



Green Infrastructure & Stormwater Management CASE STUDY

Durham College / University of Ontario Institute of Technology

Location: Oshawa, Ontario, Canada

Client: University of Ontario Institute of Technology (UOIT)

Design Firm(s): du Toit Allsopp Hillier with Diamond and Schmitt Architects

Landscape architect/Project contact: Adam Nicklin

Email: adam@dtah.com

ASLA Chapter: None



Project Specifications

Project Description: The University of Ontario Institute of Technology (UOIT) is a new university located in Durham County, an hour east of Toronto and adjacent to the Oshawa Creek Ravine. The linear wetlands and two stormwater management ponds at UOIT are integrated into the urban fabric of the new campus. They articulate both the edge of the formal commons and the interface between the built campus core and the natural ravine edge. In addition, bioswales in the parking lot structure future building plots as the campus density increases over time.

Project Type:

Institutional/education

Part of a redevelopment project

Design features: Rain garden, bioswale, green roof, cistern, and curb cuts.

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

Local ordinance

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

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? Usable green space, also backdrops for convocational events, natural trails for walking and jogging as an on-site campus amenity.



Cost & Jobs Analysis

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

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 site is

constrained by its proximity to the Oshawa Creek natural watershed. By converting existing green/open space and treating the storm facilities as an open space resource, future development plots for campus expansion were maximized.

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: Not available

Job hours devoted to project:

Planning and Design: 3 years planning and design for team of 2-4 designers

Construction: 4 years +

Annual Maintenance: minimal

Performance Measures

Stormwater reduction performance analysis:

100% of two-year event initially retained on site due to capacity of the two storm ponds.

Community & economic benefits that have resulted from the project: Properties adjacent to the ponds have maximized value, public private partnerships have invested in development of adjacent plots. The green space created has been an asset for the community at large, and has helped relations with the university.

Project Recognition

CSLA Regional Honour Award 2006

Additional Information

Links to images: <http://www.dtah.com/projects/landscape/campus/uoit-storm-ponds/>