Rainwater Harvesting Project Town of Lake George Museum Complex, Lake George, NY

Sequential Construction Brochure

Sponsored by:

- Lake Champlain Basin Program
- Champlain Watershed Improvement Coalition of NY
- Town of Lake George (Buildings & Maintenance)





Rainwater Harvesting & Irrigation Project

The goals of the rainwater harvesting project at the museum complex in Lake George, NY are:

- 1. Collect rainwater from the roof of the museum complex to irrigate areas around the building
- 2. Eliminate the use of municipal, treated water for irrigation of grass
- 3. Save the Town of Lake George money for water use
- 4. Intercept and reduce large amounts of high velocity, erosive water flows from the southeast corner of the building to the Shepards Park public beach
- 5. Reduce contaminant and sediment mobilization to Lake George
- 6. Demonstrate this green infrastructure system to pedestrians and local residents/businesses



Rain begins to fall on project site





Rain water accumulates on new cistern containment pad

Effects of high velocity rainfall on Shepards Park beach, Lake George. The beach is downhill of museum complex

Planning and Site Layout



Location of Rainwater Collection System. Lake George, New York. Original view of site.

Planning and Site Layout

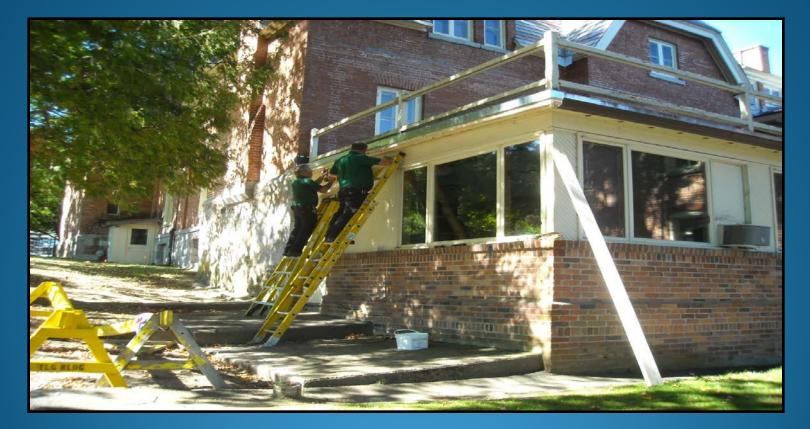






Test pits completed on site to determine percolation rates for overflows and cistern placement.

System Construction



Adjusting the existing roof gutter system.

Site Construction & Preparation



Excavation and cistern pad creation. Utilizing pervious pavers and quarry stone for containment and water infiltration.

Cistern Preparation



Arrival and prep of the roof water collection cistern (1,100 gal) with Town of Lake George Buildings and Grounds Personnel



Cistern Preparation





Cistern mural designed and painted by the Lake George High School art class.





System Assembly



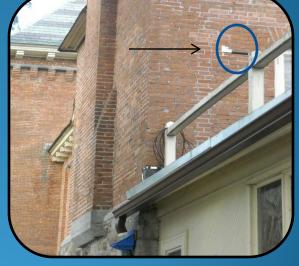
Attachment of collection pvc conduit "bridge"





Overflow discharge and rock-lined absorption





Attachment of Rain Sensor system override

System Assembly

Leaf Catcher Screen/funnel attached- water collection underway











First flush contaminant catchment





Final assembly!

Irrigation System Installation



Trenching in the irrigation lines and installing 3 zones for watering around the Lake George Museum Complex





System Trial





Pump Assembly Installed. 1.5 horsepower inline pump

Irrigation Zone #3 installed and functioning

Completion and SUCCESS!







Town of Lake George museum complex entrance way irrigation zones 1 & 2 are successfully tested.

Special thanks to:

- Lake Champlain Basin Program
- Town of Lake George Buildings and Maintenance Staff
- FW Webb, Queensbury, NY
- Atlantic Irrigation Products, Clifton Park, NY



Ready for winter





System Constructed by:

Town of Lake George Personnel:

- Jim Ellis
- Phil Goucher
- Jim Martino

CWICNY Personnel: - Andrew Snell