

**1. About your client: What are the needs of the person you are housing?**

The residents of the Luscher Farm-Field come to the property in the warm season and to live and work. Farmworkers across the country are in urgent need for affordable housing. Housing costs for 77% of farmworkers in Skagit county spend more than the federal standard of their income for housing costs (cost-burden). The main need of the farmworkers and their families (61% of Skagit farmworkers had children in their home) is simply safe, affordable housing. The farmworkers at Luscher Farms have a small area to eat that includes 2 outdoor tables. Ideally, though, the residents would want a place to cook and a more comfortable place to share their meals. After a long day of work, a personal bathroom to shower and unwind in is preferable, and the same goes for a place to sleep and store clothing. A personal space for self-care is optimal for mental health and quality of life. Also, since the farmworkers wake up early, incorporation of the sunrise light into the room is important for maintaining an adequate sleep schedule.

**2. What site did you choose given your client's needs?**

Luscher Farm

**3. What are the characteristic of this site?**

The community space of the building will be western facing, and the personal living space where the farmworkers will sleep will be eastern facing. The building would be permanently integrated into the farm. Footings would be installed for the structural 6x6 wooden posts to be placed into. The top floor will have corrugated metal roofs that direct rainfall onto a green roof. The Patio will also be made of corrugated metal. Similar to the drainage system around Trillium at Reed, before construction of the building we would excavate enough around the building to allow for French drains. Also, gravel and native foliage would line the outside of the property to absorb or purify the water runoff.

**4. What are the Physical and Mechanical restraints/needs?**

The personal spaces will have one large eastern facing window (potentially with an opening on top to allow airflow. This window placement will enforce bright energized mornings and calm, restful afternoons and nights. Living in line with the sun will hopefully bring the occupants closer to nature.

The building placement (adjacent to the other large building) will allow for electrical and water hookups. Ideally, solar panels would be implemented on the farm property (on the roofs and or in the fields, to save money in the long-term and to leave less of a carbon footprint. Electrical will be able to supply all the energy needed for heating.

**5. What type of shelter/home did you design and how big is it?**

I designed a fully grounded community building with 4 personal tiny homes within it. The entire building covers a 48' x 40' plot of land including the porch. Each tiny home within the community building has a 12'x 8' lower level with a bathroom, hallway, and storage space under the stairs. The upper level is a 12' x 20' space designated to clothing storage and sleep. The total square footage, excluding the porch, is 2400 sqft. A family of 4 could occupy a single tiny home if you included two

mattresses. This means that a maximum of 16 people could occupy the entire building relatively comfortably.

#### **6. How does your design fit on the site? How many units could be on your site?**

The building would be situated on the west side of the farm plots close to the children's garden. The porch will be facing the west towards the sunset and the windows of the individual living areas will be facing the east. If money allowed, and more than 4 households needed to be housed on the farm at once, two buildings would be able to fit on the site.

#### **7. What are the best materials to use to build this?**

Ideally, the building would be constructed by Kaiser+Path or something similar. Kaiser+Path is a group that designs mid and tall rise buildings using cross laminated timber (CLT). All of the projects are prefabricated in their processing facilities using large wood CNC machines (coincidentally similar to how I built my model with the glowforge). The pieces are combined using a prefabricated joint system. Building with timber produces far less carbon emissions than steel or concrete and it traps the carbon naturally stored in the tree's fibers (what makes the wood structures so strong) so that it doesn't get released.



<https://www.kaiserpath.com/vision>

#### **8. What are the aesthetic special and visual priorities used to enhance livability?**

Aesthetically, the wood, warm lighting, and the open quality of each space would create a comforting and practical place to live. The openness of both the personal spaces and community spaces, and the intentional separation of those two spaces hopefully bring out the full potential of each. Seeing the warm lights of the house and the homey, farmhouse inspired shape of the building would make it a place you look forward to entering at the end of a day of work outside. Bachelard talks about houses in the snow and draws the dichotomy between being in the house and being outside the house. Everything outside the house can be grouped as things you don't have to worry about while you are in the house. Also, as I've mentioned, the way in which the building is oriented towards the sunrise and sunset plays a large role in how the space will be lived in.

