UIS Green Projects Application Full Project Proposal- **Step 2**

To complete your Full Project Proposal, download this word document and type all answers to the questions below. Save your completed word document along with any supporting documentation (excel spreadsheet of budgeted itemized items, letters of support, and so on) as new files. Supporting files in Word (.docx) format should be attached to the end of this application in order to create only one Word document. Supporting files in all other formats (pdf, excel, PP) may be submitted as separate documents.

Once completed and saved to your device, return to the Green Projects website at http://www.uis.edu/greenprojects/get-involved/

Click the hyperlink titled, "Submit your completed UIS Green Project Proposal"
This can be found under Step 2 of the "Submit a Green Project Proposal" section.

You will be redirected to an external WebQ. Upload your completed application along with any supporting documentation by the deadline found in the "Timeline" section of the Green Projects website.

NOTE: Please do <u>not</u> submit this application unless you have been formally invited to do so by the UIS Green Fee Committee.

If you have any questions regarding the application or submission process, please contact us at greenprojects@uis.edu.

Project Name: Sustainable Gardens

Contact Information:

Project Team

Name	UIS Student/Faculty/Staff	UIS Email	Phone #
	& Department (or Office)	,	
Ben Collette	ENS 271 Student, ENS major	bcoll5@uis.edu	217-502-9667

Organization/Affiliation: ENS 271 Class Project

Project Information:

Provide a brief description of the project, its goals, and the desired outcomes:

The original purpose of the sustainable gardens project on campus was to reform the current gardens on campus. Rather than planting many tropical plants, I proposed using native plants in the gardens. Since I initially proposed the Sustainable Gardens idea, I have learned that the grounds crew have been transitioning many of the existing gardens on campus to matrix gardens. These also help promote sustainability on campus, but they do so in a different way. Since learning of the matrix gardens, I back them 100% and I believe we should implement this gardening style in all of the existing gardens on campus.

The only problem that I have with the current state of the matrix gardens on campus is that there is not enough education about them. The other portion of my original proposal focused on education and installing signage around the sustainable gardens I originally proposed to create. Since sustainable gardens already exist on campus, however, I propose to use funds from the Green Fee to purchase signs that promote the education of matrix gardens. I think it would be most effective to make an exhibition out of one of the central matrix gardens on campus and place several signs around it. The signs would describe what a matrix garden is, how they promote sustainability, tips about how to start a matrix garden at home, and maybe a name or a group that a person can contact if they have questions about starting their own matrix garden. Since the entire purpose of this project is to educate, I believe it is even more important to empower those people that read the signs so they can help promote sustainability in their own backyards across this city and state. That's why it's important to include tips regarding installation and the name of a person, group, or website the person can reach out to if they have questions.

How will this project improve sustainability at UIS?

The measure of sustainability traditionally uses the 3 E's as a yardstick, which are Environment/Ecology, Economy, and Equity, with Education sometimes thrown in the mix and called the 4th E. I believe this project hits on everyone of those points. Obviously it favors education, but the purpose of the signs are to educate in order to promote the environment, economy and equity. By empowering and imploring others to create their own matrix gardens in their backyards we preserve the environment by increasing biodiversity, saving water and reducing pesticides. Also matrix gardens reduce the need to mow, so fewer fossil fuels will be consumed and burned, which decreases the amount of carbon put into the air. Furthermore, the increased biodiversity and many plant types will help pull carbon from the atmosphere and sequester it in the ground. The economy benefits because people will reduce spending on synthetic fertilizers and pesticides, but initially they will have to spend more on plants. Also, if we teach people how to incorporate fruits and vegetables into their gardens we can decrease our dependence on produce from foreign markets. Equity will benefit because the signs will be made for everybody to read so everyone will benefit from the exact same knowledge and have the exact same ability to create their own gardens. In addition, they will be located in a centralized area, which will have the greatest chance of being seen and positively affecting the greatest number of people.

Please indicate how this project will involve or impact students. What role will students play in the project?

