



Green Infrastructure & Stormwater Management CASE STUDY

Florence Gardens

Location: Gulfport, MS

Client: Florence Gardens, LLC

Design Firm(s): Christian Preus

Landscape Architect: Brown, Mitchell &
Alexander Engineering

Landscape architect/Project contact:

Christian Preus, ASLA

Email: christian@florencegardens.com

ASLA Chapter: Mississippi

Project Specifications

Project Description: Florence Gardens is a traditional neighborhood development with low impact development principles incorporated in the home site drainage as well as the drainage infrastructure for the development.

Project Type:

Other (please specify)

Part of a new development

Design features: Bioretention facility, rain garden, bioswale, downspout removal, and curb cuts.

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

State statute, developer/client preference

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: greater than 5 acre



The regulatory environment and regulator was apprehensive about the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? Yes - usable green space, and property value enhancements.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: 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: Stormwater detention was broken up into small scaled controls - bioretention cells - which detains the water at the source. The overall network of these provided the proper amount of storage, and eliminated the need for a large detention pond at the end of the pipe. This method allowed us to yield more lots per acre because detention was built into the cross section of the road.

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) - in some areas, where applicable, curbs were eliminated. This was a major cost savings.

Number of jobs created: 30

Job hours devoted to project:

Planning and Design: 325

Construction: 5 years

Annual Maintenance: 1,200

Performance Measures

Community & economic benefits that have resulted from the project: Jobs have been

created through home construction, infrastructure construction, and the development has become a destination for tourist groups to our area.

Project Recognition

Sun Herald/Mississippi State University Landscape Architecture Honor Award, " Environmental Honorable Mention

Additional Information

Links to images: www.florencegardens.com

The project is an excellent example of how a dense development can incorporate alternative methods of stormwater management, and blend the function into the aesthetic nature of the project.

