



AGENDA ITEM SUMMARY

District Impacted

- ☐ 1 = Anzollitto
- ☐ 2 = Woolard
- ☐ 3 = Boyd
- ☐ 4 = Cisneros
- ☐ 5 = Colvin
- ☒ All

AGENDA DATE

November 14, 2017

DESCRIPTION

CONSIDER RESOLUTION NO. 2017-R113; A RESOLUTION AUTHORIZING THE EXPENDITURE OF FUNDS BY THE CITY OF BOERNE FOR THE PURCHASE OF A PUMP. *(Replace pump in the influent lift station at the Old San Antonio Road Wastewater Treatment and Recycling Center)*

STAFF'S RECOMMENDED ACTION (be specific)

Approve Resolution No. 2017-R113; A Resolution authorizing the expenditure of funds by the City of Boerne for the purchase of a pump. *(Replace pump in the influent lift station at the Old San Antonio Road Wastewater Treatment and Recycling Center)*

CONTACT PERSON

Michael Mann – Public Works Director

SUMMARY

Soon after the completion of construction of the WWTRC, we started to experience problems with clogging of the large pump/motor assemblies (four total) that were installed in the influent lift station during its original construction (see photo below). The pumps were clogging on items that would not be typically expected to cause such issues (fabrics, elastic, etc.).



When this clogging occurs, the pumps have to be pulled from their location in the bottom of the wet-well and manually unclogged. For whatever reason(s), subsequent coolant/moisture intrusion problems have sometimes occurred in the submersible electric motor at the top of the pump assembly following re-installation.

These moisture issues have led to the need for complete rebuild of the electric motor assembly on two occasions. The first was performed during the warranty period, soon after completion of the plant. The second time, in 2016, (plant no longer under warranty) we paid about \$16,000 to have the pump repair shop inspect/diagnose the moisture issue, only to find that the necessary motor rebuild would cost another \$22,000.

After lengthy discussions with the pump manufacturer, pump supplier and various consultants, we ultimately chose to purchase and install a complete new unit from a different manufacturer (Flygt). The new Flygt pump/motor was purchased from Xylem Water Solutions USA, Inc., who is the local dealer of Flygt equipment.

Recently, another original pump clogged and was removed for clearing. After re-installation, we got the dreaded motor moisture intrusion alarm. In a process that seems too familiar, we contacted the manufacturer's representative who recommend we ship the pump to them for inspection/diagnosis at a cost of about \$14,000. Also, because the diagnosis/repair process would be expected to take several weeks to multiple months, we also priced short-term rental of a substitute Flygt pump. The rental cost proposal for 3 months of Flygt pump rental from Xylem was \$6,665.

On the basis of our past experience and known costs for trying to evaluate/repair the original pump, Staff does not feel it is advisable to send the pump for inspection and pay for a rental unit. Our strong suspicion will be that the \$14,000 tear-down and inspection process will lead to another hefty repair estimate.

Thus, we recommend replacing the original pump with another new pump from Flygt. The current proposal from Xylem Water Solutions USA, Inc. for a new pump/motor is \$35,128.68. This cost includes free loaner pump (\$671.00 delivery and installation charge) in the 9-10 weeks it takes to get the new pump. The new Flygt pump will come with a complete 1-year warranty with a prorated warranted over a period of another five years.

This unanticipated purchase is not specifically budgeted. The price would be paid from our \$100,000 general plants maintenance budget.

Because the cost is greater than \$15,000, specific approval by Council is required per the Home Rule Charter. Staff recommends the Council authorize this expenditure.

COST	\$35,128.68
SOURCE OF FUNDS	Wastewater Operating Fund
ADDITIONAL INFORMATION	

This summary is not meant to be all inclusive. Supporting documentation is attached.