

Business Instructional Facility Prairie Garden

Student Sustainability Committee Proposal for Funding March 2010



APPLICANT

Project Lead Contact Information

Tracy McCabe <u>tmccabe@illinois.edu</u> Assistant Dean for External and Alumni Affairs College of Business at ILLINOIS 217-333-4093 219 Wohlers Hall, 1206 S. Sixth Street, MC-706

Secondary Contact Information

George Freeman <u>gfreeman@illinois.edu</u> Director of Facilities College of Business at ILLINOIS 217-333-8352 470D Wohlers Hall, 1206 S. Sixth Street, MC-706

Unit Financial Officer Contact Information

A. Susan Elliott <u>aelliott@illinois.edu</u> Assistant Dean of Administration College of Business at ILLINOIS 217-244-0253 260 Wohlers Hall, 1206 S. Sixth Street, MC-706

"The built environments of our colleges and universities, both the architecture and the landscape, have affective powers that come to bear in the recruitment and retention of students, faculty, and staff. The campus environment is continually sending symbolic as well as functional messages..."

--Society for College and University Planning

The College of Business built the Business Instructional Facility (BIF), in part, to send a message. Motivated by a common need to endure in an increasingly populated world with limited resources, leaders from around our college community worked together to build the campus' first LEED Certified building. Not only did we build it, but we received a Platinum rating from the U.S. Green Building Council, their highest rating in recognition of our dedicated efforts. BIF stands as a testament to our leadership, the campus' support of a sustainable future, and the heights to which Illini can achieve.

In order to sustain our clarion challenge to those who will follow us to a truly sustainable future on campus and the communities in which we participate, BIF must grow and change as our knowledge is refined. As we move into the future, we work with the members of the campus community to identify improvements that benefit us all. This is how we learn and foster enlightenment.

I. Project Description: Prairie Garden

Project goals:

The College of Business seeks to create a Prairie Garden comprised of plant species characteristic in east-central Illinois to surround the Deloitte Auditorium in the courtyard of the Business Instructional Facility (BIF). Depending on funding, the project may include two strips of plantings to the east of the auditorium, also located centrally within the BIF courtyard.

We seek to replace portions of the existing sedge meadow which has proven to be a maintenance problem inhibiting pedestrian use of the areas; it limits the educational value of the sustainable landscape and contributes to undesirable carbon practices. Overgrowth extending over walkways and sitting areas have prevented students, faculty, staff, and visitors from traversing that area of the natural surroundings of BIF, and continues to grow unsightly.

The new Prairie Garden will enhance the space with low-height, low-growth native plants along the perimeter of walkways and sitting areas, graduating to include some of the existing sedge, but including new native plants, as well.

It is paramount that the plantings chosen help to sustain BIF's LEED Platinum rating by the U.S. Green Building Council.

Definition of sustainability and the relationship of the project to this definition:

Sustaining growth on campus and in the local community, with a focused sensitivity to the consumption trends for natural resources, energy, and human industry, requires careful planning. Most importantly, excellent planning requires input from various professions collectively trained to consider the range of human expertise in engineering, landscaping, human factors, maintenance, business, urban planning, education, and research. The BIF Prairie Garden is an integral part of its sustainable design. It represents one of the more visible aspects of sustainable technology as well as aesthetic characteristics of BIF.

Feasibility evaluation:

In 2009, instructors from Native Plants in Design (Barb Schleicher and Jim Urban) approached the Office of Sustainability (Jeff Courson) and the College of Business (Dean Larry DeBrock, Tracy McCabe, and George Freeman) about replacing the plants with native, sustainable botanicals to create a Prairie Garden. The College agreed to the plan contingent on student support. With that support, Barb Schleicher supervised an initial evaluation of the existing sedge meadow by students who recommended specific replacement plantings.

In Summer 2010, students and faculty in Native Plants in Design will do a more detailed analysis of what species are now growing in the area and a final planting plan will be determined for a Fall 2010 implementation.

Longevity and/ or permanence of project results on campus:

As an important part of the BIF courtyard, the Prairie Garden will be a permanently maintained portion of the building grounds. BIF continues to provide a focal point of interest for its sustainable design to students, business leaders around campus and throughout Illinois. The successful implementation of the Prairie Garden will reduce necessary maintenance and provide an exemplary example of sustainable landscaping design.

Prairie Garden Placement in the BIF Courtyard



Above: the existing sedge meadow surrounding the Deloitte Auditorium will be replaced or enhanced with sustainable prairie plantings. This area is framed by walkways and the auditorium itself.

Right: in addition to the proposed area for the prairie garden, this image denotes the "extension opportunity". A matching grant of \$10,000 from the SSC allows for new, low-height perimeter plantings along the edge of walkways and stone councils in the two strips of sedge to the east of the auditorium, allowing greater accessibility to these areas by students.



