

CASE STUDY

Enviro-Septic Installed in 30-Home Community System

West Newbury, MA

SYSTEM SPECIFICATIONS

9,240 GPD Wastewater Treatment System

PRODUCTS

Enviro-Septic® combined treatment and dispersal system

OWNER

Cottages at River Hill Community Management Association, West Newbury, MA

DESCRIPTION

The Cottages at River Hill project was developed as a residential “pocket community” of 30 single-family homes clustered to foster community connections, while leaving the majority of the property as an undeveloped, shared space with walking trails and community gardens to enhance the quality of life for the residents and greater community. Because there was no infrastructure available, developers needed an innovative onsite solution capable of handling a total design flow of 9,240 GPD from the 84 total bedrooms in the development.

The developers of this innovative project chose an Enviro-Septic combined treatment and dispersal system from Infiltrator Water Technologies. Normally, an onsite wastewater system of this size in Massachusetts would require pressure distribution to facilitate dispersal of the effluent to the native soils. However, the performance track record of the Enviro-Septic wastewater treatment system enabled the project to proceed without pressure distribution.



Due to separation to seasonal high-water table requirements for new construction, the system was designed in an elevated mound configuration that included two beds for a total of 6,002 feet of Enviro-Septic pipe configured in 66 rows at 91 feet each. A portion of one of the beds (15 rows) slopes at 6 percent to allow the large field to blend in with the terrain and save on the cost of additional fill which would have been required for a level bed. Because of the secondary treatment performance of the system, the Enviro-Septic system is approved for a 40 percent reduction as compared to conventionally sized systems in Massachusetts. This enabled a much smaller footprint and subsequently much less disturbance to the natural areas of the property.



Today, the Cottages at River Hill are fully occupied. The community management association reaps the value of a low-maintenance wastewater treatment system, and the residents enjoy the benefits of a tight-knit community along with the open spaces and natural vistas this type of development provides.

