



CITY OF WASHINGTON, ILLINOIS City Council Agenda Communication

Meeting Date: Monday February 5, 2024

Prepared By: Brian Rittenhouse – Public Works Director

Agenda Item: Purchase Authorization – Wastewater Treatment Plant Water Pressure Tanks
Bladder Replacement Authorization

Explanation: The Wastewater Treatment Plant relies on reclaimed effluent wastewater water for plant operations throughout the facilities. It currently has two pressure vessels that regulate the water pressure in the system between 65 and 70 psi. The pressure vessels are filled to a specific pressure and within the vessels are rubber bladders that hold the water. The pressure in the tank puts pressure on the bladder and in return maintains the desired pressure in the system.

One vessel started leaking around the flange so staff started troubleshooting. After taking the flange off the vessel it looked like a piece of metal had corroded and broke off inside the bladder. Staff contacted GA Rich to assist and they feel this may have damaged the bladder and caused it to start leaking inside the tank. They also feel that with our reclaimed water the piece of metal should be stainless steel to help with corrosion.

Staff received a quote from GA Rich to replace just the bladder or replace the whole tank with the stainless flanged elbow fabrication. Below are the quotes.

	One Tank	Both Tanks
Replacing the Bladder	\$ 8,884.00 w/ Flange	\$17,768.00 w/ Flange
Remove and Replace Tank	\$17,842.00 w/ Flange	\$35,684.00 w/ Flange

Staff feels that if during the bladder replacement, if it is discovered that the tanks are in bad shape it would then be recommended to replace the tanks.

Fiscal Impact: \$40,000.00. There are sufficient funds in the Wastewater Budget.

Recommendation: Staff would recommend starting with replacing the bladders in both tanks with fabricated stainless flange to avoid the possibility of the same thing happening to the other tank. It is possible that the metal piece is corroding and at any time could break off and puncture the bladder, if it hasn't already. If one or both tanks need replaced staff would recommend replacing them.

Action Requested: Purchase authorization up to \$40,000 to have GA Rich to repair the pressure vessels by replacing the bladders and fabricating stainless flanged elbows.