



CASE STUDY

PROJECT NAME

Shadybank, Goddard, Kansas
Residential Septic System

SYSTEM SPECIFICATIONS

450 GPD Single Family LPP system with
STEP tank

INFILTRATOR PRODUCTS USED

EZflow by Infiltrator

INSTALLATION DATE

December 2015

HEALTH DEPARTMENT

Tim Wagner, Water Quality Specialist
Sedgewick County, Kansas

INSTALLER

Chad Mills
HD Mills & Sons, Wichita, Kansas

CLARENCE FRAZIER

Clearwater Excavating
Haysville, Kansas



INFILTRATOR
water technologies

4 Business Park Road, Old Saybrook, CT 06475
(800) 221-4436 • info@infiltratorwater.com

EZflow by Infiltrator LPP System Solves Limited Space and High Water Table Challenges

SUMMARY

Faced with a failing residential septic system that was more than 40 years old, limited space, and ground water at only 4' from the surface grade a Goddard, Kansas homeowner turned to Tim Wagner, Water Quality Specialist for Sedgewick County, Kansas for help. Wagner decided to use the system repair as a demonstration installation for the health department and approximately 15 area contractors who attended to learn about system design, installation, and maintenance of an LPP system using EZflow.

CHALLENGES

Due to lack of space and contour, and the presence of the shallow water table, the options for system repair solutions were limited. Finding a suitable location for the system was further complicated by sandy soils and the close proximity of the house to a lake. In the past the County recommended drip irrigation systems in cases such as this, but recent gopher damage to the drip lines of those systems catalyzed the County and the homeowner to search for alternatives.

SYSTEM DETAILS

The 450 GPD replacement system includes 5 lines of EZflow by Infiltrator geosynthetic aggregate installed on 5-foot centers. Each line is 45-feet long. The LPP lines are installed 8-inches deep to maintain more than 2-feet of separation from the limiting layer or water table at 4 feet.

The system was installed in reverse order to minimize compaction and keep traffic off of the LPP lines. Due to the shallow water table, the tank hole had to be dewatered in order to set the tank.

Infiltrator's Rick Kirkpatrick and Curtis Cluckey participated in the installation demonstration with Tim Wagner. Installer Chad Mills, HD Mills & Sons, also a full-time Wichita, Kansas firefighter, was contracted by Clearwater Excavating to complete the installation.

RESULT

"The EZflow by Infiltrator 0803 was fast and easy to install and enabled us to handle the 450 GPD flow in a very small area," Mills said.

Everyone on the project was happy to get a system installed that could handle the needed flow in such a small area. There we no treatment units required and very little backfill needed. The Sedgewick County Environmental Health Department was pleased to have the opportunity to provide 15 installers with the 4-hour demonstration class on the design, installation, and maintenance of a LPP system using EZflow.