



June 28, 2021

Honorable Mayor and  
Members of the City Council  
City of Warrensburg, Missouri

Dear Mayor and Councilmembers:

**SUBJECT:** Ordinance authorizing the city manager and city clerk to execute a contract with Smico Contracting Group, LLC for the East and West Wastewater Treatment Plants Geared Centrifugal Turbo Blowers project.

**BACKGROUND:**

Each wastewater treatment plant has three blowers to aerate the liquids in the sequencing batch reactors (SBRs). Each plant has two SBRs, and each SBR has a dedicated blower. The third blower is or redundancy if one of the blowers goes down. The blowers are critical to the wastewater treatment process because aerating the liquids provides the oxygen needed by the microorganisms to remove the nutrients from the wastewater so it can be safely returned to the creeks and waterways.

**ISSUE:**

The dedicated blower for SBR #2 at the west wastewater treatment plant is out of service, and it cannot be repaired. The SBR has been running on the back up blower. If there are issues with one of the operating blowers at the west plant, the plant will be operating with only one SBR.

Due to the age of the blowers at both plants (27+ years), staff is recommending replacing a blower at each plant in 2021 and 2022. Along with upgrading the equipment, the blowers will also be taken out of the basement of each plant and placed on concrete pads adjacent to the SBRs. Removing the blowers from the basement creates a safer work environment for employees and makes it easier to work on the equipment.

In addition to increasing reliability and creating a safer work environment, replacing the blowers with newer equipment is anticipated to provide significant energy savings. With advancements in technology and energy efficiencies, staff anticipates cost recovery of the new equipment in energy savings within five years.

Two bids were received for the East/West Treatment Plants Geared Centrifugal Turbo Blowers Project on June 3, 2021.

<u>Contractors</u>	<u>Total Bid</u>
Smico Contracting	\$671,284
Empire Electric	\$708,170



Smico Contracting submitted the lowest and best bid. Staff has experience working with Smico on other projects with satisfactory results.

**STRATEGIC PLAN:**

- Focus I: Investment in infrastructure
- Focus II: Growth and development

**FISCAL IMPACT:**

The budget for the first two blower replacements is \$500,000. The lowest and best bid for the project is \$171,284 over budget. Additionally, there was an unexpected engineering expense of \$30,000 incurred to move the new blower system adjacent to the SBRs and integrate the upgraded SCADA control system proposed in FY 2022 and FY 2023. The equipment costs came in as expected; however, the construction costs are over budget due to nationwide increase in costs in material and labor. Staff recommends transferring \$201,533 from cash reserves in the water pollution control fund for the additional costs. There are sufficient reserves to cover this expense. Due to the age of the equipment, employee safety, and the cost savings from energy efficiency, staff feels it is in the best interest to move forward with the purchase and installation of the new blowers.

Staff intends to purchase the next set of blowers directly from the manufacturer in FY 2022. The installation will be bid separately. This is the same process used to upgrade the west and east plant UV systems and savings were realized using this procurement method.

**RECOMMENDATION:**

Approved ordinance.

Sincerely,

Danielle Dulin  
Interim City Manager

- Attachment: 1. Bid tab
- 2. Ordinance
- 3. Agreement