



CASE STUDY

PROJECT NAME

The Cottages at River Hill
West Newbury, MA

INSTALLATION DATE

Spring 2021

SYSTEM SPECIFICATIONS

9,240 GPD combined treatment and dispersal system for 30 single-family home residential community

PRODUCT USED

Enviro-Septic® combined treatment and dispersal system

OWNER

Cottages at River Hill Community Management Assoc.

Combined Treatment and Dispersal System Enables Development of 30-Home Residential Community in Massachusetts

OVERVIEW

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.

CHALLENGE

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.

SYSTEM DESIGN

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.

RESULT

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.



INFILTRATOR
water technologies

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