#### **9. Describe your main motivation for your design.**

For this building, I wanted to emphasize community while also acknowledging the importance of privacy. For this reason, once an occupant steps through the door to their individual tiny home, the notion of a "community building," vanishes and they have their own space to think and exist individually. And when you choose to step outside of your individual tiny home, the building's open bottom floor with a kitchen, sunset view, and seating areas cultivate an optimal environment for existing within a larger body of people. My goal was to merge these two principles of humanity,

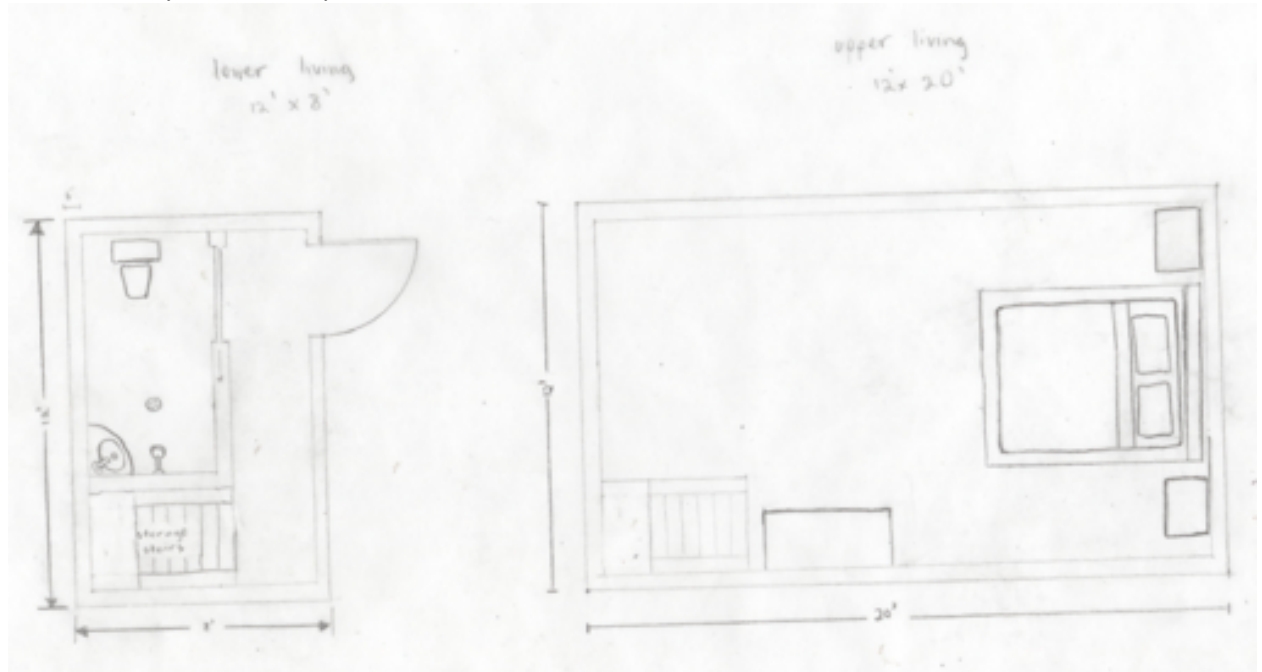
individuality and community, while keeping each of them perfectly intact. Not to mix the two, but to put them side to side.

The orientation of the building relative to the sun is also a key design feature of this building. I personally feel like the sun is a wonderful aid for our self-care routines. Waking with the sun and falling asleep in the dark is regulated by our physiology and seems to be the most human way to build a routine. Ideally (and if I were to stay here), I wouldn't incorporate any artificial lights, to further emphasize the centrality of the sun in the building. However, most of us have habituated the dependency on the practicalities of bathroom lights, nightstand lights, ceiling lights etc, and I wouldn't want to impose my ideals on people if it inhibits their quality of life.

