

A Xerxes Project Profile

Wastewater Tanks at Whispering Ridge



Xerxes fiberglass tanks fit the bill at new housing development in Minnesota

When Alan Gilyard, owner of 10-24 Developers, LLC, drew up plans for Whispering Ridge, a new housing development in Elk River, Minnesota, he didn't consider fiberglass tanks for the wastewater treatment system. "I've just used concrete in the past. It's been around forever," says Gilyard. "But concrete can chip and weather away."

Recently Gilyard came to see that fiberglass tanks offered a viable option for his new project on the outskirts of Minneapolis, Minnesota. That was in large part due to the fact that Xerxes Corporation has made it a priority to show developers the benefits of fiberglass in wastewater treatment and storage systems.

Originally, the tanks for the recirculating, sand-filter wastewater treatment system for Gilyard's 250-acre housing development were specified precast concrete. When Jeff Hempel, a Xerxes sales representative, heard about the project, he contacted Gilyard about the possibility of using fiberglass tanks. The result? Gilyard decided against concrete and the wastewater system specifications were rewritten for fiberglass tanks.

Gilyard ordered 11 single-wall, 19,000-gallon fiberglass tanks from Xerxes. Because of the size of the development — 101 single-family homes — two separate wastewater treatment installations were required, each with one dosing tank, one recirculation tank and several septic tanks manifolded together. "I thought I'd try them," says Gilyard. "I thought they'd be easier to install. We

wouldn't need the big cranes we need for concrete."

Even as developers like Gilyard become aware of the weaknesses of concrete tanks in wastewater treatment and storage systems, they are not necessarily aware of the strengths of fiberglass tanks. For instance, it is common knowledge that concrete septic systems can crack. The result is either septage leaking into groundwater (which causes groundwater contamination) or groundwater infiltrating the tank (which causes the system to process groundwater along with septage). On the one hand, there is damage to the environment. On the other hand, the system is overloaded and does not function as it was designed. What many developers do not know is that a structurally strong, watertight fiberglass tank can eliminate both of these problems, and provide a reliable and cost-effective solution for wastewater needs.

Unlike concrete storage systems, Xerxes fiberglass tanks are constructed of materials that are rustproof and corrosion-resistant. Since water by nature creates a corrosive environment, rust can be a weakness in underground storage systems when it results in the corrosion of steel reinforcement often found in precast concrete. The properties of fiberglass provide long-term, internal and external protection against leakage or structural failure due to rust.

The fact that Xerxes tanks are designed to be watertight is a benefit of widespread significance in light of today's increasingly stringent regulations, many requiring watertight systems. With the

option available to equip these tanks for on-site pressure testing, both before and after installation, tank owners can be confident that the tanks are watertight from the time they are installed.

In manufacturing its tanks, Xerxes uses only high-quality resin and glass for its unique manufacturing process. Like fluting in corrugated cardboard, the integral ribs in Xerxes tanks add strength. Since the ribs and tanks are made of the same materials and are manufactured simultaneously, the result is a structurally strong product.

In the process of choosing fiberglass tanks for the Whispering Ridge development, Gilyard came to see the benefits. "I believe if you compare apples to apples, fiberglass is more cost-effective and is easier to install." And Gilyard did not begin his experience with fiberglass on an easy project. Whispering Ridge is the largest housing development in Sherbourne County.

Because Xerxes fiberglass tanks are more lightweight than pre-cast concrete systems, they are easy to ship and easy to install. This is also a significant benefit for developers, especially when installations are large, when they are at sites with limited excavation space, and when they are in remote or hard-to-reach locations. Today, more and more housing developments and commercial developments fall into these categories. Whispering Ridge is also an example of another trend. It is located in Sherbourne County, a county that is experiencing a rapid population growth and a centralized treatment plant that is already struggling with overcapacity. Therefore, the county is encouraging the use of decentralized septic systems such as the Whispering Ridge system.



Key to the growth of Xerxes fiberglass tanks in the wastewater industry is versatility. Available in sizes up to 68,000 gallons, the Xerxes tank can be designed and manufactured to fit customers' varied needs, including septic, recirculation, dosing and holding tanks. In addition to housing developments, Xerxes wastewater tanks are routinely installed at public parks, recreation sites, rural developments, resorts, casinos, churches, rest areas, private RV parks and truck stops.

Well-known for decades as a major supplier to the petroleum industry, Xerxes has also become a major supplier of tanks in the water and wastewater industries. With manufacturing facilities strategically located throughout the United States, Xerxes

Corporation is able to provide customers with prompt and economical delivery and service all over the country.

So, whether a customer is a commercial, industrial or residential developer, or a private home owner, a Xerxes fiberglass tank is a reliable, cost-effective, long-term answer to a variety of underground storage and treatment system needs. That is what more and more people — like Alan Gilyard — are discovering.

Gilyard has several other projects in the works for which he will definitely consider fiberglass. "In my opinion," says Gilyard, "the fiberglass tank is an extremely strong, durable product that doesn't deteriorate over time. As more developers install and use fiberglass tanks, more fiberglass tanks will be sold, because more of us will see the advantages."

Project Profile	Whispering Ridge
Application	Wastewater treatment system
Site	Housing development
Location	Elk River, Minnesota
Developer	10-24 Developers, LLC
Installer	Pioneer Excavating
Engineer	Bogart Pederson & Associates
Tank Manufacturer	Xerxes Corporation

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