



Green Infrastructure & Stormwater Management CASE STUDY

Alabama Street CSO Abatement Pilot Project

Location: 1500 South Alabama Street at
Lincoln Street, Indianapolis, IN

Client: City of Indianapolis, Office of
Sustainability

Design Firm(s): Williams Creek Consulting,
Smock Fransler, Land Story

Landscape architect/Project contact:
Emily Kusz, ASLA

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ASLA Chapter: Indiana

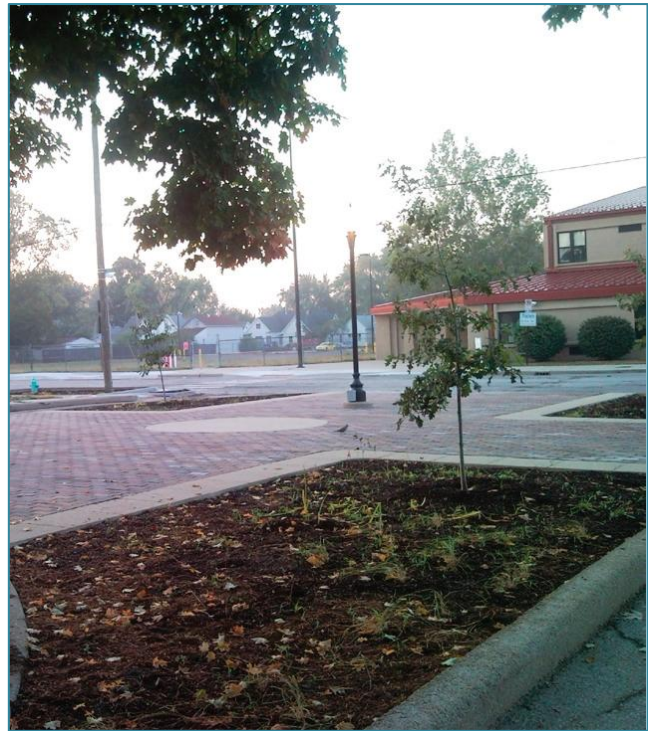


Photo: Williams Creek Consulting

Project Specifications

Project Description: The Alabama Street CSO Abatement Pilot Project extended and enhanced an existing boulevard median and introduced bump out rain gardens as part of a greater Southeast Neighborhood Development (SEND) revitalization initiative.

The new 2,500 sq/ft pedestrian plaza replaced an oversized expanse of asphalt pavement with porous concrete, pavers, and rain gardens.

Project Type:

Transportation corridor/streetscape
A retrofit of an existing property

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

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

Developer/client preference

Impervious area managed: 1 acre to 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: 1 acre to 5 acres. Existing impervious surface was converted to green space and pervious surface for stormwater management. The new 2,500 sq/ft pedestrian plaza replaced an oversized expanse of asphalt pavement with porous concrete, pavers, and rain gardens. An additional 1500 sq/ft of bump out rain gardens increased green space adjacent to the curb.

The regulatory environment and regulator was unreceptive/hostile to the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? No, usable green space was already planned sense a school is adjacent to the improvement project. The overall project was spearheaded by Building Blocks, a partnership between SEND, residents, foundations and the City of Indianapolis to comprehensively address a multitude of issues on one or two blocks. With these funds they were able to improve individual properties which in turn increase the whole neighborhood value.

Cost & Jobs Analysis

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

Was a green vs. grey cost analysis performed? No, there were no grey improvements planned for the location. The purpose of the project was to provide an example for incorporation of GI into community based initiatives.

Cost impact of conserving green/open space to the overall costs of the site design/development project: The \$52,000 cost was procured through an EPA Sustainable Skylines Grant. As such, it reduced the investment by the Community Development Corporation for the minimal improvements previously proposed, which included creating the plaza through the use of planters and the existing asphalt. The funds allowed for upgrading the plaza materials and extending the curb.

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: 0

Job hours devoted to project:

Planning and Design: 120
Construction: 200
Annual Maintenance: 40
Other: volunteer 200

Performance Measures

Stormwater reduction performance analysis:

Estimated 100% of the 2-year storm event is retained. Projected to remove over 100,000 gallons annually.

Community & economic benefits that have resulted from the project: The previously underutilized median, new plaza streetscape and surrounding rain gardens now function as a neighborhood gathering space, a center to the community, an economic generator to encourage the upkeep of homes which improve the overall neighborhood value, and an integrated stormwater management feature. The rain garden bump outs and raised plaza provide traffic calming and safe route for pedestrian connectivity to Lincoln School at the south end of Alabama Street.