Green Infrastructure & Stormwater Management CASE STUDY

Ball Horticulture Corporate Campus

Location: West Chicago, IL
Client: Ball Horticulture, Inc
Design Firm(s): Pizzo & Associates
Landscape architect/Project contact: Andy Stahr, ASLA
Email: andys@pizzo.info
ASLA Chapter: Illinois

Project Specifications

Project Description: Restoration efforts at Ball Horticultures 40 acre natural area included stormwater control, improved erosion control, wildlife habitat, and air and water quality. The project was divided into a wetland mitigation area, south woods, west woods, oak savanna, existing lawn, and tall-grass prairie. The wetland mitigation area was vegetated in 2004, as required by a DuPage County Stormwater permit. In accordance with the permit, clusters of trees and shrub saplings had to be planted in specific locations, and hydrology and vegetation monitoring including meander surveys, transect and quadrat data and photo points were collected for two years. The detention basin and the existing lawn were seeded with native species, while clearing and seeding began in the South woods.

Project Type:
Government complex
A retrofit of an existing property

Design features: Bioretention facility, rain garden, bioswale, wetlands were restored to function as the greatest on site natural stormwater management technique.

This project was designed to meet the following specific requirements or mandates:
County ordinance, developer/client preference

Impervious area managed: greater than 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: greater than 5 acres. Forty acres of land were restored to pre-settlement vegetation to preserve species diversity and enhance stormwater retention and filtration.

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 client came to us to restore the 40 acres of natural area in which it owned. All aspects of energy savings, usable green space, and property value enhancement were apart of the project from the start.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: $100,000-$500,000 (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: Maintenance costs have reduced overtime.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Significantly reduced costs (10% or greater savings).

Number of jobs created: 5

Job hours devoted to project: Not available

Planning and Design: Not available
Construction: Not available
Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:
All stormwater is retained on-site

Community & economic benefits that have resulted from the project: The areas are extensively utilized by employees for exercise and recreation along with the public. Ball Horticulture's natural areas provides open space in cramped areas of West Chicago.

Project Recognition

2008 EPA & Chicago WIlderness Award; 2008 ILCA Merit Award in commercial landscape maintenance, 2011 ILCA Gold Award in ecological planting

Additional Information

Links to images: http://pizzo.info/case_studies/detail/ball_horticulture_co/

In 2003 Pizzo & Associates, Ltd. began restoration of the tall-grass prairie, which needed the least amount of invasive species removal and gave the quickest results, with flowers blooming the following spring. To connect the prairie to the wetland, the west woods canopy was opened, allowing more sunlight to reach the ground and stimulating the growth of native trees and understory herbaceous species. Extra seed and woody plants were installed within the woods to enhance the remnant populations.