

Project

001 / Hokulani Garden



FREEDOM BY DESIGN
HAWAII CHAPTER

THE SPARK

In July 2016, AIAS' Hawaii Chapter got a taste of what the Grass Roots Conference is like in our country's capital. There, we were introduced to the mission of Freedom By Design (FBD).

“AIAS FBD empowers students to become owners in a process that radically impacts the lives of people in their communities through design and construction solutions.”

-FBD Vision Statement

BRINGING IT BACK HOME

With much motivation to keep the ball rolling, FBD jump started during the '16-'17 school year for the Hawaii Chapter.

Licensed Architect Advisors

Jim Schmit (J.A. Schmit Architect)

Massey Brooks (J.A. Schmit Architect)

Faculty Advisor

Joyce Noe (UH Manoa SoA)

Student Team

Khan Meyer

Mitchell Moses

Frank Ho

Johnathan “Malu” Stanich

James Noh

THE PROJECT

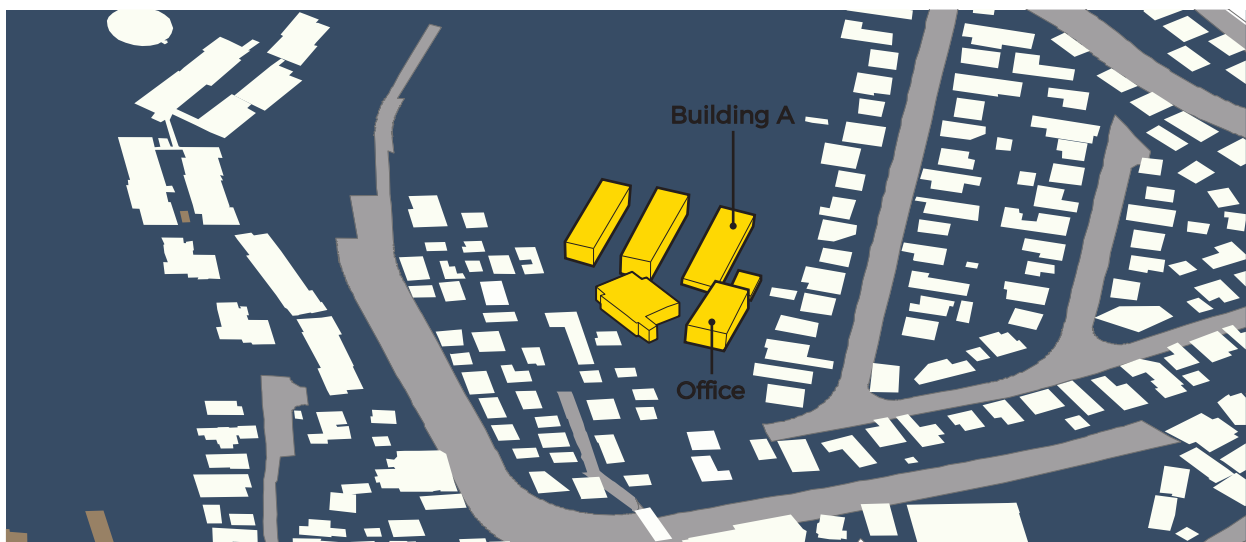
As we began our search for a project, we really didn't know where to start. With the help of our licensed architects, Jim and Massey, they pushed a few public design projects. However, we stumbled across a local elementary, Hokulani Elementary, located down the street from our university.

We got the chance to meet with the school's principal Laurie Luczak. She introduced to us the school's efforts in creating a diverse STEM environment through various classes and exercises. One of the ways of creating this diverse learning environment was through a community garden within the school. The garden is taken care of by the various grade levels and successfully creates continuity between the different students and teachers.



■ Hokulani Elementary School

Hokulani elementary is located in the dense urban fabric of Honolulu. The school is predicated on the vision of creating a community that positively impacts the world.

