



Green Infrastructure & Stormwater Management CASE STUDY

Copiague Park Extension

Location: Copiague, NY

Client: Town of Babylon, NY

Design Firm(s): Gibney Design Landscape Architecture PC

Landscape architect/Project contact: Richard W. Gibney, RLA, ASLA

Email: gibgroup@optonline.net

ASLA Chapter: New York

Project Specifications

Project Description: Copiague Park Extension took an abandoned, neglected site with an old foundation and invasive plant overgrowth to create an extension of an adjacent traditional park. Using sustainable technology the extension demonstrates the use of bioswales, rain gardens, porous pavers, native plants and CU soil.

Project Type:

Open space - park

Part of a redevelopment project

Design features: Rain garden, bioswale, porous pavers, and CU soil under pavers in a pedestrian area.

This project was designed to meet the following specific requirements or mandates:

Sustainable technology demonstration site, beautification of the area

Impervious area managed: less than 5,000 sq/ft

Amount of existing green space/open space conserved or preserved for managing stormwater on site: less than 5,000 sq/ft, this is a 4,500 sq/ft project to develop an eye-sore, neglected property on a main street.

The regulatory environment and regulator was supportive of the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? No.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: Local, town of Babylon, NY)

Related Information: Approx. \$200,000 for sitework, paving, lighting and planting.

Was a green vs. grey cost analysis performed? No

Cost impact of conserving green/open space to the overall costs of the site design/development project: Comparisons were not made. Improvements cost less than \$50 / sq ft.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Did not influence costs. Comparisons were not made. The town supervisor, Steve Bellone, was excited to have an opportunity to demonstrate sustainable technology in a small project.

Number of jobs created: Not applicable

Job hours devoted to project:

Planning and Design: Approx. 150 hrs.

Construction: Approx. 400 man-hours

Annual Maintenance: Approx. 40 man-hours

Performance Measures

Stormwater reduction performance analysis:

100% retention of a 3" storm event and due to excellent percolation in the bioswales, stormwater retention beyond a 5" event is expected.

Community & economic benefits that have resulted from the project: Community pride. Improved aesthetics on a neglected site. Educational opportunities in the area of sustainable site design.

Additional Information

Links to images: www.gibneydesign.com Go to Portfolio > Sustainable Design > Copiague Park (new images to be added shortly)

The Town of Babylon has enacted several green initiatives for development and this was an opportunity for the town to demonstrate sustainable design in a small project. We are observing its effectiveness and it has withstood extreme storms and extreme drought very well so far.