

Major Water and Sewer Projects — Fiscal Year 2016

Hillsborough's water and sewer rates are paying for a number of major projects as well as the debt service on past projects:

Wastewater Treatment Plant Upgrade and Expansion — Construction of a \$19.2 million upgrade and expansion of the plant started in October 2011 and was completed in Spring 2014.

- *Cost:* In Fiscal Year 2015, \$1.38 million in annual debt payments over 20 years began, more than doubling the plant's previous budget.
- *Why:* The Phase 1 project was needed to increase the town's wastewater treatment capacity. Stricter state rules and aging equipment had reduced the plant's capacity from its original 3 million gallons per day to 1.2 mgd, which was nearing the town's current wastewater influent flow rate.
- *Project Included:*
 - New tertiary filters capable of removing nitrogen and phosphorus
 - A new screenings removal system for trash at the beginning of the treatment process
 - Upgrades to the biological treatment basins
- *No Reasonable Alternatives:*
 - Initial costs for sending wastewater to the City of Durham for treatment were determined to be three times more expensive than upgrading and expanding the existing plant.
 - The state would not permit sending wastewater to Mebane or to the Orange Water and Sewer Authority (OWASA) in Chapel Hill as those systems discharge effluent into a different river basin.

Water and Sewer Improvements — A number of water and sewer improvement projects are starting or recently were completed, including:

- New South Zone Water Transmission Project, with construction of a meter vault and various interconnections to 16-inch main acquired from OWASA.
- New water line to be installed along U.S. 70 between N.C. 86 and Orange High School Road to create additional loops in the North Zone, improving water flow and quality.
- New South Zone Booster Pump Station, located at Forest Ridge subdivision.
- Sewer rehabilitation and repairs, including Eno River Outfall relining.
- Rehabilitation of Rencher Street and New Hope sewage pump stations.
- Installation of permanently mounted generators at the Gatemoore neighborhood and Shelton Court sewage pump stations and purchase of an additional portable generator.
- *Cost:* These projects were paid from annual budgeted funds over several years. Total cost for these projects exceed \$750,000.
- *Why:* Many pipelines in the town's system are more than 70 years old, causing serious problems with water lines leaking and with stormwater or groundwater flowing into sewer lines. The inflow increases the amount of wastewater that must be pumped and treated,

increasing costs. The town's population also is growing at a rapid rate, increasing the need for additional transmission lines, storage tanks and pump stations.

Waterstone Elevated Water Tank — Construction of a 500,000-gallon water storage tank began in October 2014 and is scheduled for completion by January 2016.

- *Cost:* The total cost for the project is \$2.03 million. Fiscal Year 2017 will be the first full year of annual debt payments to pay for the project, with annual payments of \$101,500 for 20 years.
- *Why:* The town is growing rapidly south of Interstate 85, mainly due to the addition of the UNC Hospitals Hillsborough Campus, the Durham Technical Community College Orange County campus, and the Waterstone community.

Reservoir — The West Fork Eno Reservoir was built to address longtime water shortages and allow for growth. Hillsborough voters approved general obligation bonds in 1993 to pay for a reservoir. The reservoir cost more than \$11.7 million and has annual debt service payments through Fiscal Year 2018. The annual payment in FY16 is \$649,361.

Phase 2 of the reservoir is in the design stage. This project will raise the water level by 10 feet and more than double the volume of water stored. The town also is working in partnership with the N.C. Department of Transportation to realign and raise Efland-Cedar Grove Road, which will benefit both parties. Construction of the road project is to be performed in Summer 2016. Increasing the height of the dam, land clearing, and two other related road projects are scheduled to begin construction in early 2017 and to continue through 2018.

- *Cost:* The total project cost for Phase 2 of the reservoir is estimated to be \$8.3 million. Costs are included in the Fiscal Year 2016-18 budget requests, with debt payments beginning in FY18.
- *Why:* Raising the reservoir by 10 feet will increase the capacity of the reservoir from 786 million gallons to 1.829 billion gallons, increasing the town's water supply to cover anticipated growth and drought periods.

Total Debt Service Payments

- In Fiscal Year 2014, 13.4 percent of the town's Water/Sewer Fund budget was earmarked for debt service payments, accounting for about \$1.18 million.
- By 2018, this will grow to 23.9 percent of the budget — about \$2.76 million — as new debt payments will be due for the Waterstone Elevated Water Tank and the reservoir's Phase 2 expansion, as well as debt payments that began in FY15 for the Wastewater Treatment Plant upgrade.