*Please submit this completed application and any relevant supporting documentation by the deadline listed on the SSC website to* *Sustainability-Committee@Illinois.edu**.The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the SSC at* *Sustainability-Committee@Illinois.edu**.*

# General Information

**Project Name:** Project Name

**Total Amount Requested from SSC:** Total Project Cost

**Project Topic Area(s):** [ ] Energy [x] Education [x] Food & Waste

 [ ] Land [ ] Water [ ] Transportation

# Contact Information

Applicant Name: Aaron Brakke

Unit/Department: Illinois School of Architecture

Email Address: aaron@illinois.edu

Phone Number: (815)310-0850

**Project Team**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| Aaron Brakke | Illinois School of Architecture | aaron@illinois.edu |
| Stan Ruecker | Art + Design | Email Address |
| Name | Department/Organization | Email Address |
| Name | Department/Organization | Email Address |

# Project Information

Please provide a brief background of the project, the goals, and the desired outcomes:

The architectural discipline and construction industry are accountable for making a tremendous environmental impact on the world. According to the US Green Building Council, buildings account for 40% of CO2 emissions in our country and consume more than 70% of our electricity. Furthermore, the Environmental Protection agency recorded building waste from demolition and construction to be at 534 million tons in 2014. With this daunting panorama, it is necessary for architects to rethink how we design. Since we are located in Urbana Champaign, which was once known as “Big Grove” it is natural that we ask, How might we better use our local timber? How can we use digital fabrication to innovatively catalogue these resources and create custom projects?

Our goal is to conduct preliminary investigations about recovered lumber and timber scanning coupled with digital fabrication of custom architectural elements. It is important to note that we have already salvaged a barn that was demolished last year and are working with our woodshop coordinator, Lowell Miller (recipient of Root to Roof grant) to mill lumber from our forestry plot and felled trees which are being donated from Urbana.

The desired outcome is that we will be able to create several prototypes through which we can create a proof of concept pipeline for further research and for the development.

We have had preliminary meetings with our Facilities and Services people to study the feasibility and scope to create an installation on campus. We have also planned to have several cultural and educational encounters. At one level we aim to provide the material to ask students, faculty and the community to think critically about how we use our natural resources. At another level, we wish broaden the visibility of this sustainable timber use in the region.

Please provide a brief summary of how students will be involved in the project:

Students are critical for this project. We have involved students all along the way so far and will continue to work with students on the development and implementation of this next step.

Please provide a brief summary of the project timeline:

During the Spring 2018 semester we are continuing to consolidate knowledge with existing equipment. It is also hoped that we will be able to acquire the additional equipment during this semester. We will continue to work with FandS to get the approval necessary to create an installation on campus. The summer and Fall 2018 will be used to conduct the level of research necessary for this proof of concept phase of development.

Additional comments

Please see attachment with original barn proposal.