



KUSTOMFLO

WASTEWATER TREATMENT EQUALIZATION TANK

KUSTOMFLO delivered a custom-engineered, watertight equalization tank solution that combined installation efficiency, design flexibility, and long-term performance.

WASTEWATER TANK

Location: Defiance, OH

Installation: July, 2026

PROJECT DETAILS

Owner: City of Defiance

Contractor: R.G. Zachrich Construction, Inc.

Engineer: Strand Associates

PRODUCT DESCRIPTION

Diameter: 54ft of 84-inch Kustomflo and 14ft of 18-inch Pipeline Plastic PE4710

SITE CONDITIONS

Trench Depth: 14ft

Backfill Material: #57 crushed stone at the base and #304 aggregated crushed stone with dust

Surface Material: 8-inch concrete drive



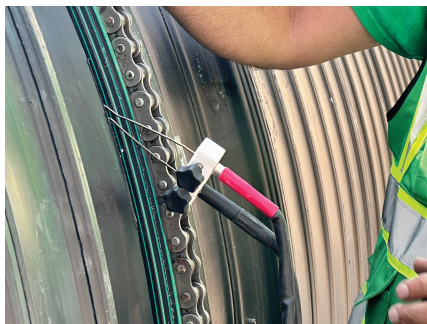
CONTEXT

The City of Defiance's Wastewater Treatment Equalization Tank project required a large-diameter storage solution capable of managing fluctuating wastewater flows while maintaining long-term system integrity. Installed in July 2026, the project included 54 feet of 84-inch KUSTOMFLO pipe and 14 feet of 18-inch PE4710 pipe. The installation was performed by R.G. Zachrich Construction, Inc. and engineered by Strand Associates.

The system called for an 84-inch diameter tank installation beneath an 8-inch concrete drive surface at a depth of 14 feet. The project also required multiple access points and customized tank connections to accommodate site-specific design requirements.

CHALLENGE

Several unique site conditions had to be addressed during the design and installation process. The equalization tank needed to connect to solid-wall inlet pipes at the bulkhead while also incorporating two access risers located at varying surface elevations. Achieving secure, watertight connections across these customized components was critical to the project's success.



SOLUTION

KUSTOMFLO HDPE pipe was selected because it provided a lightweight, large-diameter system with customizable tank configurations and reliable watertight joining technology. The tank was fabricated with customized access risers and stubbed connections to meet the project's unique layout requirements.

Electrofusion technology played a key role in the installation. Two electrofusion joints were completed on the 84-inch pipe, with one performed at the manufacturing facility and one completed onsite. Two vertical risers were also electrofused onsite, creating a secure and watertight assembly.

The combination of factory coordination, onsite technical support, and adaptable fabrication allowed the contractor to efficiently accommodate changing field conditions while maintaining project quality standards.



WHY KUSTOMFLO MADE THE DIFFERENCE

- **Long-term system reliability** with electrofusion joints.
- **Lightweight components** that simplified handling and installation compared with traditional materials.
- **Custom fabrication capabilities** that accommodated varying elevations, access requirements, and bulkhead connections.
- **Strong collaboration** between the fabrication team, onsite support staff, contractor, and engineer throughout the project.
- **Fast, secure connections** completed both before shipment and in the field, helping keep installation on schedule.

Bottom line: KustomFlo provided a customized, watertight equalization tank solution that met the City's operational requirements while giving the contractor the flexibility needed to address real-world field conditions efficiently and successfully.

For more information and to learn more about our products and services, please visit www.solenousa.com.

