



Green Infrastructure & Stormwater Management CASE STUDY

Catalyst MRP West

Location: Madison, AL

Client: RPD Catalyst

Design Firm(s): Fuqua and Partners Architects, 4Site Inc. Civil Engineering and Landscape Architecture

Landscape architect/Project contact: Andrew L. Wharton, ASLA

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ASLA Chapter: Alabama

Project Specifications

Project Description: Project included the construction of two multi-tenant buildings totaling 80,000 sq/ft and associated site improvements. The project achieved LEED Gold Certification for Core and Shell and obtained site credits for both stormwater quality and quantity. It also achieved >50% reduction in potable water use for irrigation.

Project Type:

Commercial

Part of a new development

Design features: Rain garden, bioswale, curb cuts, and all Roof drainage discharged to surface rain garden areas instead of tying directly to storm drainage structures.

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

Developer/client preference, owner's desire was for a LEED Gold Project

Impervious area managed: greater than 5 acres

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

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, the owner expected water savings and enhancement of landscape and open space on the site.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: None)

Related Information: Not Available

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: Minimized the required size of storm drainage infrastructure through utilization of "rain gardens" and other intergrated management practices throughout the site.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Did not influence costs. A detailed cost comparison was not performed based on other goals for the project (ie LEED Certification).

Number of jobs created: unknown

Job hours devoted to project:

Planning and Design: approx 480 hours excluding Architecture

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

100% of 2-year storm retained on-site, and the first inch of rainfall runoff is treated for removal of 80% min. TSS.

Community & economic benefits that have resulted from the project: This project demonstrates emerging practices in the development of sites for commercial use and will help to prove the viability of a "green" approach to site development.

Project Recognition

LEED Gold Certification for Core and Shell

Additional Information

Links to images: email dwharton@4siteinc.biz for jpeg images if desired.