

COATESVILLE DISTRICT – WASTEWATER

Collection System Description

The wastewater collection system serves the City of Coatesville, Borough of Parkesburg, and the following Townships: West Sadsbury , East Fallowfield , Caln , West Caln , West Brandywine, Valley, Sadsbury and Highland. The collection system terminates at the wastewater treatment plant in the Borough of South of Coatesville.

The collection system serves approximately 6,030 direct customers. The system contains approximately 416,843 feet of sewer mains and approximately 1,562 manholes. The sewer mains consist of vitrified clay, reinforced concrete and polyvinylchloride material, with the oldest pipes over 75 years old. The older manholes are predominantly brick and mortar construction and newer ones are pre-cast concrete.

PAWC also owns and maintains 16 sewer lift stations which are described below.

Branford Village Lift Station #1 – Constructed in 2001, the wet well is 16.5 feet deep and 6 feet in diameter, with an 8 inch inflow pipe. There are two -30 horsepower submersible pumps in the station. The building is cement block with a stucco exterior and is located in the Brooks Crossing Development in East Fallowfield Township.

Branford Village Lift Station #2 – Constructed in 2002, the wet well is 16.5 feet deep and 6 feet in diameter with an 8 inch inflow pipe. There are two - 25 horsepower submersible pumps. The building is cement block with a stucco exterior and is located in the Branford Village Development in East Fallowfield Township.

Brinton Station Lift Station #1 – Constructed in 2000, the wet well is 13 feet deep and 6 feet in diameter, with an 8 inch inflow pipe. There are two- 7-1/2 horsepower submersible grinder pumps in the station. This station does not have an above ground structure and all the controls are located in a control panel located on top of the wet well. The station is located in the Brinton Station Development in East Fallowfield Township.

Brinton Station Lift Station #2 – Constructed in 2000, the wet well is 13 feet deep and 6 inch in diameter, with an 8 inch inflow pipe. There are two – 2 horsepower submersible

grinder pumps in the station. The station is located in the Brinton Station Development in East Fallowfield Township.

Derry Lane Pump Station (Fieldstone) – Constructed in 2008 as part of the Fieldstone development in East Fallowfield, it serves the 74 EDU's within this development and conveys the sewage through a 4" force main to the Robin's Cove Pump Station. The wet well is 16' deep and 6' in diameter with a 10" inflow pipe. There are two 30 horsepower submersible pumps in the station. The building is cement block with a faux stone and stucco exterior.

Millview Lift Station - Constructed in 2003, the wet well is 20.5 feet deep and 6 inch in diameter, with an 8 inch inflow pipes. There are two – 40 horsepower submersible pumps in the station. The building is made of concrete. The station is located in the Millview Development in the City of Coatesville.

Northwoods Lift Station – Constructed in 2007, the wet well is 21 feet deep and 6 feet in diameter, with an 8 inch inflow pipe. There are and two – 3 horsepower submersible pumps in the station. The building is cement block with a stone exterior. The station is located in the Northwoods Development in East Fallowfield Township.

Parkesburg Lift Station – Constructed in 1995, the wet well is 20.75 feet long by 7.5 feet wide and 12.7 feet deep, with a 12 inch inflow pipe. There are three - 40 horsepower pumps located in the dry well. The facility is fully automated with SCADA. Flow equalization facilities exist at the site. The building is brick and located in the Borough of Parkesburg.

Providence Hill Lift Station – Constructed in 2006, the wet well is 15 feet deep and 7 feet in diameter with an 8 inch inflow pipe. There are two – 30 horsepower submersible pumps in the station. The building is cement block with a stone exterior and located on West Chester Road in East Fallowfield Township.

Robins Cove #1 Lift Station – Constructed in 2004, the wet well is 10 feet deep and 6 feet in diameter, with an 8 inch inflow pipe. There are two - 5 horsepower submersible pumps in the station. The building is cement block with a stucco exterior. The station is located in the Stone Creek Development in East Fallowfield Township.

Robins Cove #2 Lift Station – Constructed in 2003, the wet well is 23 feet deep and 8 feet in diameter, with a 12 inch and an 8" inflow pipe. There are two - 60 horsepower

submersible pumps in the station. The building is cement block with a stucco exterior. The station is located at the entrance to the Stone Creek Development in East Fallowfield Township.

Sandy Hill Lift Station – Constructed in 2005, the wet well is 18 feet deep and 6 feet in diameter, with an 8” inflow pipe. There are 2- 15 horsepower submersible pumps in the station. The building is cement block with a stucco exterior. The station is located in the Sandy Way Development in West Caln Township.

Strasburg Hunt Lift Station # 1 – Constructed in 1993, the wet well is 13.5 feet deep and 5 feet in diameter, with an 8” inflow pipe. There are two – 2 horsepower submersible grinder pumps in the station. There is no above ground building on site, and controls are located in a control panel on top of the wet well. The station is located in the Strasburg Hunt Development in East Fallowfield Township.

Strasburg Hunt Lift Station #2 – Constructed in 1994, the wet well is 10 feet deep and 6 feet in diameter, with an 8 inch inflow pipe. There are two- 5 horsepower submersible pumps in the station. There is no building, and controls are located in control panel on top of the wet well. The station is located in the Strasburg Hunt Development in East Fallowfield Township.

West Sadsbury Lift Station – Constructed in 1999, the wet well is 18 feet deep and 8 feet in diameter, with an 8 inch inflow pipe. There are two- 10 horsepower submersible pumps. There is no building and controls are located in a control panel located on top of the wet well. The station is located on Lower Valley Road in West Sadsbury Township.

West Sadsbury Commons Lift Station – Constructed in 2001, the wet well is 20 feet deep and 6 feet in diameter, with an 8 inch inflow pipe. There are two - 18 horsepower submersible pumps in the station. The building is made of fiberglass. The station is located in the shopping center near the intersection of Route 30 and Route10 in West Sadsbury Township.

Wastewater Plant Description

Pennsylvania American Water Company’s wastewater treatment plant is located in South Coatesville Borough. The plant was originally constructed in 1932 and has been expanded and upgraded several times. PAWC is completing a major expansion and rehabilitation of the wastewater treatment plant to change the treatment process from

trickling filter – extended aeration to an oxidation ditch process. This upgrade and expansion will increase the average daily treatment capacity to 7.0 MGD. The upgraded plant consists of construction of a new influent pump station, headworks structure for screening and grit removal, new biological treatment process including anaerobic and aerobic treatment units, three new secondary clarifiers, return activated sludge (RAS) pumping station, tertiary filtration units, expansion of an existing UV disinfection system, and upgrades and modifications to the sludge handling facilities. Sludge is dewatered with a gravity belt thickener and centrifuge and the filter cake is disposed of by either land application or in a landfill. Treated wastewater effluent flows into the West Branch of Brandywine Creek through an NPDES regulated discharge point.