Yorktown Wastewater Treatment Plant 2001 S. West St. Yorktown, IN 47396

December, 11th, 2018

Greetings Pete and Town Council,

The Yorktown Wastewater Treatment Plant is requesting approval for the purchase and installation of a stationary 3.8 horsepower Flygt brand pump and the installation of a control box fed with a 480 volt circuit, which is required to run the pump.

This pump will allow us to reuse treated wastewater near the end of the treatment plant and pump it back into most tanks throughout the plant.

Estimate Total for project: \$15,789.00

The Yorktown Wastewater Treatment Plant had an average daily flow of 1.22 MGD (million gallons per day) for the year 2017. The majority of the plant is designed for optimal treatment with a flow between 3.0 and 4.0 MGD. We have three main areas of treatment with each containing four tanks ranging in size from 47,000 to 112,000 gallons each. In some instances, only one or two tanks in each area are needed. As a result of this lower flow, much of the time, we have more tanks in use than needed. This causes the wastewater being treated to be detained much longer than ideal. This causes problems such as the treated wastewater becoming septic which in turn causes further issues with treatment. We will shut off unneeded tanks to optimize treatment but we must remove the tank contents to keep it from becoming septic. If the tanks are left empty, there is a fear that the water table can cause the tank to become buoyant forcing the tank to eject from the ground, destroying itself. We are currently using a combination of fresh tap water from our hydrants and off the shelf sump pumps which pose problems. While the sump pumps do help, they do not supply the volume needed and we are having electrical issues because of the distance from the power source to the pumps. The sump pumps and extension cords overheat and in turn have short lifespans. Additionally, we are trying to conserve fresh tap water. This proposed pump will run more efficiently, moving more water while using less electricity than a 110 volt sump pump. This pump will allow us to recapture treated wastewater and pump it to most, if not all, of our tanks that would need to be refilled.

Alan Neff, Yorktown Wastewater Superintendent
