



# 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](mailto: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](http://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.