First and foremost the students will have the opportunity to benefit by simply passing by the exhibit garden and educational signs. They will be able to read the signs and use the information provided to create their own gardens if they choose to do so. The creation of the signs could be used as a class project in either an environmental studies or a botany class. The research about what a matrix garden is, how the plants benefit from it, how it is sustainable, and how to create one could be a group project in either of these fields of study. Another possibility would be to use this as an undergraduate capstone project (I would be more than willing to tackle this project) in the spring semester. The students in the computer sciences department would have the opportunity to benefit as well by creating the website. A teacher could assign this project as either an individual or a group project. The students would have the ability to learn how to create the site, code the information, and maintain it over time. Furthermore, the matrix gardens could be used in classes as an example of sustainable gardening solutions in either environmental studies or biology. Dr. McEuen could refer to it in her Conservation Biology class, Dr. Stokes could use it in his Botany class, and almost every professor in the ENS department could use it in one way or another.

Where will the project be located? Do you need special permissions to enact the project at this site? If so, please explain and attach a letter of support to your application. If you are not sure, let us know! We can help.

I discussed the location of the exhibition garden with Brian Beckerman and he gave me some very interesting tips. Initially I told him I was interested in turning the matrix garden between PAC and Brookens into the exhibition garden, but he told me that there are plans in the near future that may result in that garden being ripped out. He did tell me, however, that there are plans this upcoming summer to create a new matrix garden north of the student union. The university has recently purchased some artwork and it is going to be featured in the new garden. I propose using this new garden as the exhibition garden. Since the plans are still being finalized we would incorporate the signs into those plans. Additionally, Brian Beckerman told me that they are going to incorporate more Buffalo Grass into this space. I believe this would provide another phenomenal opportunity to provide information to students, faculty, and others through educational signage.

Another potential future or immediate plan is to implement signs in the other three matrix gardens. Each one could provide a different sustainable garden tip. The tips could even be numbered (such as Tip #4 of 10) so the students would have to walk around the campus looking at all the gardens if they wanted to "collect" all the tips. This would spread education of matrix gardening across campus to reach as many people as possible.

I recommend utilizing the internet to further spread information about matrix gardening. This could include a website that people can visit if they have questions about any aspect of matrix gardening. In the event that someone forgets the benefits of this style of gardening, the website would provide a way for them to access the information from anywhere in the world. This website would be an extension of one of the current UIS websites and be also be accessible by simply searching for matrix gardening on the internet. Not only would it help to disseminate information, but it would also increase awareness of UIS on the global scale.

The two groups we would need permission from in order to move forward with this project would be Grounds Maintenance and the Campus Web Team. I have contacted Brian Beckerman, superintendent of Ground Maintenance he fully endorsed the project. Due to their current transitioning away from traditional gardens towards a more sustainable style, he said they will be more than happy to work with us. The only other group that would need to be notified would be the Campus Web Team and I have not contacted them because, quite

frankly, the idea for the website came to me much later when there was no longer time to contact them. If this project is accepted, however, I would be more than happy to contact and facilitate the needs of this project with the appropriate personnel and organizations.

Other than the project team, who will hold stake in the project? Please list other individuals, groups, or departments indirectly or directly affected by this project. This includes any funding entities (immediate, future, ongoing, etc.) and any entities that will be benefiting from this project. Communication with affected departments is encouraged ahead of time. List the names of who you spoke with and their comments.

The stakeholders in this project will be the Green Fee Committee, Grounds Maintenance, and the Campus Web Team. The Green Fee will be responsible for funding the signs. The Grounds Maintenance department will be responsible for maintenance of the gardens and the installation of the signs. This should not be a problem since neither of these are anything more than their normal duties. They already maintain the gardens on campus and they are also responsible for any sign installation on the grounds. I asked Brian Beckerman if his crew would mind installing the signs and he told me that it wouldn't be a problem at all. The Campus Web Team would be responsible for creating and maintaining the website that accompanies this project. Again, I have not contacted them yet because I didn't think of the idea for the site until it was too late to contact anyone about it, but I would be more than happy to make arrangements to do so if this project is accepted. This also should not be a problem for them because it does not extend beyond any of their normal duties. The only other potential stakeholder would be the creator of the information. As stated before this could be either a class project in an environmental studies class, botany, or as an undergraduate capstone class. If you choose not to elect either of these routes, I would be more than happy to create the information for the signs in my free time as a side project. Another group that may need to be contacted would be a designer of the signs. This is another group that I did not consider until it was too late. The designs could be carried out by the team group that does the research or a different group in either the same class or a different class. This could also be given to a group in one of the visual art classes or computer marketing classes. If neither of these groups would like to take up the project I would also take on the responsibility.

Have you applied for funding from the Student Green Fee previously? If so, for what project?

