

# LEET MILLER

Final studio works  
2022-2024

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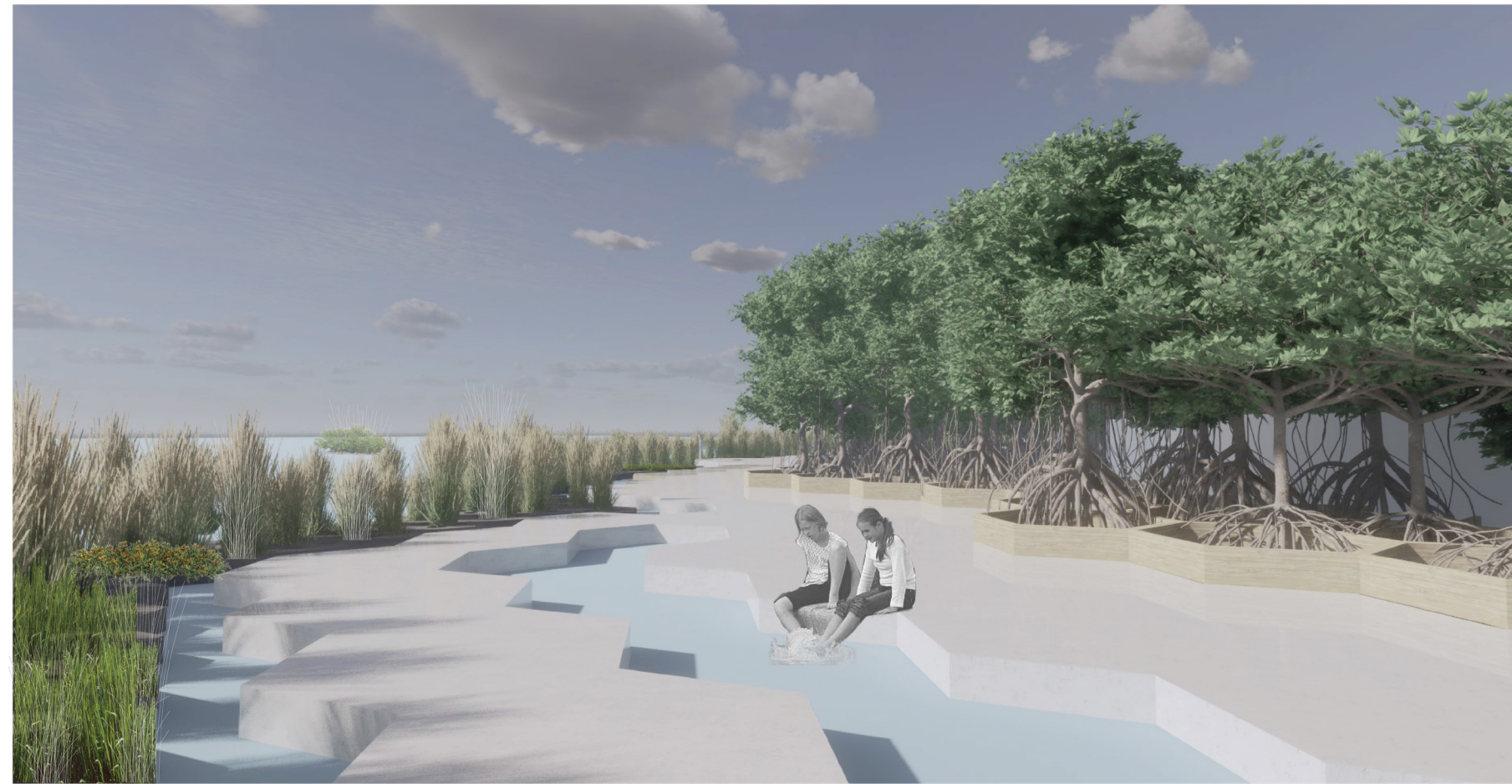
**Links to other work**

