

## Village of Watkins Glen WWTP Schuyler County, NY



In 2019, Dutchland built a precast post-tensioned SBR tank at the Village of Watkins Glen WWTP in Schuyler County, NY. Previously, the Villages of Watkins Glen and Montour Falls each operated aging municipal wastewater treatment plants. The two villages jointly developed the new WWTP and decommissioned their respective facilities when the new plant was operational.

Dutchland's 4.2MG rectangular open-top tank for the new plant measures 219' long by 124' wide with 20'-4" tall wall panels. The tank includes a common-walled pump station measuring 17' long by 16'-6" wide by 15'-6" tall. However, the base of the pump station is 6'-4" lower than the SBR base slab which required installation and backfill prior to the main tank going in.

Due to its proximity to Seneca Lake, the site includes high groundwater and poor soils. The design engineering firm, Barton & Loguidice, originally designed the process reactor for cast-in-place on a pile-supported structure on preloaded soils. However, the original bid came in over the engineer's estimate and the Authority elected to re-bid the job. For the re-bid, Barton & Loguidice determined that the piles could be eliminated as a cost-saving measure. The design for the reactor tank also included a sloped base for drainage which was intended as a secondary pour.

Dutchland was able to value-engineer the CIP tank design by adjusting the keyways and constructing the sloped base slab in a single pour. Dutchland also sloped the walkways 1" side-to-side to assist with drainage. Additionally, all of the walkway and roof panels include epoxy-coated reinforcing for additional corrosion protection.

Dutchland completed construction of the 4.2MG reactor tank in 18 weeks on-site.