Green Infrastructure & Stormwater Management CASE STUDY

Novus International

Location: Saint Charles, MO
Client: Novus International
Design Firm(s): SWT Design
Landscape architect/Project contact: Hunter Beckham, ASLA
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Project Specifications

Project Description: The Novus Headquarters Campus enhancement plan preserves and enhances natural habitats, focuses on improving vegetation, hydrology of the site and creates an active and healthy environment employees can be proud of and inspired to interact in. The University of Missouri has set base lines and will continue a habitat monitoring program employees will participate in. Monitoring will include green roofs, water quality, bird and insect identification and other sustainable features.

Project Type:
Commercial
A retrofit of an existing property

Design features: Bioretention facility, rain garden, bioswale, green roof, porous pavers, curb cuts, and improved vegetated riparian buffers.

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

Impervious area managed: 1 acre to 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: 1 acre to 5 acres

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? Yes, improved water quality, reduced quantity and habitat improvements were of primary interests to all concerned with this project.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: $500,000-$1,000,000 (Public funding: No public money was used)

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: The portion of the site that was preserved was rather small and would have only affected the cost by a few thousand dollars. The improvements to the rest of the site regenerative design obviously raised the cost of the project but the cost benefits were worth it for the habitat regeneration.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Did not influence costs.

Number of jobs created: approximately 20

Job hours devoted to project:
- Planning and Design: 1,500
- Construction: 2,000
- Annual Maintenance: 850
- Other: 1,500 client team hours

Performance Measures

Stormwater reduction performance analysis: Calculations not performed

Community & economic benefits that have resulted from the project: As part of the project submittal for SITES documentation was put together to show how the project promotes equitable site use in the community. Informational tour with local communities have been organized and employee physical activities have been incorporated throughout the site. This documentation can be provided if needed.

Project Recognition

Urban Conservationist Of The Year, St. Charles County Soil and Water Conservation District
Additional Information


Novus International is a global leader in creating science-based health and nutrition solutions. Over 2,500 clients in more than 80 countries trust the Novus product family to be an integral part of their daily animal agricultural operations. The company is privately owned and headquartered in the St. Louis, Missouri area. Novus’s mission is to “help feed the world affordable, wholesome food.”

Novus earned Platinum LEED Certification in 2006 for the Headquarters building. With their commitment to sustainability and belief in performance through innovation, applying to become a Pilot Project for the Sustainable Sites Initiative was a natural decision.

The design team approached the project looking at the context of the larger natural community adjacent to the near by Missouri River. Situated just over the bluff from the river, the site sits within The Missouri Research Park and is part of a wildlife corridor connecting two Missouri Department of Conservation sites, Weldon Spring and Busch Conservation Areas. There are several opportunities to improve the hydrology, soils and vegetation that were recently put in place. The company’s culture and existing programs made it very easy to address the health and well being of the employees as you will see throughout this project.

The intent of the new campus master plan is to preserve and enhance natural habitats, focus on improving vegetation, hydrology of the site and create an active and healthy environment that the employees can be proud of and be inspired to interact in. The team has partnered with the University of Missouri to set base lines and a continued habitat monitoring program that the employees will participate in with members of the University. This includes green roofs, water quality, bird and insect identification to name a few. While the proposed plantings promote habitat diversity, there will be two areas for edible gardens. The first is a berry bramble that the chef will have access to and the second is a terraced vegetable garden representing the company’s commitment to food production. Employees are so excited about this that a garden committee has already been formed. Finally, the design team will work with the contractor and client to establish maintenance standards and a manual that will remain with the client to foster a healthy site in the future.