

MEETING DATE: 4-3-2023

AGENDA ITEM SUMMARY

Subject: Water Department: WELL #5 VFD REPLACEMENT

Background Summary:

The city currently has three active wells that pump water to the treatment plant for softening before being pumped to the distribution system. Well #8 is our main well, we blend well #8 with wells #5 & #7, rotating quarterly. Well #5 was used in the fall of 2022. When we went to start it this spring, it would not start.

After conducting a thorough inspection of the variable frequency drive (VFD), it was determined that it is not repairable due to the fact that it is no longer supported by the manufacturer Allen-Bradley, and repair parts are no longer available from this resource or from aftermarket sources. The VFD is roughly 20 years old and has experienced normal wear and tear over the years.

The VFD is a critical component that controls the speed and frequency of the motor that pumps water from the well. It allows the motor to be ran at different speeds and to ramp up (start- up) and ramp down (shut-down) instead of only running wide open when on.

The total cost for the replacement VFD is \$24,950.34, which includes material, and installation.

Replacing the VFD is a necessary investment to ensure the ongoing operation of the well and maintain a reliable source of clean water for the city. We respectfully request your approval for this project.

CITY OF CHARLES CITY

RESOLUTION NO. 24 23

RESOLUTION APPROVING REPAIRS TO WELL #5

WHEREAS, the water superintendent is recommending replacement of the variable frequency drive on well #5;

WHEREAS, a quote of \$24,950.34 has been received from Packard Electric for this replacement which includes material and installation;

WHEREAS, staff is recommending acceptance of this quote;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Charles City, Iowa hereby approves the repair of the variable frequency drive on well #5 for a total of \$24,950.34 by Packard Electric.

COUNCIL MEMBER moved the adoption of the foregoing Resolution;

COUNCIL MEMBER seconded the motion to adopt, and on roll call the voting was as follows:

AYES:

NAYS:

Passed and approved this 3rd day of February, 2021.

Dean Andrews, Mayor

Attest:

Trudy O'Donnell, City Clerk