# ARCH 494 LIVING EDGES

Located at the mouth of the Miami River, Living Edges is a system of interconnected floating pods that cleanse the waters of Biscayne Bay, buffer sea level rise, and offer space for city dwellers to engage with Miami's more wild past. The various pods act as containers and surfaces for these goals. Mangrove pods facilitate mangroves, which mature over time and soften Miami's rigid edge. Wetland and oyster pods clean the polluted water that enters the Bay from the river. Path and bench pods trail the coastline and allow access to different points of reflection, possibilities to learn about Miami's ecosystem, and other recreation activities. These are just some samples of the programmed possibilities of living edge pods; the system's programming can adapt to adjacent sites as it expands at a regional scale.



100' N



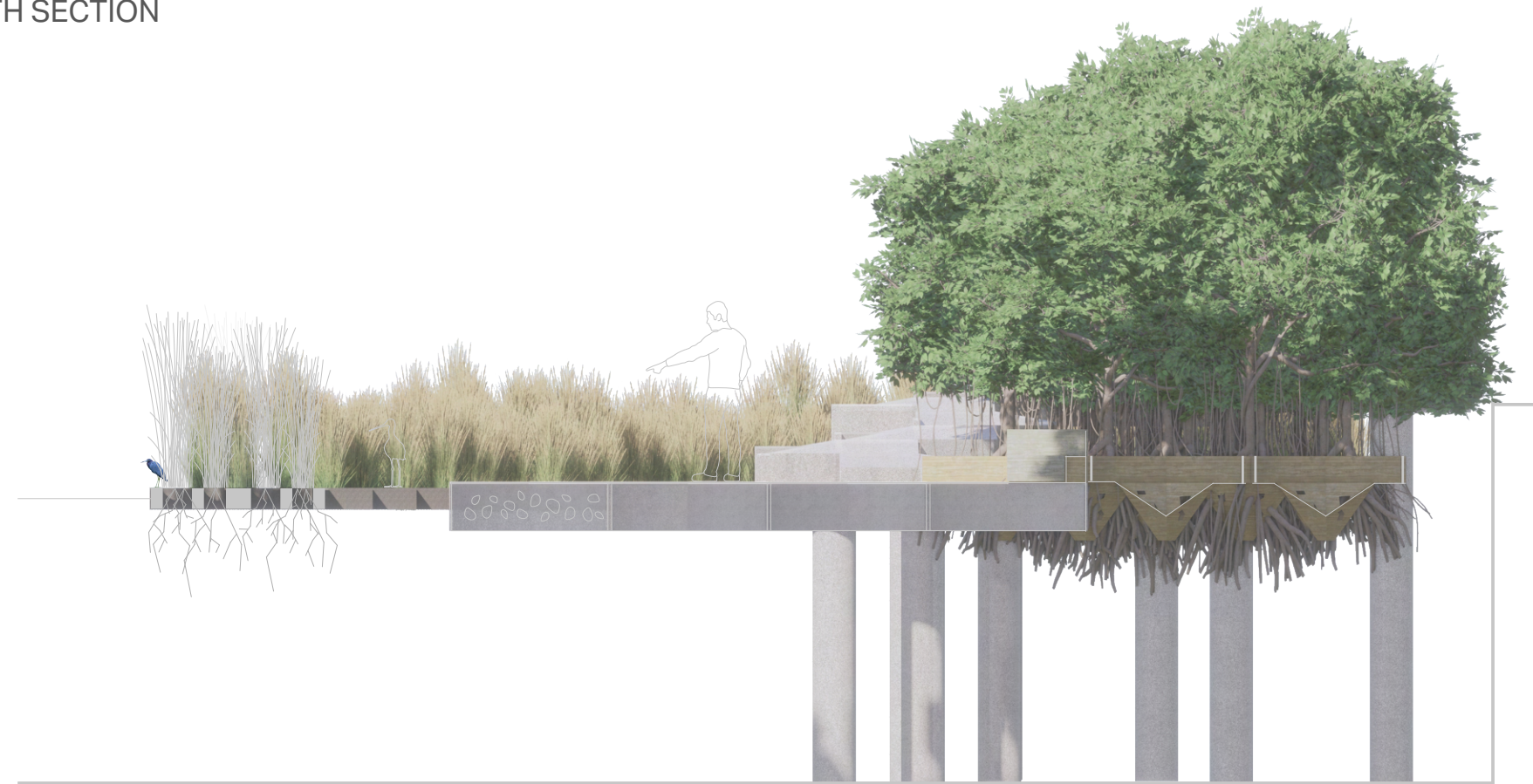


## Rewild, protect, grow

The plan and section demonstrate a particular component of the larger network, which interacts with the adjacent pedestrian path, hotel, and boating channel. Other components of the system would interact with nearby parks, marinas, restaurants, and commercial activity occurring along the Bay and river's edge. While Living Edges float in the water, occasional podiums offer steps to negotiate a seven foot height difference to the coastline. The sections demonstrate the accumulation of silt and sand that the living edges create over time. Living edges ultimately help to rewild Miami's hardened coastline, rejuvenate its ecosystems, and create a sponge buffer for sea level rise.

## NORTH SECTION

1/4" = 1'



## NORTH SECTION - YEAR 10

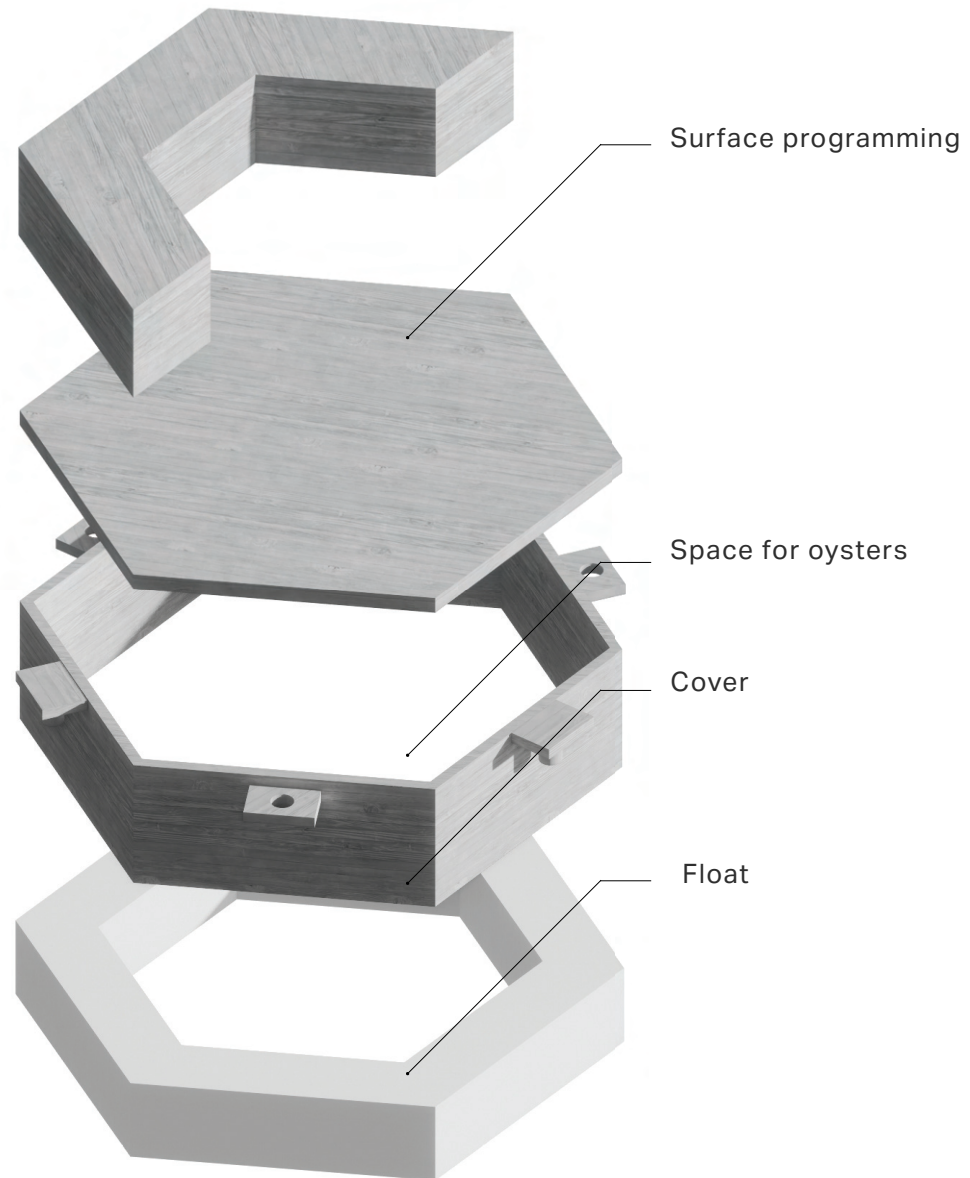
1/4" = 1'