Yes, I have submitted a LOI for this project earlier this semester and I also applied for funding from the Green Fee for the Green Parking Spaces project last year.

Scope, Schedule, and Budget verification

Do you have a plan for project implementation? Describe the key steps of the project.

The first step in the project will be to garner approval for this project. Next, would be to decide which avenue will create the information for the signs. Again, I could take responsibility for this and speak with several of the professors to see if anyone would be willing to incorporate this into their lesson plans, if not I would research and create the information myself. I believe the research and creation of information could be completed be the end of the spring semester. While the information is being compiled I would also recommend sending the idea for the signs to the marketing or art department to create the designs. Once both of these have been created the information should be added to the designs and sent to the manufacturer. While they are being manufactured, I recommend sending the information to the Campus Web Team so they can work on getting the website built and accessible. I don't believe the signs will take long to come in, once they do they can be given to the Grounds Maintenance department so they can install them. All together, I believe this should be able to be completed by mid-summer of 2019.

List all budget items for which funding will be required. Include the cost for each item requested. Please be as detailed as possible, to the best of your ability. If you know where you would like to purchase materials from, please list the contact information of the retailer(s) below, along with the URL addresses to each item you will be requiring. If you need suggestions for how and where to purchase materials, please contact the Student Sustainability Projects Coordinators by email.

For the size of the garden, I would recommend installing 4-6 signs. When I started to look online, however, the minimum order was typically 10. For that number, I would order 10 signs with 10 different bits of information. 4-6 of them could be installed around the exhibition garden, while the remaining signs could be installed around campus at other locations. I visited a site called https://myplantlabel.com/ and they offer 10 5" x 8" signs for \$24.50 - \$26 per sign. Personally I believe the \$26 signs look better and at this cost it would only cost the Green Fee Committee \$260.00.

I found another website that also specializes in customizable outdoor signs, but they are also committed to sustainability. The site is https://panniergraphics.com/ and their specialty is outdoor informational signs. The problem, however, is that they don't list their price list, so figuring out the exact cost is a little more difficult. Although with the size of their signs only one or two would be needed for the exhibition garden because they can incorporate much more information. Another benefit to using Pannier Graphics is they are very willing to work with their customers and they make it incredibly easy to create custom signs. Personally, I believe this company creates better signs and the quality and style of signs they create are more in line with the type of project I am proposing. I recommend using one of their low profile bases, more specifically either the Traditional T, Cantilevered, Single Pedestal, or Double Pedestal. If you would like I'd be happy to contact the company to research prices further. I saw one quote Pannier Graphics gave to Ohio State University in 2013. They quoted them \$5,645 for 12 signs. This averages out to be \$470.41 per sign. If we were to purchase 2 signs, at this rate it would cost approximately \$950. This quote was for 18" x 24" signs and included the signs, bases, shipping and handling. Each sign was \$155, the pedestals were \$305 and the shipping was \$125. At this price it would cost the Green Fee Committee \$1,045. The benefits, however, are that the signs are more

durable, more appealing, and they can convey more information. To see the original quote, please visit https://kb.osu.edu/bitstream/handle/1811/58450/1/ENR2367 OutdoorSignage Aut2013.pdf.

Will this project require ongoing funding? Do you have a plan for supporting the project in order to cover replacement, operation, or renewal costs?

The only potential ongoing funding for the original would be the recreation of signs if they were to be destroyed. If that were to happen we could ask the Grounds Maintenance department to cover the costs of replacing them, if not it could be another potential Green Fee project. In the future, however, the project could be expanded to include other gardens or more signs. I believe expanding the current matrix garden would come from the Grounds Maintenance budget, but the creation of additional signs could be another Green Fee Project in the future. Since Grounds Maintenance already maintains and cares for the existing gardens, they would simply continue to do so, so there wouldn't be any operational costs.

Every project must be publicized! Where would you like to see information about this project reported?

One of the best aspect of UIS is its ability to disseminate information. There are many methods to publicize the information about the new exhibition matrix garden and I recommend using them all. Everyday the campus announcements are emailed to every student and faculty member on campus. I believe there should be an announcement about the matrix exhibition garden in that email when it is created. I would also publicize it through the Journal student newspaper and also through the radio on WUIS. Either news stream could interview somebody from the Green Fee, the group that researched the information, or myself about the purpose of the gardens and how they make UIS more sustainable.