

## City of Hoschton Wastewater Treatment Facility Improvements Jackson County, Georgia

### Services Provided:

Preliminary Planning  
Funding Procurement  
Environmental Assessment  
Surveying  
Downstream Analysis  
Engineering Design  
Permitting  
Interagency Coordination  
Bid Phase Management  
Construction Observation  
Program Management

### Project Data:

Phase 1: 1.8 MG Equalization  
Pond  
Phase 2: Two 35-ft diameter  
Clarifiers

Total Project Cost:  
Phase 1: \$766,000  
Phase 2: \$2.5 million

Date of Completion:  
Phase 1: November 2018  
Phase 2: Expected 2021

### Contact:

City of Hoschton  
The Honorable Shannon Sell,  
Mayor  
79 City Square  
Hoschton, GA 30548  
(706) 654-3034



The City of Hoschton's Wastewater Treatment Facility (WWTF) could not properly treat the 500,000 GPD capacity authorized by EPD in its NPDES Permit. In addition, during intense rainfall events, high levels of infiltration and inflow (I/I) into the facility would impede the plant's ability to properly treat the wastewater. As a result, the City was hampered from growth and expansion because of the limitations in accepting new sewer customers of any appreciable size. The facility needed to be able to accept, assimilate, treat and discharge a high-quality effluent as required by their permit.

In order to help with the above-mentioned issues, the City began a program to rehabilitate its sewer collection system in 2014 by evaluating the sewer collection system and rehabilitating a portion of the system over a number of years. However, since the WWTF is the heart of the system the problems at the WWTF needed to be addressed first to head off imminent fines and penalties from EPD due to exceeding permitted flow limits.

The effects of the economic recession had a large impact on the City of Hoschton and previous improvements to the WWTF had placed a large debt service burden on the City. The City needed to make necessary improvements in order to operate its plant as designed without the addition of much debt service. To help facilitate these issues, the City of Hoschton contracted with Engineering Management, Inc. to develop a plan of improvements and to evaluate the treatment capacity of its limiting treatment units. EMI created a phased improvement plan to increase treatment performance and replace faulty equipment.

Phase 1 included constructing an equalization pond in order to capture increased flows at the facility caused by I/I during rain events. By detaining the peak flows and releasing them over an extended period of time the equalization pond will improve operability of the plant during these peak events.

Phase 2 calls to remove the facility's limiting treatment unit, the phase separator. The phase separator's purpose is to act as a clarifier and was designed to handle 0.5 MGD. After many years of trial and error it was determined the phase separator could not operate as designed. Therefore, the phase separator will be replaced with two clarifiers with a treatment capacity for 0.5 MGD average daily flow, which would allow the City to meet its permit limits. The phase 2 improvements are currently under design and construction is expected to begin in late 2019.

EMI assisted the City in obtaining a \$300,000 ARC grant for the phase 1 equalization basin. Funding for the phase 2 clarifiers will come from development capacity fees.