



Green Infrastructure & Stormwater Management CASE STUDY

Victor's 1959 Cafe Stormwater Plan

Location: Minneapolis, MN

Client: Nicki Stavrou

Design Firm(s): Emmons & Olivier Resources, Inc.

Landscape architect/Project contact: Brad Aldrich, ASLA

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ASLA Chapter: Minnesota

Project Specifications

Project Description: A small restaurant on an urban site in Minneapolis wished to make site improvements that included reorienting a patio, parking, and landscaping. The landscape architect designed a system that captured, stored and treated stormwater using a porous paver patio, underground storage and infiltration cell, and bioretention facility. The improvements significantly reduced the owner's city stormwater utility fee, added additional outdoor table space on the patio, created safer parking circulation, and reoriented the patio and raingarden toward the street to enhance the urban streetscape.

Project Type:

Commercial

A retrofit of an existing property

Design features: Bioretention facility, rain garden, porous pavers, and rerouting downspouts to underground infiltration chamber below.

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

Local ordinance, developer/client preference

Impervious area managed: Less than 5,000 sq/ft

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. Property value enhancements, maximize space for additional seating - increasing seasonal revenue, reducing significant City stormwater utility.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$10,000-\$50,000 (Public funding: Local, watershed management organization cost share)

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: Had little impact - requirement of city.

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: 6

Job hours devoted to project:

Planning and Design: 80

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

Captures and infiltrates 1.25" storm event. Porous paver patio has been observed to infiltrate large storms without outletting.

Community & economic benefits that have resulted from the project: This project enhanced the streetscape of urban commercial node, increased property values, and is used as an educational tool for restaurant patrons.