



City of
Atlanta

Northside and Adamsville Pump Stations

Client: City of Atlanta, GA

Location: Atlanta, GA



System Features

- Ethernet Processors •
- Fiber Ethernet Switches •
- OPC Compliant Interfaces •
to Field Devices
- LCD Operator Interfaces •
- SQL Server •
- Data Warehousing •
- Report Generation •
- PLC's •
- iFIX •

The City of Atlanta operates sixteen pump stations that collect and pump wastewater from the sanitary and combined sewer collection network to the City's four water reclamation centers. Each station consists of one or more pumps or sewage ejectors that push untreated wastewater into a force main, then transmits the flow to a WRC for treatment. Currently, the City of Atlanta's water system (www.atlantaga.gov) consists of more than 2,400 miles of water mains covering a 650-square-mile area and provides service to more than a million people each day.

Transdyn was awarded a contract to design and build new control systems for City of Atlanta's Northside and Adamsville pump stations. Teamed with Player & Company, Transdyn provided new equipment and engineering services to modernize monitoring and control of the two pump stations. The Adamsville pumping station consists of three pumps regulating two 5 million gallon tanks. The Northside station has four pumps regulating 4 and 6 million gallon tanks.

Each pump station is equipped with redundant programmable logic controllers (PLC's) and a local touch screen HMI configured for autonomous operation should communications be interrupted. The pump stations communicate over a wireless Ethernet link to another set of redundant PLCs set up as a polling master. The polling master communicates to the central office using Ethernet over single-mode fiber. To improve process measurement, new field instrumentation was also installed. The system is designed for expansion to allow other Atlanta pump stations to be added to the control system in the future.