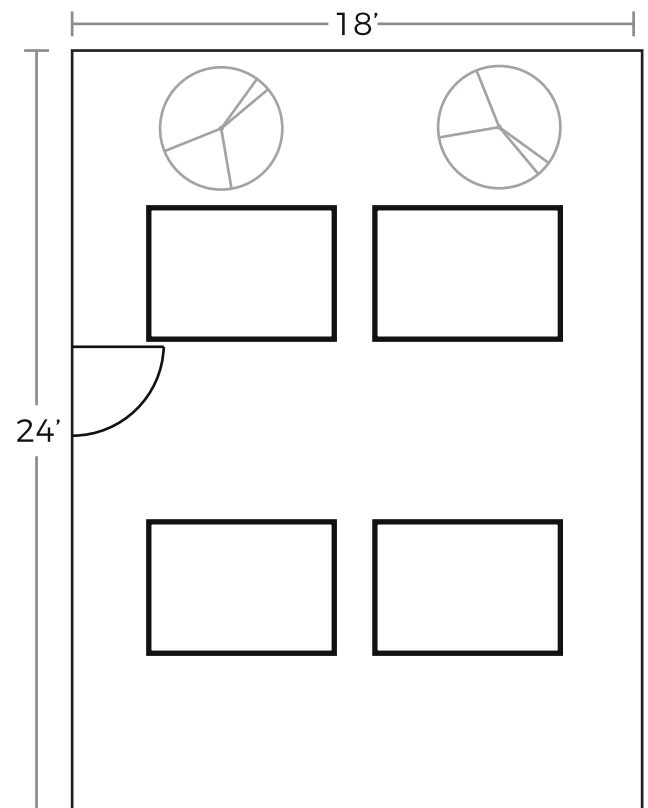


The garden is located between Building A and the administrative offices on campus.



THE CURRENT SITUATION

Hokulani's community garden is taken care of by the numerous grade levels and teachers. Although the garden does host an ample amount of space, only four in-bed planter boxes are currently being used. There is a large opportunity to introduce variations of agriculture methods. Brainstorming with Laurie and a few teachers resulted in the idea of nursery racks, a lifted troft, an aquaponic system, and as well as a cabinet for the students to store their tools and equipment,



“Our community is dedicated to building a strong foundation that fosters a love of learning that inspires everyone to reach their highest potential in an ever-changing world.”

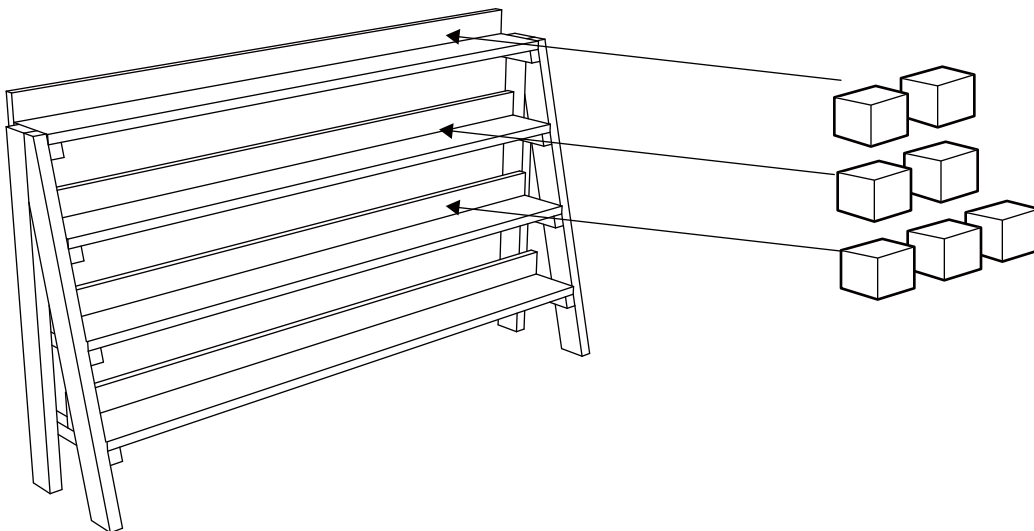
-Hokulani's mission

INTRODUCING DESIGN

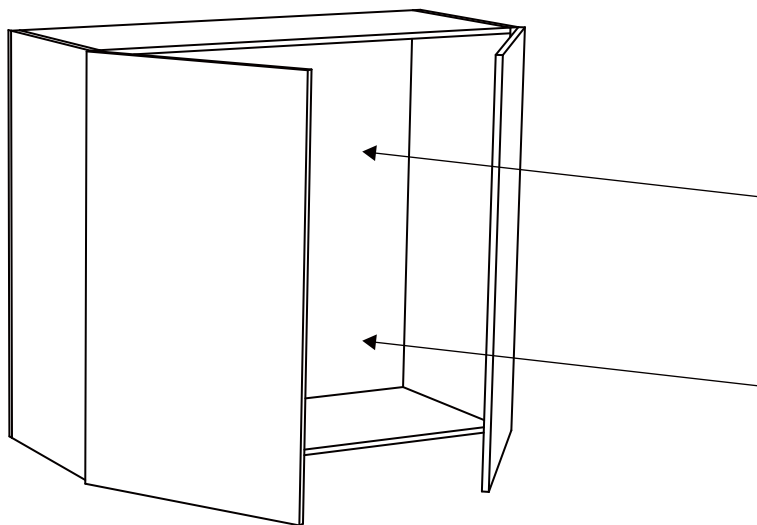
- Nursery rack
- Aquaponic system
- Equipment storage cabinet
- Lifted plant troft
- In-bed planter

Nursery Rack

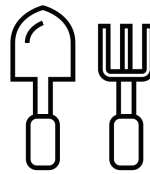
The students recycle milk cartons and an assortment of empty food containers to be used as a nursery stage in the vegetations growth. After the plants have grown to a certain maturity they are repotted into a larger container to allow for more root space. Considering the containers were just sitting on the ground, we wanted to give them a justified space. Providing a nursery rack will allow the students to place their assorment of potted containers on a shelf to grow.