BIF Prairie Garden Proposal

Communications with relevant campus administrative entities and Facilities & Services personnel: The College opened dialogue between Facilities & Services sustainability contacts, Grounds Personnel, faculty in Landscape Architecture in January 2010. Those parties reached consensus over the need to replace/renovate the existing sedge meadow into a garden requiring less active management and more people engagement (access, aesthetics, ownership); the parties have also agreed to cooperate on the final planting plan and ongoing maintenance education.

Location: Refer to page 4 of 9.

The Prairie Garden will replace/renovate the sedge meadow surrounding the Deloitte Auditorium in the courtyard of BIF. Contingent upon funding, the project may include two strips of plantings to the east of the auditorium, also located centrally within the BIF courtyard. Facilities & Services has been consulted and supports the project's implementation.

Additional questions by the SSC related specifically to this project:

1) Long term maintenance plans for prairie area. The Committee is seeking assurances that the current site issues caused by improper maintenance are not repeated.

The original landscaping installation project included two years of maintenance from the installing contractor; that 2-year maintenance period expires on August 15, 2010. Any work done by the campus before the August 15, 2010 date would have voided the contract. Consequently, the campus Grounds Division has not maintained the sedge meadow. As of August 16, 2010, campus will resume proper maintenance of the sedge meadow. Discussions have already begun, including the campus Grounds Division, in the re-planning of the area. The campus Grounds Division ensures that regular maintenance practices are considered along with aesthetics and other sustainability concerns. Additionally, the Landscape Architecture faculty and students involved have offered to help the Grounds Division personnel establish proper maintenance techniques for the new Prairie Garden.

In addition to maintenance personnel, the College hopes that the interactions of Landscape Architecture with students, faculty, and staff will generate awareness and elicit general grounds maintenance for the garden prompting responsiveness to overgrowth and accumulated litter.

2) Proposed design and implementation plan. The Committee encourages the use of volunteers for plantings (as in a prairie garden installation funded by the Committee at the College of Veterinary Medicine), in order to build support at the unit for the new landscape.

Design of the Prairie Garden is being done by students in the Native Plants in Design class under the supervision of landscape architecture instructor Barb Schleicher. An implementation plan will be coordinated between Schleicher, Facilities & Services Grounds Division personnel, and the College. Implementation will be achieved primarily by student, faculty, and staff volunteers; students have already organized through the Legacy group and the College will be enlisting faculty and staff involvement during summer 2010. Through Business RSO's and existing contacts with student sustainability groups and landscape architecture students, we will seek broad-based student volunteer support in planting the garden. If necessary, a portion of site preparation may be contracted to Grounds Division personnel or another provider of technical services.

University of Illinois Landscape Architecture Course # 452--Native Plants in Design Business Instructional Facility Plant Redesign around the Auditorium-- Wetland Plant Design--Plant List

Designers: Alex Sammet, Brian Concordia and Barbara Schleicher

Species				Amount	Price*
Grasses/Sedges					
Carex cristella	Crested Oval	Sedge		53	63
Carex interior	Prairie Star S	edge		106	190.8
Carex vulpinoidea	Brown Fox Sedge			185	219.7
Panicum cribneriam	Scribner's Pra	airie Grass		135	240
Sporobolus heterolepis		orthern Drop seed		182	910
Forbs					
Allium stellatum	Prairie Onion			182	218.4
Asclepias purpurascens		urple Milkweed		200	237.5
Asclepias verticillata	Whorled N	1ilkweed		565	667
Aster azureus	Sky Blue Aster			506	600.8
Aster ericoides	ster ericoides Heath Aster			472	560.5
Baptisia minor	Dwarf Blue Ir	Dwarf Blue Indigo		1196	4784
Caltha palustris	Marsh Marig	Marsh Marigold		250	562.5
Coreopsis palmate	Prairie Coreo	Prairie Coreopsis		605	1694
Dodecatheon media	Midland Shoo	Midland Shooting Star		274	685
Echinacea pallida	Pale Purple C	Pale Purple Coneflower		345	517.5
Lobelia cardinalis	Cardinal Flow	ver		240	285
Phlox divaricata	Wild Blue Ph	lox		266	931
			Total	5762	\$13,367

*Estimates from Prairie Moon Nursery and Possibility Place Nursery

3) Discussion of how the site will be improved from the current situation by the installation.

The current sedge meadow has presented several issues: overgrowth inhibiting human traffic and engagement on walkways and in sitting areas; excessive use of carbon-emitting equipment to control overgrowth; and the spread of undesirable and invasive plants that maintenance personnel cannot control – due in part to a lack of education on the plants, but also due to difficulty in accessing undesirable plants amid the sedge. What results is an unsightly overgrowth that people do not want to be near.