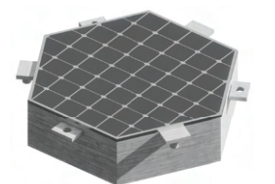
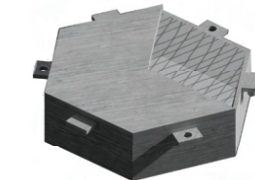
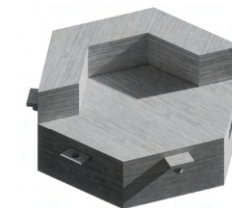
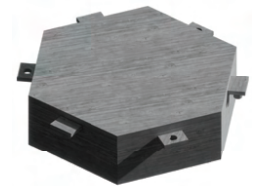
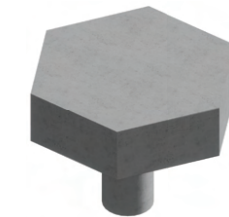
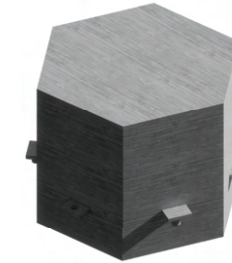
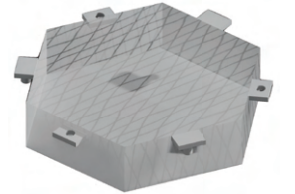
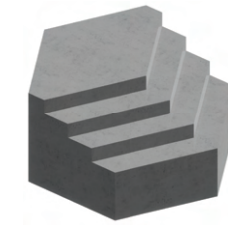
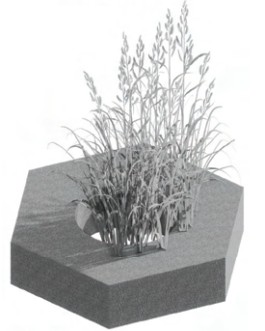
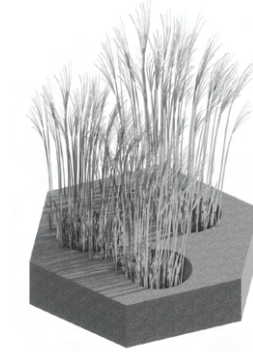
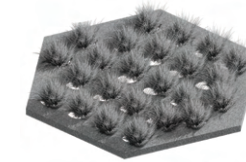
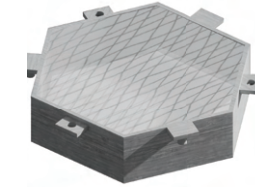
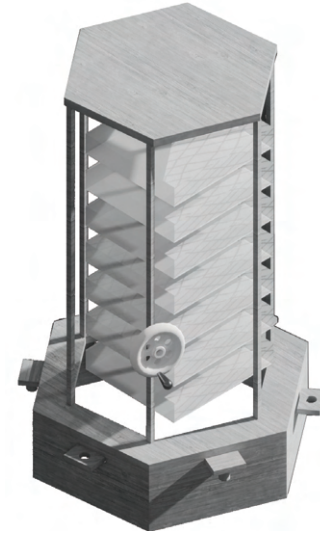


