



# Infiltrator® Quick4™ Standard Chamber System Installed to Replace Aging Lagoon at New York School District High School

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## Owner

Jordan Elbridge School District  
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When the Jordan Elbridge Central School District needed to replace an existing lagoon with a new septic system for the high school, they ran into poor soils with varied permeability and percolation rates. Engineers for the project needed to find a solution that could efficiently handle the wastewater flow and be installed within the maximum allowable bed width of 20 feet per the State of New York health regulations. Initially, a stone and pipe system was proposed as part of the Draft Environmental Impact Statement, however the vast size of the bed required was larger than allowed by State standards.

Although chamber systems have been installed in similar commercial applications in New York State, when originally proposed, the system was met with some concerns due to a lack of familiarity with chamber technology in the area. The engineer and Infiltrator team worked closely with the Department of Health and the project team to work out a project design to solve the site and soil challenges.

Ultimately, an absorption field using 5700 linear feet of Infiltrator Quick4 Standard chambers was designed and approved. To accommodate the maximum bed width regulation of 20 feet, the drainfield system was divided using two six-way valves supplying 12 separate beds. Infiltrator chambers were installed along with Orenco controls, pumps, and distribution valves operating on a time dosed schedule.

The Quick4 Standard chamber was selected because it dimensionally fit inside of the parameters of the field size. The Infiltrator chamber system provides increased storage volume in the bed and a larger unobstructed absorptive area than a traditional stone and pipe system. This increase in storage volume was a plus in this scenario due to the varied nature of the flows from the school between periods of high flow during school hours to very low flow when school was not in session. Sand fill was used to level the uneven slope for the shallow, keyed-in design.

Installation was completed in the summer of 2010 and the system went online as planned and is operating effectively.



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