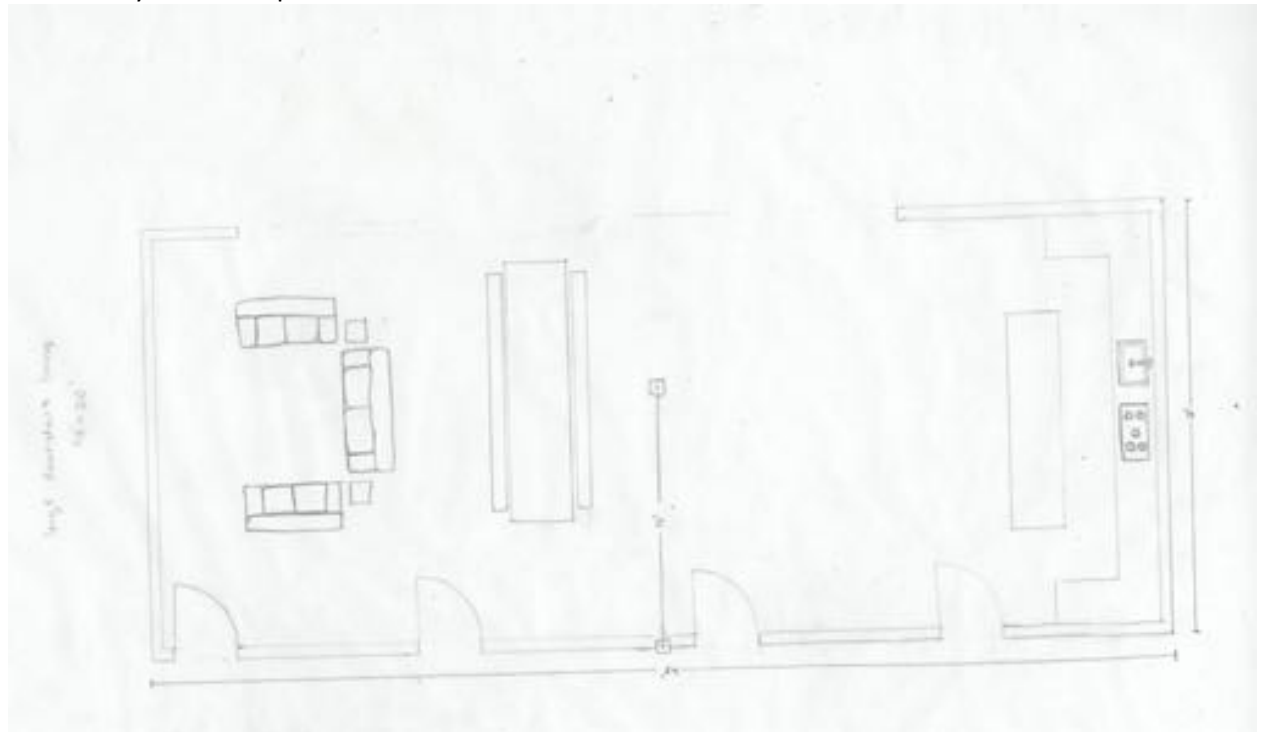
**Drawings of your design with description:**

