



TOWN OF ERIE

645 Holbrook Street
Erie, CO 80516

Town Council

Board Meeting Date: 12/10/2019

File #: 19-558, Version: 1

SUBJECT: CONSENT AGENDA

A Resolution of the Board of Trustees of the Town of Erie Approving the Purchase of Two Variable Frequency Drive Cabinets from Timken Motor & Crane Services, LLC DBA Wazee Electric in an Amount not to Exceed \$38,000

DEPARTMENT: Public Works

PRESENTER: Todd Fessenden, Public Works Director

FISCAL INFORMATION:

Cost as Recommended:	\$ 38,000
Balance Available:	\$ 149,800
Budget Line Item Number:	500.70.110.605000.100087
New Appropriation Required:	No

STAFF RECOMMENDATION:

Approve the Resolution

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The 2019 Water budget includes funds for pump station improvements. The Vista Ridge Pump Station (VRPS) is one of the Town's potable water pump stations. It discharges water and provides pressure to Zone 4B in Vista Ridge. The goal of Town staff has been to improve operations, increase efficiencies and reduce costs at the water plant and the associated pump stations. One of the ways to increase efficiencies and reduce electrical costs is by adding variable frequency drives (VFDs) to the pump motors. This allows the pump to operate at variable speeds instead of a fixed 100% speed.

There are currently four pumps in the VRPS, two of them have VFDs and the 2 large pumps are fixed speed pumps. The fixed speed pumps operate on a daily basis at high flow times, usually in the morning. They typically pump more water than what is needed at full speed, which opens up a pressure reducing valve to pump the excess water back into the water tank instead of into the distribution system. At this point we are pumping water in a circle. This has also caused cavitation problems for the pumps. Adding VFDs to the motors will provide a wider pumping range for the pumps. This will also provide redundancy to the middle range pump in the event of a pump failure.

The proposal is purchase and install two VFDs for pumps #3 and #4 at the VRPS. Staff received three quotes, has reviewed the pricing and recommends said purchase.

Cost Summary

Purchase Price	\$35,954.00
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<u>Contingency</u>	<u>\$ 2,046.00</u>
Total	\$38,000.00

ATTACHMENTS:

- a. Resolution
- b. Agreement
- c. Quotations