



Green Infrastructure & Stormwater Management CASE STUDY

NE Sandy Boulevard Rain Gardens

Location: Portland, OR

Client: City of Portland Bureau of Transportation and Bureau of Environmental Services

Design Firm(s): Nevue Ngan Associates; Lloyd Lindley, ASLA; URS Corporation

Landscape architect/Project contact: Kevin Robert Perry, ASLA

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ASLA Chapter: Oregon



Photo: Kevin Robert Perry, ASLA

Project Specifications

Project Description: Completed in 2007, this green street project implemented multiple rain garden projects along a 30-block stretch of NE Sandy Boulevard in Portland, Oregon. The design team created a streetscape plan that incorporates four large urban rain gardens and one stormwater plaza for stormwater treatment along the Sandy Boulevard corridor. The green street elements along Sandy Boulevard are designed to fulfill multiple purposes, including:

reducing the frequency of combined sewer overflows (CSO), creating a stronger visual identity to specific intersections along Sandy Boulevard, and helping provide a safer pedestrian condition along one of Portland's busiest corridors.

Project Type:

Transportation corridor/streetscape

A retrofit of an existing property

Design features: Rain garden

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

Local ordinance - 2004 Portland Stormwater Management Manual

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: 500,000-\$1,000,000 (Public funding: State, 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)? Did not influence costs.

Number of jobs created: Not available

Job hours devoted to project: Not available

Planning and Design: Not available

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

Monitoring data for two of the Sandy Boulevard rain gardens can be found at:

<http://www.portlandonline.com/bes/index.cfm?c=36055&a=343463>

Community & economic benefits that have resulted from the project: This project helped provide a much better pedestrian environment along NE Sandy Boulevard by providing safer pedestrian crossings, better site distance for vehicles/pedestrians, and a significant increase in urban green space.

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