



Green Infrastructure & Stormwater Management CASE STUDY

Glencoe Elementary School Parking Lot Stormwater Retrofit

Location: Portland, OR

Client: City of Portland, Bureau of Environmental Services

Design Firm(s): City of Portland, Bureau of Environmental Services

Landscape architect/Project contact: Kevin Robert Perry, ASLA

Email: kevin@nevuengan.com

ASLA Chapter: Oregon



Photo: Kevin Robert Perry, ASLA

Project Specifications

Project Description: Completed in 2002, this project at a local elementary school retrofitted a 12,000 sq/ft parking lot with a 1,000 sq/ft stormwater swale. An additional 3,000 sq/ft of impervious area was converted into landscape space. The project responded to the neighborhoods chronic problem with local basement sewer backups. Because the existing parking lot had a very inefficient parking layout, the stormwater swale was installed with only a

loss of two parking spaces and created a much safer traffic condition for parents and students. Project is considered a strong success with most of the annual rainfall from the parking lot managed within the stormwater swale.

Project Type:

Institutional/education

A retrofit of an existing property

Design features: Bioswale and curb cuts.

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

Resolve local basement sewer backup problems

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.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? Yes

Cost & Jobs Analysis

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

Was a green vs. grey cost analysis performed? No

Number of jobs created: 0

Job hours devoted to project:

Planning and Design: 120

Construction: 240

Annual Maintenance: 40

Performance Measures**Stormwater reduction performance analysis:**

Detailed project performance data can be obtained on the Bureau of Environmental Services Website at: <http://www.portlandonline.com/bes/index.cfm?c=45388&a=78198>

Community & economic benefits that have resulted from the project: The parking lot is a much safer and aesthetically pleasing element to the school. Also, the children learn on a day to day basis what sustainable stormwater management looks like.

Additional Information

Links to images: Pictures can be available by contacting Kevin Robert Perry at 503-239-0600 or email at kevin@nevuengan.com



Photo: Kevin Robert Perry, ASLA