## Research

Hexagons are the optimal shape for the floating wetland pods because they are less likely to tip over in the water than other shapes. Natural mechanisms such as oysters and plants embedded inside the pods purify the polluted ocean water and runoff from the Miami River, which is concentrated at the mouth of the river. One oyster can filter as much as 50 gallons of water per day, which means that an entire oyster pod can filter 25,000 gallons in the same time period. Mangroves filter 80-90% of nitrates, phosphates, and suspended solids.

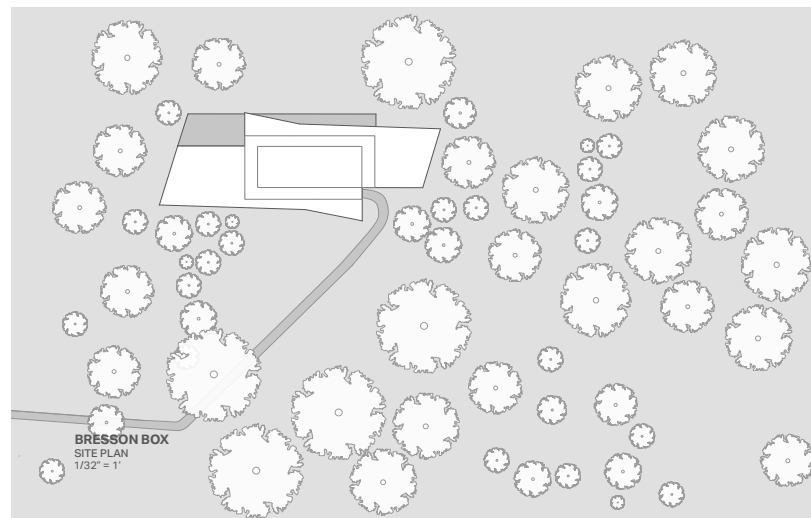
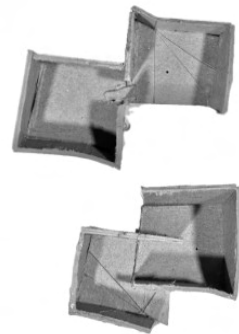
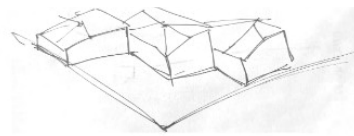


