

DATE: August 9, 2022

TO: Peter Zanoni, City Manager

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Magnesium Anodes for Gas Department

CAPTION:

Motion authorizing a two-year supply agreement with International Corrosion Control, Inc., of Lewiston, New York, in an amount not to exceed \$2,375,138.00, for the purchase of magnesium anodes, used by the Gas Department to provide cathodic protection for corrosion control of underground gas pipelines with FY 2022 funding of \$296,892.24 available from the Gas Fund

SUMMARY:

This supply agreement is for the purchase of magnesium anodes for the Gas Department to provide cathodic protection for corrosion control of underground gas pipelines.

BACKGROUND AND FINDINGS:

A magnesium anode is a rod made of magnesium that is used as a sacrificial metal to protect infrastructure against corrosion. Magnesium corrodes easily. Therefore, if it is placed within a gas line system, it attracts the corrosion towards the anode and away from the gas lines and other components.

The Gas Department purchases and stocks high potential magnesium anodes and zinc spike anodes so that they are available as needed to provide cathodic protection for our existing buried gas pipelines. Cathodic protection of coated steel gas lines is necessary for preventing corrosion which is a leading cause of premature failures in pipelines.

These anodes are buried in the soil and attached to the pipeline by wire through a test station and act as a sacrificial metal that corrodes instead of the protected line. Over time the magnesium anode continues to corrode, consuming the anode material until it eventually must be replaced. These anodes will be used to replace existing anodes throughout our system that have been depleted or have exceeded the expected life cycle of approximately 10 years.

PROCUREMENT DETAIL:

Finance-Procurement conducted a Request for Bid (RFB) Process to obtain bids. The City received three bids; one non-responsive and two responsive, responsible bids. Staff is recommending the award to the lowest, responsive, responsible bidder International Corrosion Control, Inc., of Lewiston, New York. In 2017 the City paid \$142.91 per anode by the same vendor. The current price has been increased to \$365.22 per anode. The Gas Department decided to change the quantity originally in the RFB from 13,500 to 5,000 for the next two years.

ALTERNATIVES:

The alternative to accepting this bid would be to require the Gas Department to purchase magnesium anodes on an as-needed basis, which would not be as productive. In addition, a long-term supply agreement allows for a better economy of scale.

FISCAL IMPACT:

The fiscal impact for Gas Engineering Design in FY 2022 is not to exceed \$2,375,138.00, for this supply agreement with International Corrosion Control, Inc., of Lewiston, New York for the purchase of magnesium anodes for the Gas Department to provide cathodic protection for corrosion control of underground gas pipelines, FY 2022 will be funding \$296,892.24, with the remaining cost funded in future years budget approval.

FUNDING DETAIL:

Fund:	4130 Gas
Organization/Activity:	34130 Gas Construction
Mission Element:	022 Gas Distribution System
Project # (CIP Only):	N/A
Account:	520090 Minor tool & equip
Cost:	\$296,892.24

RECOMMENDATION:

Staff recommends approval of this motion authorizing a two-year agreement with International Corrosion Control, Inc. for Magnesium Anodes as presented.

LIST OF SUPPORTING DOCUMENTS:

Bid Tabulation Supply Agreement