



Town of Pittsboro, North Carolina

Memorandum

To: Mayor Bill Terry and the Town Board of Commissioners

From: Fred Royal, PE, Town Engineer
Bryan Gruesbeck, Town Manager

Subject: Recommendation of Option A: Wastewater Treatment Expansion

Date: September 28, 2015

Background

On August 17, 2015, the Town Board of Commissioners held a Utility Workshop with staff to review the alternatives and cost estimates for the Preliminary Engineering Report (PER), developed with the assistance of the Wooten Company. The PER was developed to review all alternatives available to the Town to increase the sewer treatment capacity from 0.75 million gallons per day (MGD) to 1.249 MGD and above. The time horizon of this planning is 20 years or to the year 2035.

The demand for additional sewer capacity is reaching the current permitted capacity at the existing WWTP and projections indicate the existing capacity will be reached by approximately 2017. We believe that it is prudent to apply for a loan now due to this situation and other factors such as wet weather flows and the possibility of higher than predicted treatment demands.

The PER process identified a combination of treatment expansion options: expansion of the existing WWTP (requiring additional adjacent land), rehabilitation of the existing WWTP, construction of new plants at other locations and pumping untreated sewer to the Big Buffalo WWTP, owned and operated by the City of Sanford.

The schedule of the PER is to develop the loan application documents that will meet NCDENR standards for a revolving loan fund application by September 30, 2015. The final PER would be completed and submitted to DENR in October 2015. The loan fund application schedule is September and March of each year. These documents are attached to this memo.

Discussion

The PER process used Town data and Chatham Park data for predicted treatment requirements. Looking at Chatham Park options and the City of Sanford option for a 2 MGD raw sewage line from Pittsboro to the Big Buffalo Wastewater Treatment Plant has resulted in comparative cost analysis for capital and operational costs. This cost analysis was provided to you at the Utility Workshop on 9/17/2015.

Although all options presented are viable, we believe Option A is prudent for several reasons.

Primarily it would be cost-effective for meeting the Town's short-term treatment and reclaimed needs and allow time to develop plans, develop financing, obtain permits, rehabilitate the WWTP, construct a new lift station and pipeline to Sanford.

These improvements are considered part of Phase 1 (see graph "Combined Wastewater Flows – Option A: Refurbish WWTP, 2 MGD to Sanford, Regional WWTP). This phase will provide treatment for up to 3 MGD to projected year 2028.

The cost estimate for the loan application is approximately \$23M. The total capital cost estimate for Option A (Phase I) is \$30.3M. It is recommended that the Town loan application omit the \$7.5M cost of the Chatham Park "package plant" planned exclusively for that development. The loan application includes only the cost of the existing WWTP rehabilitation, lift station and pipeline to Sanford. Finally, the \$23M will be a shared cost between the Town and Chatham Park Investors. Staff recommends engaging financial consultants to help determine the most equitable cost-sharing ratio for the proposed improvements.

Attached please find:

1. Option A: Table of Advantages and Disadvantages
2. Graph of Option A: Wastewater Treatment in 2 phases
3. Resolution approving the revolving loan fund application

Recommendation

We recommend that Option A of the PER analysis be approved along with the attached Resolution. If so, the Town will quickly finalize the application (requires Mayor's signature) for the loan of approximately \$23M. The loan application package is due to NCDENR on September 30, 2015.

This is a non-binding application and the loan amount requested can be reduced in the future if the Town finds that this loan amount can be reduced.

If not approved during the 9/28/2015 Board of Commissioners meeting, the Town can submit a loan application in March 2016. However, this could impact costs and delay treatment capacity expansion.