



Green Infrastructure & Stormwater Management CASE STUDY

Bowes Creek Country Club

Location: Elgin, IL

Client: City of Elgin, Toll Brothers, Inc.

Design Firm(s): Jacobson Golf Course Design

Landscape architect/Project contact: Rick Jacobson

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ASLA Chapter: Illinois

Project Specifications

Project Description: The “holistic” approach to planning used at Bowes Creek reflects a visionary paradigm for creating golf course communities in harmony with nature. The golf course was used as a transitional buffer between clustered residential enclaves and the site’s interconnected environmental corridor system. Sustainability practices resulted in a golf course with significantly reduced manicured turf grass acreage, a stormwater recycling system and a water quality enhancing “treatment train” that is sensitive to existing natural ecosystems.

Project Type:

Commercial

Part of a new development

Design features: Bioretention facility, bioswale, porous pavers, curb cuts, on-site wetlands utilized for their stormwater management qualities, 40 acres of jurisdictional wetlands preserved, and 26 acres of additional wetlands were mitigated or enhanced.

This project was designed to meet the following specific requirements or mandates: Not applicable

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. 159 acres of golf course are preserved, mitigated, or enhanced green/open space used to direct or retain stormwater

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? No.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$1,000,000-\$5,000,000 (Public funding: Local)

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: Resulted in a reduction in costs because it limited graded, grassed, and manicured area.

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: 30 (estimated)

Job hours devoted to project:

Planning and Design: 350

Construction: 3,200

Annual Maintenance: \$700,000 (estimated)

Performance Measures

Stormwater reduction performance analysis:

The golf course drainage system was designed to retain a 5-year storm within the formal grass areas.

Community & economic benefits that have resulted from the project: The uncompromised quality of the finished product resulted in a unique golf experience that has generated revenues that exceeded projections for 2010 while the real estate development is 50% sold out and is in the process of opening the next phase. The golf course amenity has provided a recreational opportunity that is important to the health and quality of life for the community. However, more importantly the Junior Golf Program is teaching our next generation the core values of the game of golf: honesty, integrity and sportsmanship.

Project Recognition

ILASLA Merit Award

Additional Information

Links to images: <http://www.jacobsongolfcoursedesign.com/bowescreek.htm>

<http://www.bowescreekcountryclub.com/golf.shtml>