SUSTAINABILITY PROPOSAL

(MSU CAMPUS GARDEN FACILITY)

SUBMITTED BY:
(MARY BOOKS)

SUBMITTED ON:
11/20/2019

I. Identification of Sponsors

a. Project Sponsors

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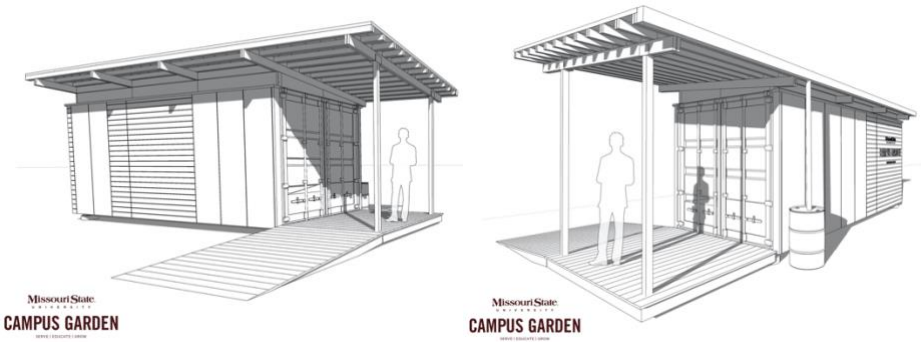
c. Project Manager

1. Mary Books

II. Description of Proposed Project

a. General Description of Proposal: This proposal requests funding for materials and construction for a storage facility with electricity located at the Missouri State Campus Garden. This facility will provide a secure storage place for garden equipment along with providing a work area for cleaning and storing produce from the garden. Passing this proposal is the first step in starting the Campus Garden's Master Plan.

b. **Proposal Details:** The facility will be constructed by repurposing a shipping container. The storage area will be approximately 20 feet by 8 feet (see attached images for size details). It will have an attached treated deck and ramp for entering and exiting the building, with an awning. It will be sided with leftover materials from construction on Ellis Hall, costs include cutting and reworking these materials. In addition, the costs will include roofing and a rain barrel to collect roof runoff water. Electricity and lighting will be included in the cost to meet the safety and functional needs of the garden. This includes 100-amp service with 2 exterior motion security lights, 4 LED interior lights, 2 switches and 4 receptacles. The garden will have its own pole and meter, future electric costs can be budgeted into the garden's budget.



c. **Proposed location for the object of the proposal:** Immediately East of the current garden structures.
d. **Alternatives: N/A**
e. **Drawbacks**: The only potential drawback would be unforeseen delays in construction and installation due to the unpredictability of the weather. If any future problems with the location of the facility arise, the structure is technically portable.

III. **Necessary modifications to existing structures:** There are currently no existing structures to modify. In trying to maintain a good relationship with the Phelps Grove neighborhood and meet requirements of the City of Springfield,

Grounds has worked to create a green buffer-zone of shrubs and trees that will block the neighborhood's view of the facility.

IV. Estimated Cost of the Project

a. Provisions of Alternatives in Order of Preference: There are no alternative designs. This is as simple as the design could be in order to meet the needs of the garden and the requirements of the City of Springfield. The University has an agreement with the City of Springfield which requires the buffer zone and for the building to look complete, which includes siding. Which is also important in trying to maintain good relations with Phelps Grove neighborhood. This facility is an investment in the Campus Garden's future, being the first step toward completing the Campus Garden's Master Plan. This design provides a building that will last through the future growth of the garden.

b. Provisions of Complete Cost Breakdowns:

Consultants	$0.00
Construction Contract (Kenmar Construction)	$69,433.00
Project Administration	$1,000.00
Construction Contingency	$10,000.00
Contractor Electrical Work	$14,080.00
City Utilities Electrical Work	$5,000.00
Total Project Budget	$99,513.00