Equipment Storage Cabinet



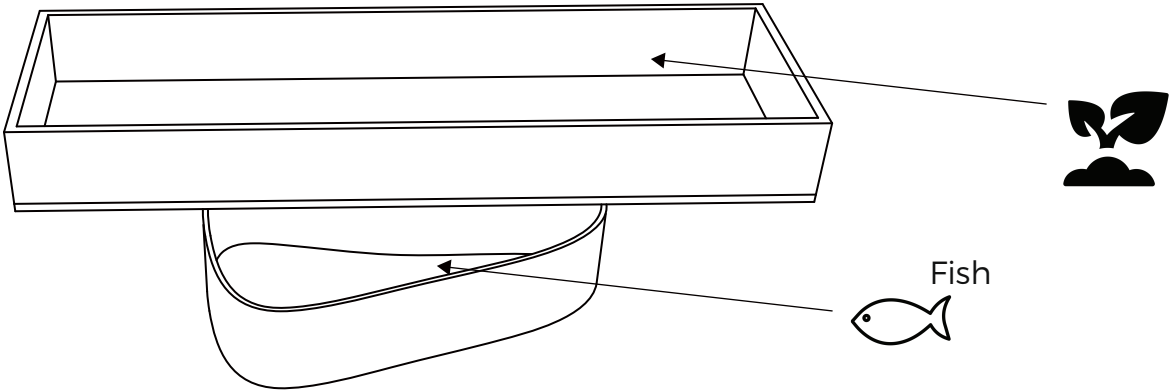
Tools



Seed/Soil Bag



Aquaponic System

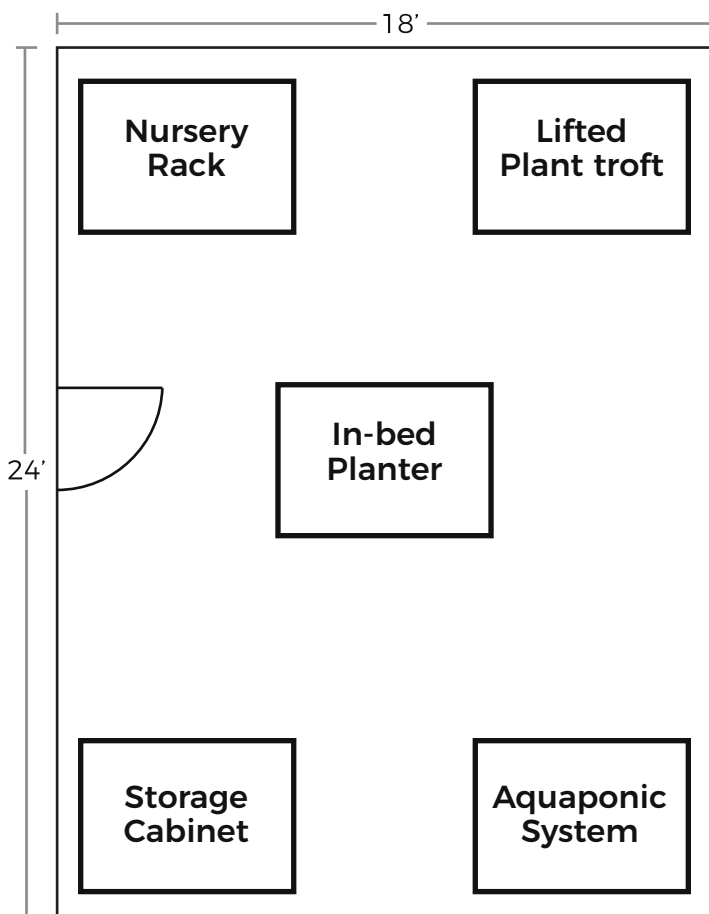


Lifted Plant Troft

One of the last things we wanted to provide for the students was a lifted troft for the growing vegetables/fruits which, would create an easier working height for the growing kids.



FINAL GARDEN PLAN



Underlying Goals

- Continue to support the foundation of STEM based education at Hokulani.
- Strengthen the continuity among the different grade levels and as well as between students and teachers.
- Create new opportunities for ideas in agricultural growth methods.



**AIAS Hawaii Chapter
University of Hawai'i at Mānoa
School of Architecture**

THANK YOU