Infiltrator Septic Tanks and Aquaworx Used in System with High Water Table

Cordele, GA

"I really like the ease of programming offered by the Aquaworx panel and its ability to log data from the system. This enhances the ability to diagnose any issues and educate homeowners about their water usage."

-Matt Vinson, Vinson Septic Systems

SYSTEM SPECIFICATIONS

Residential Wastewater Treatment System

INSTALLATION DATE

Summer 2011

PRODUCTS

IM-Series Septic Tanks Aquaworx Control Panel

ENGINEER

Vinson Septic Solutions, Milledgeville, GA

DESCRIPTION

A small lot on Lake Blackshear point in Cordele, Georgia, sat vacant after several potential buyers unsuccessfully attempted to get a septic permit from the Crisp County Health Department. A shallow water table and only a 50-foot setback to the lake made squeezing in a primary and replacement drainfield tricky. New owners were determined to build a two-bedroom seasonal cabin on the lot turned to Matt Vinson of Vinson Septic Systems for help.

Vinson had to accommodate site constraints, the County requirement for alternative systems to have replacement drainfields, and the intermittent usage of the cabin. Conventional systems were considered but space limitations prohibited enough square footage for a primary and the required replacement drainfield area and a mound system wasn't desirable due to limited space for the drainfield and required side slope.

Vinson chose a peat fiber biofiltration pretreatment system from Anua with direct discharge paired with a IM-1060 septic tank and a IM-540 dosing tank, and an Aquaworx by Infiltrator IPC Intelligent Control Panel.

Wastewater gravity flows through 4-inch PVC pipe to the septic tank, then into the dosing tank. Every two hours, the pump in the dosing tank sends 25 gallons through a 1.5-inch PVC Schedule 40 force main to the modules. Effluent trickles down 30 inches of packed peat fiber to a 6-inch-deep gravel layer at the bottom of the modules before entering the gravel absorption bed. Microorganisms living on the media go dormant when the cabin is vacant and reactivate to optimal performance levels shortly after the homeowners return.

The Aquaworx IPC Panel leverages simple pressure transducer technology for the enhancement of pump system



performance, and ease of installation. Relying on an embedded microprocessor in the pump controller and a floatless pressure transducer in the pump chamber, the IPC Panel monitors liquid levels, controls pumping time intervals, and logs events in real time. The system was installed in a 30 by 40 foot area next to the cabin using a backhoe. Another important system component was the lightweight, compact Infiltrator septic tank and the dosing tank.

