



Quick4® Standard Chambers Installed in Community Soil Absorption System

A resort community in Jackson Hole required an environmentally-sound, optimal performing onsite wastewater treatment system which would preserve the natural habitat and support its various amenities.

Project

Community soil absorption system utilizing 37,000 square feet of Quick4 Standard Chambers and 624 Quick4 Standard MultiPort end caps.

Installation Date

June 2006

Engineer

Ty S. Ross, PE
The Meridian Group Inc.
Jackson, Wyoming

Contractor/Installer

Jeff and Kevin Killroy
Killroy LLC
Alton, Wyoming

Permitting Agency

Wyoming DEQ

Owner

Snake River Sporting Club
Development Co. LLC
Jackson, Wyoming

Distributor

National Water Works
Idaho Falls, Idaho

Design Specifications

Flow: 45,000 GPD
Soil Type: Perc rate of 10 min/inch
Distribution Type: 1¼" to 4"
pressurized HDPE
Leachfield: 3,270 Quick4 Standard
Chambers

Snake River Sporting Club is a first-class golf and sporting community on 554 acres along the Snake River in Jackson Hole, Wyoming. The area lies amid the largest intact temperate ecosystem in the United States and is closely protected by state and county agencies. When the 71-lot residential development with an 18-hole golf course, clubhouse and restaurant was proposed, a suitable solution was necessary for handling the wastewater onsite.

Several distribution and wastewater treatment options were evaluated including pressure sewer, gravity sewer and centralized lift stations, sand filters and a conventional wastewater treatment plant. A community soil absorption system was the preferred solution due to area topography, anticipated seasonal occupancies, limited siting area within the project boundary, ease of construction and minimal O&M requirements.

Each building has its own septic tank which provides primary treatment. The effluent is then transported via a pressurized sewer to dual high capacity siphon units. Then the effluent is dosed alternately between two community chamber leachfields. Infiltrator chambers were specified to minimize required leachfield dimensions. The chambers are installed in three equally sized cells consisting of a total of 3270 Quick4 Standard chambers. One of the three cells is rested on a yearly basis leaving two cells operational under uniform pressurized distribution.

Two areas within the project are served by gravity sewers terminating at common septic tanks. Through the use of a Orenco Bio-Tube filter, duplex pumping units are inserted directly within the septic tanks serving both these locations. The Clubhouse which generates both sanitary and kitchen wastes has two gravity sewer service lines. A 6-inch line carrying sanitary wastes discharges to the first of two septic tanks connected in series. A 4-inch line conveying kitchen wastes discharges to a 1500-gallon grease trap interceptor and is subsequently connected to the 6-inch sanitary main. Effluent is then conveyed to a separate pump chamber and the pressurized network. Isolation valves within the network were incorporated to facilitate system operation and maintenance and to minimize service interruption.



INFILTRATOR®
systems inc.

1-800-221-4436

www.infiltratorsystems.com