for professional services with Lockwood, Andrews & Newnam, Inc. (LAN) of Corpus Christi, Texas for a period of one (1) year in the amount of $300,000 with two (2) optional 1-year renewals for a total contract cost of $900,000 for the Citywide Large-Size Water Line Assessment and Repairs project.

PURPOSE:

This MSA provides engineering services to develop a strategic plan of action for implementation of short and long-term improvements to existing large diameter (over 16-inches) water transmission lines throughout the City.

BACKGROUND AND FINDINGS:

There are approximately 1,700 miles of water lines throughout the City with approximately 150 miles that are defined as large diameter transmission lines. Prior to the 1980's, common pipeline materials were ferrous materials subject to corrosion such as Cast-Iron Pipe (CIP), Ductile Iron Pipe (DIP), Concrete Steel Cylinder Pressure Pipe (CSCP), and steel. Many of these lines are approaching the end of their respective design lives and lack adequate cathodic protection systems. In the 1980's, Polyvinyl Chloride (PVC) pipe and other "plastic pipe" materials were

introduced and are still widely used today for water and wastewater lines. The PVC provides equivalent strengths, operational performance, better resistance to corrosion and chemicals, reduced maintenance requirements, and typically has a longer service life.

This project addresses the aging network by evaluation and analysis of existing lines to develop a prioritization matrix to determine an overall short and long-term improvement plan based on cost effectiveness and risks. The risk analysis would include consideration for probability of failure, consequence and cost of such failure. Considerations would include key aspects such as number of customers impacted, proximity to hospital, critical and large users, road type, complexity of repair/replacement, system redundancy and other critical factors developed into a matrix for future infrastructure projects and maintenance activities.

The contract is proposed with a 3-year term for one base year plus two optional renewals at $300,000 annually and total value of $900,000. The optional renewals will be administratively authorized by the City Manager, or designee.

The assessment provides for collection of the following attributes and data:

- Physical attributes – age, size, material, linings, coatings, etc.
- Condition attributes – pipe condition, joints, valves, etc.
- Environmental attributes – soil type, condition, groundwater and corrosive qualities.
- Operational/performance data – pressure, flows, maintenance history, breaks, leaks, etc.

The assessment and engineering also include:

- Review of existing documentation; record drawings, maintenance and repair records
- Physical investigations/inspection of surface and subsurface conditions
- Testing to verify integrity of joint and pipeline
- Cathodic protection system inspection and corrosion survey (External Corrosion Direct Assessment)
- Investigations to witness excavation pipeline inspection (external and internal)
- Additional non-destructive inspection techniques to evaluate potential leakage for lines that cannot be taken out of service or are not able to be physically entered
- Provide a report with findings and recommendations
- Design repair, replacement and/or other rehab details for leaking or damaged pipe segments
- Design replacement or new sacrificial anode or impressed current cathodic protection systems

ALTERNATIVES:

1. Authorize execution of Master Services Agreement. (Recommended)
2. Do not authorize execution of Master Services Agreement. (Not Recommended)

OTHER CONSIDERATIONS:

LAN was selected for this project under RFQ 2018-01.

CONFORMITY TO CITY POLICY:

Complies with statutory requirements for professional services contracts. Conforms to FY 2019 Capital Improvement Program (CIP) Budget.

EMERGENCY / NON-EMERGENCY:

Non-Emergency

DEPARTMENTAL CLEARANCES:

Water Utilities Department

FINANCIAL IMPACT:

□ Operating □ Revenue **X Capital** □ Not applicable

Fiscal Year 2018-2019	Project to Date Expenditures (CIP only)	Current Year	Future Years	TOTALS
Budget		500,000	3,500,000	4,000,000
Encumbered / Expended Amount				
This item		**300,000**	**600,000**	**900,000**
Future Anticipated Expenditures This Project		20,000	3,080,000	3,100,000
BALANCE		180,000	-180,000	0

Fund(s): Water CIP

RECOMMENDATION:

Staff recommends awarding the Master Service Agreement to LAN of Corpus Christi, Texas.

LIST OF SUPPORTING DOCUMENTS:

Project Budget
Location Map
Presentation
Agreement