

# Green Infrastructure & Stormwater Management CASE STUDY

## **Des Peres Park Pond Improvement**

**Location:** Des Peres, MO **Client:** City of Des Peres

**Design Firm(s):** SWT Design, Jacobs Engineering **Landscape architect/Project contact:** SWT Design

Email: <a href="mailto:chrism@swtdesign.com">chrism@swtdesign.com</a>
ASLA Chapter: St. Louis

#### **Project Specifications**

**Project Description**: The lake is the centerpiece of the community park and has not been updated in 20 years. The rock-edged lake was transformed into an eco-friendly aquatic edged water source. There was an old wood bridge that was replaced with an arched metal bridge. One of the reasons for the improvement were based on an adjacent property owner upgrading there campus to which their stormwater is placed in Des Peres Lake. St. Louis Metropolitan Sewer District has new regulations that are based on the Maryland requirements were implemented for this project. This is a requirement for St. Louis County.

#### **Project Type:**

Open space - park
A retrofit of an existing property

**Design features:** Bioretention facility.

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

County ordinance

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: less than 5,000 sq/ft

The regulatory environment and regulator was supportive of the project.

Case No. 388 Page | 2

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? Yes. I was not involved in conceptual design so I was not privy to these talks.

#### **Cost & Jobs Analysis**

Estimated Cost of Stormwater Project: \$500,000-\$1,000,000 (Public funding: Regional)

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: That would be hard to calcualte. The project was a rehab project and it used the same footprint for the pond.

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: 15-20 during construction

#### Job hours devoted to project:

Planning and Design: 760
Construction: 2100 (approx)
Annual Maintenance: 120

#### **Performance Measures**

Stormwater reduction performance analysis:

Not available

Community & economic benefits that have resulted from the project: Yes - this park is very active and can only imagine that this would bring econimc benefits.

### **Project Recognition**

ASLA Chapter Award of Excellence

#### **Additional Information**

**Links to images:** I have images available if you need them but none that I could find on the internet.