



Green Infrastructure & Stormwater Management CASE STUDY

Arizona State University - Academic Buildings

Location: Mesa, AZ

Client: Arizona State University

Design Firm(s): Ten Eyck Landscape Architects

Landscape architect/Project contact: Roger Socha, ASLA

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ASLA Chapter: Arizona



Photo: Ten Eyck Landscape Architects

Project Specifications

Project Description: The ASU Polytechnic Campus project consists of 21 acres of site work in association with five new classroom buildings. The goal was to transform the former barren Air Force base into a thriving campus for learning. Other projects at the campus have helped towards this end; however, because of the size of this undertaking, real impact has been

achieved. Former Air Force base streets that formerly flooded during rains have been turned into water harvesting arroyos adjacent to new campus malls, giving students and faculty a daily connection to nature while solving storm water problems on the campus. Shaded courtyards allow informal gathering areas for student interaction and continued learning.

Project Type:

Institutional/education

Part of a redevelopment project

Design features: Bioretention facility, bioswale, and downspout removal.

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

State statute, developer/client preference

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

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 requested that the open space and stormwater have an educational component, for students.

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 project budget was raised to accommodate the increase in site area needed to address the development needs and constraints.

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: Not available

Job hours devoted to project:

Planning and Design: 4,200

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

Project is design to hold the 100-year 2-hour storm event on site.

Community & economic benefits that have resulted from the project: As the heart of the ASU Polytechnic campus, this 21-acre project serves as a learning laboratory and restorative gathering place for social interaction, grounded in the qualities of our unique region. It is a model for other renovation projects in the Valley, demonstrating the transformation and positive effect on people's daily lives that can be achieved when the outdoor environment and spaces are given importance, thought and dedicated resources.

Project Recognition

Valley Forward Environmental Excellence Award

Additional Information

Links to images: <http://www.mediafire.com/?ps9q1qi8ssex5>