



Green Infrastructure & Stormwater Management CASE STUDY

Saughahatchee Creek Watershed Low Impact Development - Lundy Chase

Location: Auburn, AL

Client: ADEM, Alabama Extension Service, Stone Martin Builders

Design Firm(s): Macknally Ross Land Design

Landscape architect/Project contact: Lea Ann Macknally, ASLA

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ASLA Chapter: Alabama

Project Specifications

Project Description: Through an EPA sponsored grant, we are working with the Alabama Department of Environmental Management, Alabama Extension Service, and a developer to provide a case study for low-impact development measures. The installation measures / final grant sponsored work will be complete by September 2011. The case study will provide testing, design, and construction cost comparisons between a traditionally designed single-family home subdivision and one designed with a minimum of five different low-impact development practices

Project Type:

Single family residential

Part of a new development

Design features: Rain garden, bioswale, porous pavers, curb cuts, filter strips, water spreading, vegetated swales in lieu of piped drainage, created wetlands, and ditch stabilization.

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

Local ordinance, to meet funding criteria, 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: greater than 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? The developer came to the table to offer his development for consideration when he first heard about the grant. Property value enhancements was a driving factor.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: Federal - EPA Low-Impact Development Grant)

Related Information: Detailed costs are in process

Was a green vs. grey cost analysis performed? Not available.

Cost impact of conserving green/open space to the overall costs of the site design/development project: This is part of the current analysis.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Part of the current analysis.

Number of jobs created: We are getting this information from developer. Minimum of 12 jobs involved in the planning and design process

Job hours devoted to project:

Planning and Design: Not available

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

We will have information available in September.

Community & economic benefits that have resulted from the project: The city is working with us to see how their local ordinances need to be modified to allow for more low-impact development practices to be incorporated without extensive city reviews / additional approvals. This will make LID practices more attractive as standard practices by developers.