



Green Infrastructure & Stormwater Management CASE STUDY

Dunbar Porous Concrete Parking Lot

Location: Syracuse, NY

Client: Dunbar Association, Inc.

Design Firm(s): Natural Systems Engineering, PLLC

Landscape architect/Project contact: Kyle E. Thomas

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Project Specifications

Project Description: Built a porous concrete section of parking lot to infiltrate stormwater from adjoining tarvia lot and sidewalks. Rooftop runoff from the associated building was directed to the infiltration basin for additional stormwater mitigation.

Project Type:

Institutional/education

A retrofit of an existing property

Design features: Porous pavement (concrete)

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

Amount of existing green space/open space conserved or preserved for managing stormwater on site: Less than 5,000 sq/ft

The regulatory environment and regulator was supportive of the project.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$50,000-\$100,000 (Public funding: Federal, local)

Was a green vs. grey cost analysis performed? No



Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Slightly increased.

Number of jobs created: 5

Job hours devoted to project:

Planning and Design: 35

Construction: 60

Annual Maintenance: 8

Performance Measures

Stormwater reduction performance analysis:

Designed for retention of events up to the 1-year, 24-hour storm. Actual performance likely to be much higher.

Additional Information

Links to images: www.naturalsystemsengineering.com or look up Natural Systems Engineering on Facebook.