## Catalog

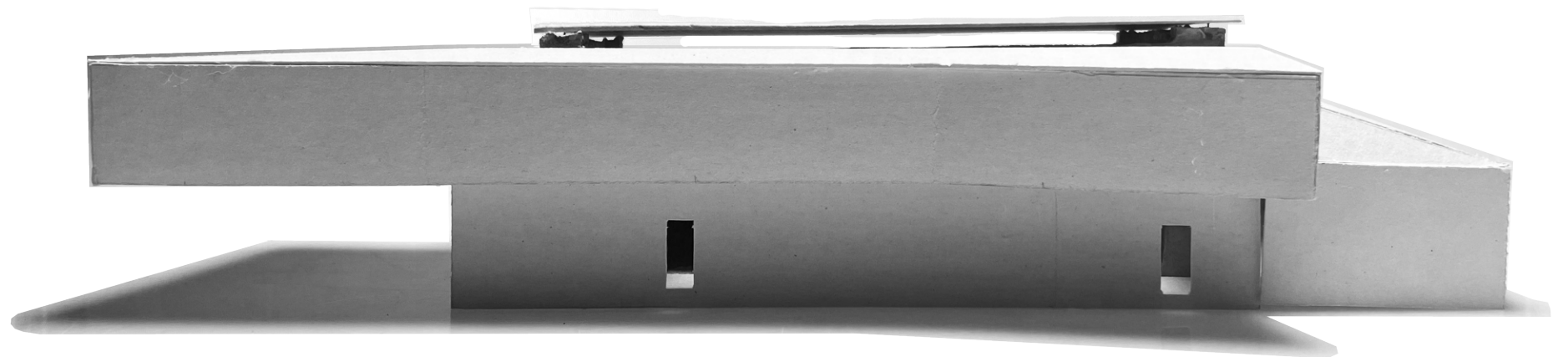
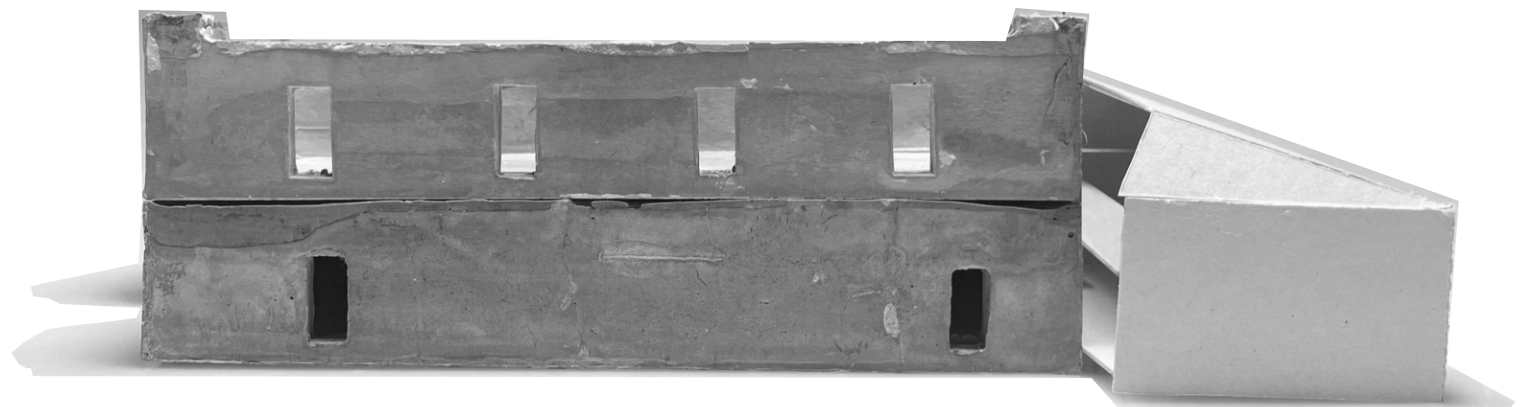
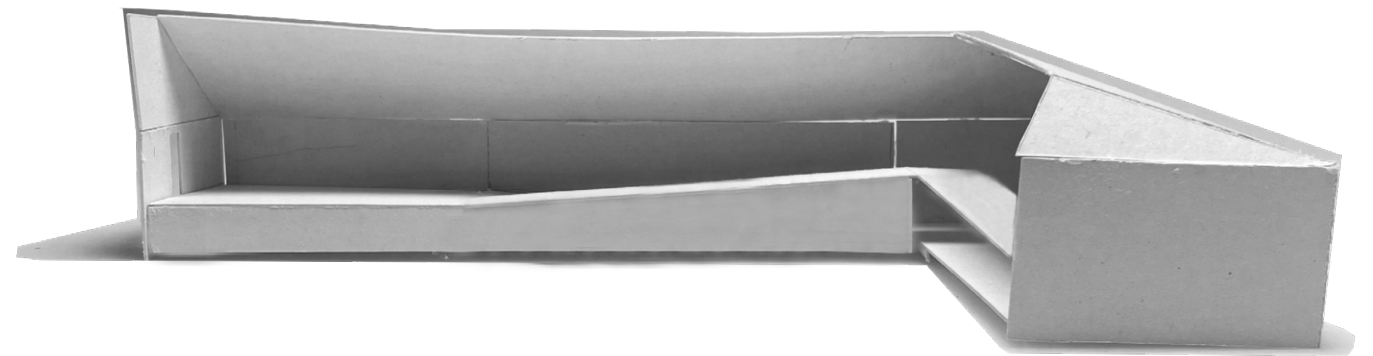


