

# Request for Board Action

**REFERRED TO BOARD:** September 10<sup>th</sup>, 2018

**AGENDA ITEM NO:** 8

**ORIGINATING DEPARTMENT:** Treatment Facility

**SUBJECT:** Consideration of a Resolution authorizing the purchase (1) one FLYGT submersible Mixer, and (1) Submersible Propeller Pump (Recycle Pump) from Xylem Water Solutions USA, Inc. at the cost of \$33,779.77. Sabel Mechanical LLC is the recommended company for installing the equipment, and their quoted price is \$5,484.00. This project was budget for this year.

## **SUMMARY AND BACKGROUND OF SUBJECT MATTER:**

The Treatment Facility utilizes microbiology to remove pollutants from the wastewater. Treatment facilities are designed to manipulate these organisms in numerous ways to achieve permit compliance. The Village treatment facility employs the UCT (University of Cape Town) method to remove nutrients from the wastewater stream biologically. Without going into extreme detail, the recycle pumps, and mixers are used to assist the microorganisms in denitrifying (remove nitrates) from the return activated sludge (RAS). The resulting denitrified mixed liquor is pumped to the anaerobic zone to provide nitrate free mixed liquor to the biology in the anaerobic zones. This equipment plays a critical role in making the biological nutrient removal system function. There is a mixer and recycle pump for each of the three anoxic zones. Currently, there is (1) one mixer, and (1) one recycle pump that has failed. L.A.I is the exclusive sales representative for FLYGT equipment in this area. Hence, the staff can only produce this one quote for this equipment. FLYGT equipment has a proven track record in dealing with the harsh environment wastewater produces. They have numerous installs within the area. The Treatment Facility received two quotes for the installation of this equipment. Sabel Mechanical and Dahm Mechanical; Sabel was the lowest.

## **FINANCIAL IMPACT:**

## **DOCUMENTS ATTACHED:**

1. Resolution

## **RECOMMENDED MOTION:**

**Move** to approve a Resolution authorizing the Treatment Facility to purchase (1) one FLYGT submersible Mixer, and (1) Submersible Propeller Pump (Recycle Pump) from L.A.I. and have Sabel Mechanical perform the install.

**RESOLUTION 18 - \_\_\_\_\_**

**A RESOLUTION GRANTING AUTHORITY TO THE ADMINISTRATOR TO PURCHASING (1) FLYGT SUBMERSIBLE MIXER, AND (1) SUBMERSIBLE PROPELLER PUMP (RECYCLE PUMP) FROM XYLEM WATER SOLUTIONS USA, INC. FOR THE WASTEWATER TREATMENT FACILITY IN THE AMOUNT OF \$33,779.77. INSTALLATION OF SUCH EQUIPMENT IS TO BE PERFORM BY SABEL MECHANICAL IN THE AMOUNT OF \$5,484.00**

**WHEREAS**, the existing recycle pump and mixer have passed the end of their serviceable lives, and

**WHEREAS**, the existing equipment has been rebuilt three times, and in their current state cannot be restored again, and

**WHEREAS**, this equipment is critical to the operation in meeting the phosphorus limit outlined in the N.P.D.E.S permit, and

**WHEREAS**, the total cost for the equipment and the installation is \$39,263.77 and

**NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE MAYOR AND VILLAGE BOARD OF TRUSTEES OF THE VILLAGE OF ANTIOCH, LAKE COUNTY, ILLINOIS**, to authorize the Village Administrator in purchasing (1) FLYGT submersible mixer, (1) submersible propeller pump (recycle pump) for the treatment facility. Then, have Sabel Mechanical install such equipment.

**ADOPTED** by the Mayor and Village Board of Trustees of the Village of Antioch, Lake County, Illinois, and this 10<sup>th</sup> day of September 2018

**APPROVED** this 10<sup>th</sup> day of September 2018.

AYES:

NAYS:

ABSENT:

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Lawrence M. Hanson, Mayor

ATTEST:

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Lori K. Romine, Village Clerk