

City of Jefferson
I-85 Wastewater Treatment Facility Land Application System Upgrade
Jackson County, Georgia

Services Provided:

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

Project Data:

Improvements to the
WWTF Treatment Pond
Addition of a 99,000 GPD
Sprayfield

Total Project Cost:
\$681,000

Date of Completion:
December 2018

Contact:

City of Jefferson
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The City of Jefferson's I-85 Wastewater Treatment Facility (WWTF) consisted of pretreatment, storage, and a land application spray field (LAS), and was originally sized to treat 287,000 GPD.

Over the years, treatment at the I-85 facility became difficult. The character of the influent waste strength is high due to the make-up of the service area, which is comprised mostly of commercial and industrial users and a small number of residential customers. The I-85 wastewater treatment facility was frequently out of compliance with its permit with numerous consent orders, and the facility could not treat at full capacity due to deficiencies of the treatment pond.

In 2015, the City began receiving requests for additional sewer treatment capacity at the facility; however, the City could not serve these additional customers without improvements to the I-85 WWTF. Jefferson contracted with EMI to provide engineering services to design improvements to the facility that would allow the City to treat additional flow, and meet the City's permit with minimal investment into the current facility. The improvements would allow the City to utilize its current treatment capacity at the I-85 WWTF and meet EPD regulations, until the City expands the I-85 WWTF to a 1.0 MGD Mechanical Plant.

The wastewater treatment pond improvement project included solids removal from the ponds, installation of baffles, replacement of existing aerators with larger ones and the addition of two new aerators. Once this project was completed, the City was able to meet compliance with its permit and the consent orders were lifted.

The project was completed under budget, and the City was able to utilize the remaining funds to install an additional sprayfield to treat an additional 99,000 GPD and increase its treatment capacity to 386,000 GPD. EMI assisted the City in obtaining a \$300,000 ARC Grant and a \$381,000 GEFA loan for the project.