Green Infrastructure & Stormwater Management CASE STUDY

Perkiomen Watershed Conservancy Headquarters Master Site Plan

Location: Skippack Township, Montgomery County, PA Client: Perkiomen Watershed Conservancy Design Firm(s): KMS Design Group, LLC Landscape architect/Project contact: Adam A. Supplee, RLA, ASLA, AICP, LEED AP Email: asupplee@kmsdesigngroup.com ASLA Chapter: Pennsylvania/Delaware

Project Specifications

Project Description: The master site plan was developed to help the Perkiomen Watershed Conservancy address multiple site issues, including the correction of drainage problems, poor vehicular and pedestrian circulation systems, and inadequate parking. Additionally, the Conservancy wanted to have organized outdoor areas for their environmental education programs. The master site plan addressed these issues and more. Incorporated in the master site plan were multiple demonstration stormwater BMPs to show homeowners different methods of handling stormwater on their properties. Stormwater BMP types included vegetated swales, drywells, raingardens, wetland pockets, rain barrels and porous pavements.

Project Type:

A retrofit of an existing property

Design features: Bioretention facility, rain garden, bioswale, rain barrels, porous pavers, curb cuts, and dry wells.

This project was designed to meet the following specific requirements or mandates: Developer/client preference

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: 1 acre to 5 acres. The project addressed poor drainage and circulation problems and incorporated additional educational value at the headquarters of a non-profit watershed conservancy.

asla.org/stormwater

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. It was desired to take advantage of the site's attributes to enhance educational opportunities

Cost & Jobs Analysis

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

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: Unknown. The design project was to prepare a master site plan.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Did not influence costs.

Number of jobs created: None. This project will likely be completed by volunteers.

Job hours devoted to project:

Planning and Design: 120 Construction: Not yet constructed Annual Maintenance: Not applicable

Performance Measures

Stormwater reduction performance analysis:

2-year storm event 100%. Not intended for large volume storage.

Community & economic benefits that have resulted from the project: When the master site plan is completed, it will improve the usability of the site during inclement weather, increase the educational value of the site, enhancing the conservancy's mission.