1. Floor Plans:

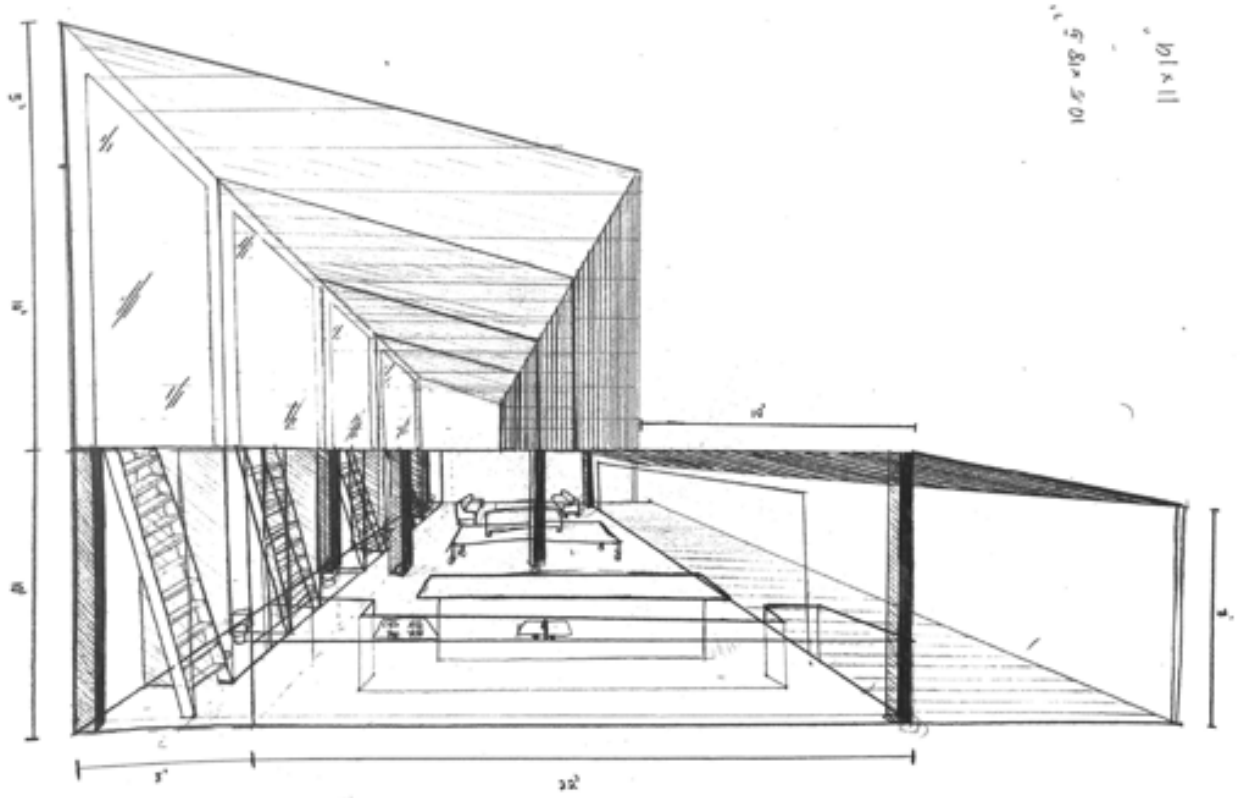
Individual tiny home floor plans:



Community area floor plan:



2. Building drawing:



placement on the site:





**Photos of your model with description:**



**Side profile of the South facing wall**  
Here you can see the barn like side silhouette of the structure

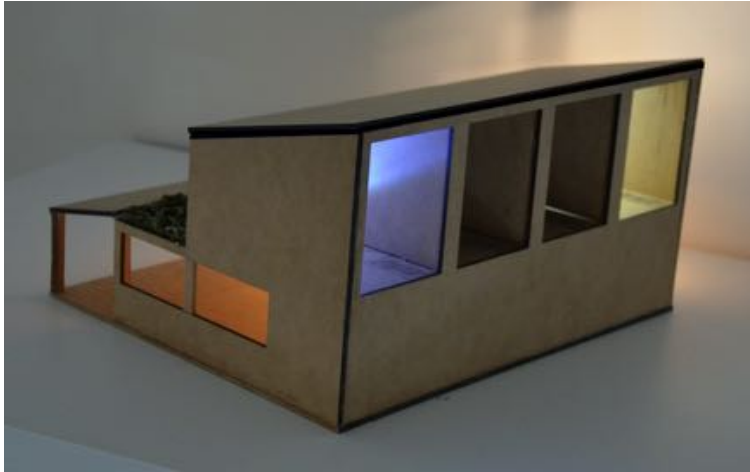
**birds eye perspective of the west and north facing walls.**

The roof and porch are engraved with lines to represent corrugated metal. Mulch and moss from trees in front of the psychology building were used to model the green roof.



**West and North walls with roof off**

The roof in the model is removable to see inside the bedrooms of the individual tiny homes.



**South and east faces with light moving out of the building.**  
Here we can see how light travels out of the bedroom lights

**North and West faces with light moving out of the building**  
This is what the building might look like in at night when the residents are occupying the communal area.



**North and East faces with light moving out of the building**  
Here we can imagine that some of the residents in are occupying both the rooms individual spaces. If there were to be residents in the middle rooms, light would not enter their room, allowing for sleep.