The new prairie garden provides these solutions: low-height, low-growth plants along walkways and seating areas so that they remain freely accessible to people; removal of undesirable plants and the planting of more sustainable native grasses and forbs that require less active management; and more aesthetically pleasing plants and signage that engage people to learn about the garden and to enjoy it.

The College discussed this change with the building's designers at Pelli Clarke Pelli and they agree that transitioning from a sedge meadow to a prairie garden better accomplished our goals for a sustainable and complementary landscape.

II. Budget & Fundraising:

1. Detailed budget

Expenses:	
Grasses/Sedges*	\$1,624
Forbs*	\$11,743
Other plant and material costs	\$2,673
Labor (non volunteer)	\$3,000
Signage	\$1,500
Total^{Ω}	\$20,540

*varieties and associated costs are subject to change in the final project plan. These represent initial, conservative (or low cost) estimates.

^ΩOpportunities to reduce costs through bids and increased volunteerism will be pursued; cost reductions resulting in a total of less than \$20,000 for the project will be passed along as savings shared equally by the SSC and the College, fulfilling the College's commitment to an equal match of funds.

Funding:	
Student Clean Energy Committee grant	\$10,000
Legacy campaign (or College funds)	\$10,000
College funds	\$540
Total	\$20,540
Total	\$20 , 340

2. Fundraising

Legacy, a registered student organization in the College of Business dedicated to philanthropy benefitting future generations of College students, is in the process of raising money for a Class of 2010 Gift – the Prairie Garden. The organization's goal is to raise

\$10,000 and donations will be solicited through summer 2010 (note: this goal has increased since the first request was submitted to the SSC in November 2009). Past Legacy initiatives have focused on funding technology, furniture, and artwork in Business buildings; this year, students voted overwhelmingly to support a more sustainable project. Their idea of funding the Prairie Garden was accepted by Dean Larry DeBrock in fall 2009 and solicitations began immediately thereafter.

In the event that Legacy does not reach its goal, the College of Business guarantees a dollarfor-dollar match to funds provided by the Student Clean Energy Committee through a combination of Legacy contributions and existing funds, up to \$10,540.

III. Timeline

Fall 2009	Evaluation of existing sedge meadow and initial proposal for renovation		
January 2010	Launch of Legacy campaign for funding		
March 2010	Funding request submitted to Student Sustainability Committee		
Summer 2010	Detailed assessment of existing species by student landscape group and development of renovation planting plan.		
	Close of Legacy campaign		
September 2010	Approval of planting plan and supplier bids, and formation of implementation team		
Fall 2010	Installation by student committees and installation of signage		

IV. Energy, Environmental, Social and Economic Impact

C. All Projects

Environmental Impact

The reduction of active maintenance provides a beneficial environmental impact compared to the sedge meadow previously present at the site. Continued sequestration of CO2 and management of water runoff (preventing water from entering local municipal drainage) are also benefits of the Prairie Garden project. Additional benefits also accrue from increased biodiversity.

Social Impact

This project contributes to the larger campus effort to promote more responsible landscaping. It is a visible example of the importance the College places on sustainable design and a departure from turf typically used in such public places on campus.

Economic Impact

The reduction of active maintenance contributes to lower costs.

V. Outreach and Education

Visibility of the project to students:

The project is located in a major thoroughfare trafficked weekly by over 4,000 Business students and thousands of other students, faculty, staff, and visitors who daily traverse the east-west walkways along the University's military access.

Because the project is being partially funded by the Legacy campaign, students and their parents are receiving regular correspondence encouraging participation. Notices also appear on the Virtual Bulletin Boards in the BIF Commons.

A video is planned for orientation of new students that will address "how best to inhabit a green building" – explaining the green features of the building and landscape and how behaviors like conservation, recycling, cessation of smoking and littering, and dressing for seasons can improve student's experience in BIF. As part of the video, we hope to educate students about prairie plantings, their utility, and their appearance.

The signage designating the Prairie Garden will be placed prominently within the garden and will include an educational notation about the sustainable choices made in planting.

Role that students will play in the project:

Students from Landscape Architecture are conducting the assessments and recommendations related to the creation of the Prairie Garden; we expect they will participate in the planting along with Business student volunteers from Business RSO's, including members of the Legacy organization.

Opportunities for involvement in classroom curriculum:

Barb Schleicher has graciously agreed to make this project a classroom activity for Landscape Architecture students. Materials will also be available for future classes interested in studying this case.

Media opportunities:

The College of Business Communications Office will issue a press release and photo opportunity to coincide with the planting activities, in hopes of gaining external media attention. The College will cover the project on its website and eNewsletter mailed to 17,000 alumni and subscribers.

Resources

Webcast: Campus Landscaping: Impact on Recruitment and Retention <u>http://www.scup.org/page/profdev/notravel/2008/campus-landscaping</u>