

## The Bridgewater State University Green Parking Lot, Bridgewater, MA





Bridgewater State University parking lot before (above left) and after construction (above right). Photo: Google Earth.

**Who**: Bridgewater State University and Horsley Witten Group Inc.

**What**: Collaborated to build a <u>Low-Impact Design</u> (LID) parking lot for Bridgewater's new Marshall Conant Science and Math Building (See Fact Sheet #3 for more information about low impact design).

**When**: Brainstorming began in 2010. Construction was completed in 2012.

**Where**: On Bridgewater State University, Bridgewater, MA. Behind the Conant Science and Mathematics Center at 131 Summer St, Bridgewater, MA.

**Why**: A LID parking lot can decrease the amount of stormwater pollution entering the Taunton River Watershed which is a federally designated wild and scenic river that provides many services for fish, wildlife, and people.

**How**: By changing the layout of the parking lot, all water flowing off the lot is directed through a natural system designed to filter, slow down, and absorb the water.

## **Benefits:**

- The 2 bioretention trenches reduce flooding by storing 1,000,000 gallons of water. Cost: \$28,000/impervious acre treated. Total cost: \$70,000
- Recharge Chambers are pipe replacements that are open to the ground. They allow 15% more water storage and let rain water recharge to the water table. *Cost:* \$910/Chamber. *Total cost:* \$127,000
- LID design created an additional 50 parking spaces
- Stormwater pollution decreases (See Fact Sheet #5 for information about pollution mitigation)
- Water temperature is decreased
- Pollution in run-off is decreased
- Monitoring Chambers and sampling equipment were added to this project for college students to study the science of stormwater treatment

Bioretention trench at BSU Conant Bldg. Photo courtesy of the Horsley Witten Group, Inc.

