Green Infrastructure & Stormwater Management CASE STUDY

Sprinker Recreation Center Low Impact Parking

Location: Spanaway, WA
Client: Pierce County Parks
Design Firm(s): Robert W. Droll, Landscape Architect, PS
Landscape architect/Project contact: Bob Droll, ASLA
Email: bob@rwdroll.com
ASLA Chapter: Washington

Project Specifications

Project Description: Renovated deteriorating impervious parking lot (700 stalls +/-) to porous asphalt and concrete pavement and rain gardens.

Project Type:
Recreation complex
A retrofit of an existing property

Design features: Rain garden, porous pavers, curb cuts, porous asphalt, and concrete pavement.

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

Impervious area managed: 1 acre to 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: 5,000 sq/ft to 1 acre

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? Goal was to infiltrate 100% of stormwater.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: $500,000-$1,000,000 (Public funding: State - funded from Department of Ecology Stormwater Grant)

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: Decreased costs.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Slightly reduced costs (1-9% savings).

Number of jobs created: 30

Job hours devoted to project:

Planning and Design: 1,500
Construction: 3,500
Annual Maintenance: 40

Performance Measures

Stormwater reduction performance analysis:
100% in infiltrated on site.

Community & economic benefits that have resulted from the project: All stormwater was retained and infiltrated on site. Landscape improvements cleanse stormwater and reduced heat island effect.

Project Recognition

State of Washington