

Large-scale Stormwater Chamber System

Frederickson, Washington

Product Types:

HydroStor® HS290 Chambers, Goldflo® dual-wall pipe, Goldflo® fittings, Geotextiles

Application Types:

Stormwater collection, conveyance, underground retention, filtration

Contractor:

Pivetta Brothers Construction

Engineer:

Barghausen Consulting Engineers, Inc.

Prinsco's Applications
Engineering Department

Matthew Davis, Prinsco Regional Engineer

Installation Date:

September 2023

Location:

Frederickson, Pierce County, Washington, United States







Abstract:

Clover Creek is a 16.34 acre commercial warehouse development with a large parking lot in Frederickson, Pierce County, Washington. Construction began in September of 2023. The project was completed in 8 weeks. The chamber system provides 320,000 cubic feet of stormwater storage and is the largest Prinsco-installed chamber project in the Pacific Northwest.

The stormwater system was built with HydroStor® HS290 Chambers, a polypropylene chamber with a storage capacity of 164 ft³/chamber. Each HS290 chamber measures 59.5" high by 100.5" wide, has an installed length of 48.3", weighs 125 pounds and features integrated handles, which allows for easy installation by just two people because of its lightweight design. This project used 1,971 chambers along with Goldflo® dual-wall pipe, fittings, geotextile and 9 inches of rock. It was designed to meet the Washington State Western Washington Hydrology Manual (WWHM) mandates to treat total suspended solids and infiltrate stormwater back into the ground.

Underground water management systems are essential for areas like Frederickson, Washington where precipitation can be heavy, and the fisheries industry depends on clean water. This project was initially designed by a competitor with a different product, but was re-engineered by Prinsco's team with the more economical and easier-to-install HydroStor® HS290 Chambers, saving both time and money.

Prinsco is proud to serve customers in the Pacific Northwest with 2 manufacturing facilities and several yards located in the Western United States, making the HydroStor® stormwater chambers an economical option in Washington State.

See a project summary from our sales team.

