

# Breezewood Wastewater Treatment Facility Replacement

Client: East Providence Township Municipal Authority

Bedford County, PA

Year: 2018    Cost: \$4,160,000



The East Providence Township Municipal Authority selected Gwin, Dobson & Foreman, its long time consulting engineer, to design the replacement of its process treatment system. An Intermittent Cycle Extended Aeration System (ICEAS) was selected as the biological treatment process with nutrient removal capability.

The system, a variation of the activated sludge process, allows continuous inflow of raw wastewater and intermittently discharged influent. Each cycle consists of aeration, sedimentation and decantation phases. The aeration phase is operated on an oxic/anoxic mode for the purpose of nitrification/denitrification and biological phosphorus removal.

The \$4.16 million project consisted of the following components:

- Improvements to the headworks and influent pump station
- ICEAS process treatment system
- New aeration system and post aeration tank
- Ultraviolet disinfection system, effluent flow metering, effluent piping and outfall structure
- Process control and electrical/blower building
- Chemical feed and storage systems
- Aerobic digester
- Process control system and instrumentation system
- Emergency Generator

GD&F arranged for financing through Pennvest, which resulted in 100% grant funding for the project. GD&F also handled all project management and construction administration work.