




ROY COOPER
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MEMORANDUM

To: Crystal Best
State Environmental Review Clearinghouse
Department of Administration

From: Seth Robertson, P.E. 

Date: February 1, 2017

Subject: Amendment to FONSI for Handy Sanitary District
Badin Lake Regional Sewer Project
CWSRF Project No. CS370849-01
SCH File # 08-E-4300-0188

The purpose of this memorandum is to amend the Finding of No Significant Impact/Environmental Assessment (FONSI/EA) for the Handy Sanitary District's Badin Lake Regional Sewer Project (State Clearinghouse Number 08-E-4300-0188). As the Lead Agency, the Division of Water Infrastructure requests that the State Environmental Review Clearinghouse post this document for 30 days as an informational update for interested parties. Information regarding the proposed amendment to the FONSI/EA is discussed below.

The original FONSI/EA included the following scope of work for the Badin Lake Regional Sewer System (BLRSS): (1) install a low-pressure collection system consisting of approximately 126,000 linear feet (l.f.) of 2-inch to 8-inch sewer to replace approximately 1,200 on-site septic tanks in the project area; (2) construct approximately 24 miles 6-inch to 14-inch forcemain, including 13 pump stations, to send the entire project area's wastewater to the Town of Troy's wastewater treatment plant, and (3) decommission the Uwharrie Point Wastewater Treatment Plant owned by the district and the Badin Shore Wastewater Treatment Plant owned by the Badin Shore Homeowners Association.

The proposed amendment adds a 40 HP duplex submersible sewer pump station and 2,200 linear feet of 6" force main in the Badin Shores subdivision to address problems with the collection system in that subdivision. No new flow or customers are added.

The existing Badin Shores collection system has approximately 40 miles of 8-inch gravity sewer and four pump stations. As part of the original project, the Badin Shores collection system was made tributary to Handy Sanitary District's Regional Pump Station No. 2. The Badin Shores



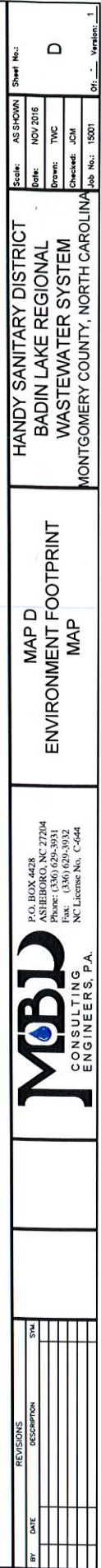
collection system is struggling with infiltration and inflow, which is leading to sanitary sewer overflows (SSOs) in a critical area of the collection system where three of the five collection system phases converge into a common main with shallow depth and relatively flat downstream gradients. All flow within the subdivision is tributary to Badin Shores Pump Station No. 2, which is undersized for the wet weather flow, and is just downstream of the critical area that is prone to SSOs. During significant rain events, the District must provide emergency pumping and hauling to prevent or lessen the severity of SSOs in this critical area. Decommissioning of the treatment plant has been delayed because the lagoon is being used for these pump and haul operations.

The proposed new pump station will intercept flow just upstream of the critical area, thereby alleviating the SSOs. Flow from the Badin Shores Pump Station No. 2 will also be diverted to the new station, which will be able to pump flow all the way to the Regional Pump Station. Badin Shores Pump Station No. 3, which currently operates in series with Pump Station No. 2 to supplement the horsepower needed to transmit flow to the Regional Pump Station, will no longer be needed and will be decommissioned.

The proposed amendment will have a relatively small project area with construction disturbing less than one acre of land. Forcemain construction will be in existing rights-of-way, and erosion and sedimentation control measures will be implemented.

Conclusion

The project overall is likely to be beneficial to water quality in the lake by reducing sanitary sewer overflows. The review process indicated that with the mitigation measures in place, significant adverse environmental impacts should not occur and an environmental impact statement will not be required.

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