

SWATeam Recommendation

Name of SWATeam: Water and Stormwater

SWATeam Chair: Art Schmidt

Date Submitted to iSEE:

Specific Actions/Policy Recommended (a few sentences):

The appropriate campus units (Parking, Facilities and Services) should begin the process of implementing the award-winning green stormwater redesign for parking Lot F4.

Rationale for Recommendation (a few sentences):

Parking lot F4 is located near the intersection of Goodwin Ave. and Peabody Ave. near the Art Annex Studio and the Agriculture Bioprocess Laboratory. This 2.3 acre parking lot has deteriorating pavement, documented flooding problems, little shading, and significant bicycle and pedestrian traffic. The *Campus Hydro Redesigned* team, comprised of thirteen students from six departments, worked with advisors from multiple campus units and departments, to develop a green stormwater redesign for parking lot F4. This redesign incorporates green roof on the Art Annex Studio, porous pavers in low traffic service lanes, bioswales around the parking lot to convey runoff to a rain garden, rerouting of roof downspouts to permeable areas, an educational and recreational area that also provides stormwater infiltration and storage, and trees and vegetation to provide shade and urban heat island benefits as well as aesthetic benefits. The redesign maintains the number of parking spaces while providing stormwater, heat island, educational, and aesthetic benefits, and also improves the flow of pedestrian and bicycle traffic around the site, providing safety benefits.

The proposed redesign for parking Lot F4 was submitted to the U.S. Environmental Protection Agency *Campus Rainworks Design Challenge* and this design overwhelmingly won the first place award from among from among 87 teams representing 53 universities. Implementing this award-winning design will not only provide the benefits described above but also clearly demonstrate the University's commitment to the *American College & University Presidents' Climate Commitment* and to the ICAP goal to, "serve as a model for the community, state, and nation."

Connection to iCAP Goals (a few sentences):

In addition to meeting the overall ICAP goal "to serve as a model for the community, state, and nation," implementing this project also connects to the following ICAP Goals:

1. Chapter 5, Objective 4 includes, "recommending a strategic, phased conversion of hardscape surfaces toward pervious/infiltrating surfaces and landscapes designed to capture rainwater, both for reuse and/or infiltration."
2. Chapter 5, Objective 6: Investigate the water quality impacts of stormwater runoff and potential ways to reduce stormwater pollutant discharges by FY18.
3. Chapter 7, Objective 2: Design and maintain the campus landscapes in a more sustainable manner

Perceived Challenges (a few sentences):

According to oral communication from Facilities and Services, there are plans to improve the alignment of Goodwin Avenue between Peabody Dr. and Pennsylvania Avenue. This realignment has been considered in the proposed design. Implementation of the proposed redesign of parking lot F4 should be coordinated with the realignment of Goodwin Ave.

Suggested unit/department to address implementation:

Parking, Facilities & Services.

Anticipated level of budget and/or policy impact (low, medium, high):

Cost would be high. This project involves complete reconstruction of parking lot F4.

Individual comments are required from each SWATeam member (can be brief, if member fully agrees):

Team Member Name	Team Member's Comments
Art Schmidt (Chair)	I strongly support this. The student team did an excellent job to address both engineering and non-technical considerations in developing this design. This provides an excellent opportunity for the campus to demonstrate nationwide leadership in stormwater sustainability.
Keith Erickson	I support
N Rajagopalan	I support this as well.
Lauren Excell	The success of this design in the EPA competition proves its merit. It should be implemented not only for the storm water/community benefits, but to show the University's commitment to its sustainability goals.
Rabin Bhattarai	I support this effort. The design winning a national competition adds a great value to this.
John Berens	This winning design from this completion is the epitome of a project that satisfies the goals that our group is trying to achieve with respect to parking lot sustainability & reform. This is also an excellent opportunity for the university to show that they support these efforts.

Comments from Consultation Group (if any; these can be anonymous):

Explanation and Background (can be supplied in an attachment):

Campus Hydro Redesigned's submission to the USEPA Campus Rainworks Challenge is attached (file Project D82-Project Narrative.pdf). The supporting video that was submitted for the USEPA Campus Rainworks Challenge is available at: <https://youtu.be/OsWU9oXhSN8>