

The City of Portsmouth Stewart Hollow Pump Station Wheelersburg, Ohio



Project Description

Howerton Engineering & Surveying was contracted by The City of Portsmouth to provide design and construction services for the design of a new pump station for The Stewart Hollow Area.

In 2009 Howerton Engineering & Surveying designed a new 803,000 gallon water storage tank along with new water main loops to better serve the Wheelersburg Area residents. The plans were submitted to The Ohio EPA for approval. The plans were accepted providing that The City of Portsmouth within 5 years of the completion of the tank upgrade the Stewart Hollow Pump Station.

Access Road:

To begin this project a full boundary and topographic survey was conducted of the proposed site. An access road off of Stewart Hollow Road was then designed to service the proposed Pump Station. Howerton Engineering & Surveying prepared full grading and erosion control plans for the Pump Station site as well as a storm water prevention plan. Plan/profile sheets were created in the design of the access road. Culverts were installed on the access road where the existing drain was. Two Ohio Department of Transportation approved headwalls were installed on each end of the access road to maintain flow in the existing ditch that runs parallel with Stewart Hollow Road.

Pump Station Design:

Howerton Engineering & Surveying performed a hydraulic study and modeled the existing water system to design the pump station. Dual alternating pumps were designed along with VFD's and telemetry to control them from the water treatment plant. A 24' x 36' block pump house was designed to house the pumps and VFD's, a 24' x 24' garage bay was added to the building to house a backup generator.

Client/Location

The City of Portsmouth
Public Waterworks
4862 Gallia Street
Portsmouth, OH 45662

Client Reference

Sam Sutherland
City of Portsmouth
City Manager
(740) 354-8807
ssutherland@portsmouthoh.org

Project Status

Complete - 2012

Dates of Service

Design – 2011
Construction - 2012

Special Features

- Access Road Design
- Hydraulic Study
- Water Extension
- Telemetry
- Pump Station Design
- Boundary Survey
- Topographic Survey
- Grading Design
- AEP Coordination
- Electrical Design