Cost Breakdown of the Construction Contract

Equipment, Crane	$ 1,000.00
Utilities, generator and fuel	$ 500.00
Trash disposal	$ 150.00
Termite treatment	$ 350.00
Temp services (fencing)	$ 880.00
Clean up	$ 480.00
Rough Grade (excavate..)	$ 2,460.00
Finish Grade (seed and straw)	$ 1,060.00
Concrete, layouts, forms, rebar	$ 4,710.00
Rock	$ 150.00
Structural Steel	$ 1,058.00
Storage Container	$ 2,310.00
Sheet metal roofing, siding, flashing	$ 19,125.00
Rough Carpentry	$ 18,658.00
Insultation	$ 200.00
Painting, staining	$ 3,490.00
Ventilation, screen, rain barrel	$ 1,140.00
Signage	$ 600.00
Supervision	$ 4,800.00
Overhead & Profit	$ 6,312.00
TOTAL	$ 69,433.00

c. **Provisions of any Ongoing Costs:** Other potential costs will be budgeted into the garden's yearly budget.

V. **Estimated Completion Time of Project:** Ground break on the project can happen once project is approved, and the ground isn't frozen. Estimated construction time: 2 to 3 months, weather permitting. Possibility of completion during the next fiscal year.

III. **Estimated Life of Project:** Once completed, the project will last indefinitely. It is a one-time cost for the construction and installation of the facility. The facility will be placed on a foundation and sided. The materials have been chosen to last, with very little maintenance. This facility is a part of the garden's multiphase Master Plan. The large size allows for expansion to happen around the facility without needing additional storage.

IV. Justification of Project: The addition of a storage facility in the garden will greatly impact the functionality of the workers and student volunteers in the MSU Campus Garden. Currently, there are 4 different storage areas for the Campus Garden's materials and equipment: Karls 106, Karls 109, Plaster Stadium Bullpen, and unsecured storage at the garden. For each workday or volunteer event, the Campus Garden Staff are responsible for gathering materials and tools and transporting them to and from the garden. The tools that are kept at the garden, because of lack of ability to transport them, are at constant risk of theft. This year a wheelbarrow was stolen along with other smaller items over time (herbs, flowers, produce, trash can lid, chair, signs). The cost to replace these items are extra expenses that could be eliminated. Further complicating the matter is transporting large equipment such as the garden's electric weed-eater. There currently is no good place for it to be charged and stored. Fire hazards make the battery unable to be charged without supervision and there is no place to allow managers to charge without it being logged as work hours. Also, the transportation of the push mower requires paid work time to get and return it from the stadium bullpen storage.

Another pressing matter is having a location for the garden refrigerator, which stores seed through the year and produce during the growing season. The refrigerator is being temporarily stored in a Karls 109 closet. The closet is required for lab equipment and we have already used the closet longer than anticipated. Having electricity in the facility also provides more safety. Lighting and the possibility of having a security camera could have a huge impact on the rising theft problems at the garden.

A raised structure will add to the overall concept of the Campus Garden as an established sustainability project and will further the mission statement of the garden to "Serve. Educate. Grow." The development of the Campus Garden has been a long-lasting project funded by the SGA Sustainability Fund and has become a popular volunteer spot for the campus and community.

Increasing its beautification and growing the scope of the project will allow for more interest in sustainable gardening practices and serve as a legitimization of the Campus Garden as an organization.

Benefits:

- Provides a secure place for garden equipment
- Condenses garden storage areas from 4 spaces to 1
- Saves garden budget money by avoiding replacing items lost to theft
- Saves garden budget money by not paying wages for time spent on transportation and charging equipment
- Adds to the overall safety of campus by having lighting in the garden area
- Allows the garden to continue to store seed and produce for summer Campus Garden Memberships
- Provides a dry place to store and charge the garden lawn mower and weed eater
- Provides a shaded area in the garden
- Starts the expansion of the garden and pushes for more stages of the Master Plan to be completed

V. University Support

Attachments (pictures and design details)

Master Plan