Green Infrastructure & Stormwater Management CASE STUDY

Saylor Grove

Location: Intersection Rittenhouse Street, and Wissahickon Avenue and Lincoln Drive,

Philadelphia, PA

Client: Philadelphia Parks & Recreation

Design Firm(s): Philadelphia Department of Water **Landscape architect/Project contact:** Rick Howley

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Photo Credit: Philadelphia Water Department

Case No. 470 Page | 2

Project Specifications

Project Description: Saylor Grove is a 3.25-acre park in the Fairmount Park system, located in the Germantown neighborhood of Philadelphia. A .70-acre stormwater treatment wetland was constructed in Saylor Grove to address the impact of urban runoff and bank erosion along the Monoshone Creek. The Saylor Grove wetland is located at the terminus of a 156-acre urbanized watershed and filters a large portion of the watershed's approximately 70 million gallons of annual stormwater. Water entering the wetland originates from a dalylighted stream that was formerly piped under the park and the stormwater diverted from the stom sewer system. Water flows over cascading rocks, which help slow the flow and settle out some contaminants. Wetland plants and wildlife aid the filtration process. The system is designed to filter non-point source pollutants and reduce peak stormwater flow rates and volumes. This will result in improved water quality of the Monoshone Creek and adjacent water department intake; reduced downstream bank erosion and improved aquatic habitat.

Project Type:

Recreation Center / Open Space

A retrofit of an existing property

Design features Stormwater treatment wetland

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

Impervious area managed: 1 acre to 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: N/A It was a project in an existing park.

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? Yes, use of existing green space, in the form of parks and floodplain areas was considered.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$1,000,000-\$5,000,000 (Public funding: Local)

Was a green vs. grey cost analysis performed? No

Number of jobs created: Not available

Case No. 470 Page | 3

Job hours devoted to project:

Planning and Design:

Construction:

Annual Maintenance:

Performance Measures

Stormwater reduction performance analysis; Philadelphia designs their systems to manage the first inch of every storm from the drainage area. The metric used is acre-inches. This project manages 156 acre-inches.

Community & economic benefits that have resulted from the project:

The site is highly visible and includes public access and environmental education opportunities. PWD installed a boardwalk with educational signage illustrating the effects of stormwater and non-point source pollution. As part of this project, improvements were also made to the trails and benches to increase usability.

Additional Information

Links to images:

http://www.phillywatersheds.org/img/ASLA/Saylor Grove PWD.JPG