

Green Innovation Grant Program

Project Title: Regional Green Infrastructure Demonstration

Grant Recipient: Bard College

Location: Dutchess County, NY

Green Infrastructure Practice: Permeable Pavement, Wetland Construction, Bioretention

EFC Grant Amount: \$732,728

Total Project Amount: \$814,143

GIGP ROUND 5



Projected Construction Start: Fall 2014

Project Description:

An existing parking lot at Bard College in Annandale-on-Hudson is to be retrofitted with a new stormwater management system using green infrastructure practices. Bioretention areas and permeable pavement will be installed at the site to capture, treat, and infiltrate stormwater before it enters local waterways or the existing stormwater drainage system. Runoff from the existing lot at the main instructional building on campus currently enters a small tributary of the Saw Kill Creek, which supplies the drinking water for the College before flowing into the Hudson River.

The project's goal is to create a linked series of green stormwater infrastructure practices which will be monitored and studied to demonstrate performance. The project's components are designed to work together as a unit, mimicking a natural ecosystem. Bioretention practices help slow

the speed of stormwater runoff and treat it, while porous asphalt allows water to drain through the pavement surface into a stone recharge bed which facilitates infiltration. The first one inch of rain that falls on the Olin Parking Lot will be infiltrated. Working as a system, these practices will help recharge ground water and improve and protect regional water quality.

This project turns a problem area into an asset: Eliminating an impervious area and transforming it into a permeable one in the most heavily-trafficked sections of the campus will provide both environmental and educational benefits. The project is intended to become a regional model for green infrastructure, helping to improve water quality and biodiversity, while promoting a healthier, more resilient watershed.



Conceptual plan (left) illustrates the proposed green infrastructure practices designed to help improve stormwater quality and management at the Bard College campus in Annandale-on-Hudson. Existing impervious parking lot (right).

