Green Infrastructure & Stormwater Management CASE STUDY

Greenstreets - Pelham Pkwy & Stillwell Ave, Bronx

Location: Pelham Pkwy & Stillwell Ave, Bronx, New York City, NY Client: NYC Parks & Recreation Design Firm(s): NYC Parks & Recreation Landscape architect/Project contact: Adriana Jacykewycz Email: <u>Adriana.Jacykewycz@parks.nyc.gov</u> ASLA Chapter: New York

Project Specifications

Project Description: The Greenstreet at Pelham Pkwy & Stillwell Ave, Bronx, was



constructed in the spring of 2008 to alleviate existing drainage problems and to accompany plantings in a nearby median. Stormwater is managed from 9,140 sq/ft of impervious surface, including a heavily trafficked intersection on Pelham Pkwy. Runoff sheets over a gravel diaphragm shoulder flush with the roadbed, and spreads into a bioswale depression, where it infiltrates into 2' of soil and 1' of ³/₄-inch crushed blue stone above native soil. The site is planted with Taxodium, Quercus, Prunus, Echinacea, Liatris, Iris, Hemerocallis, Rudbeckia, Panicum, and Liriope.

Project Type:

Transportation corridor/streetscape A retrofit of an existing property

Design features: Bioretention facility, bioswale, gravel reservoir, flush curb, and gravel diaphragm.

This project was designed to meet the following specific requirements or mandates: Not applicable

Impervious area managed: 5,000 sq/ft to 1 acre

asla.org/stormwater

Amount of existing green space/open space conserved or preserved for managing stormwater on site: Not applicable

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: \$1,000,000 - \$5,000,000 (Public funding: Local - NYC Parks Dept - Capital Budget)

Was a green vs. grey cost analysis performed? No

Number of jobs created: 0.57

Job hours devoted to project: Not available

Planning and Design: Not available Construction: Not available Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

Disconnected 9,140 sq/ft of impervious surface from sewers.

Community & economic benefits that have resulted from the project:

Greenstreets not only beautify the urban



landscape, but also calm busy traffic, clean the air, cool the city, sequester carbon, increase pedestrian safety, provide environment for wildlife, mitigate flooding, and capture stormwater for irrigation.

Additional Information

Links to images: http://www.nycgovparks.org/sub_your_park/trees_greenstreets.html

http://www.nycgovparks.org/sub_your_park/trees_greenstreets/images/NYC_Greenstreets-Green_Infrastructure_for_Stormwater_Management.pdf

asla.org/stormwater