# ARCH 490 BRESSON BOX

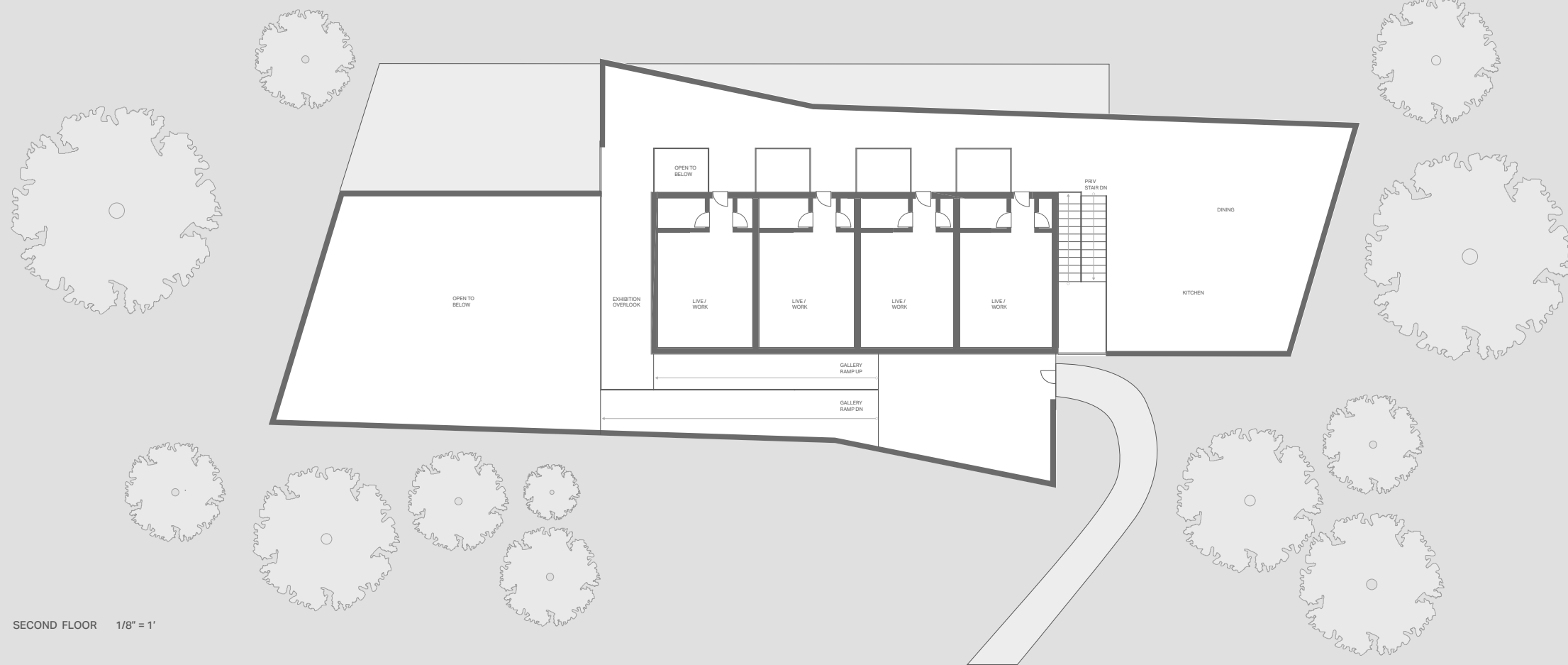
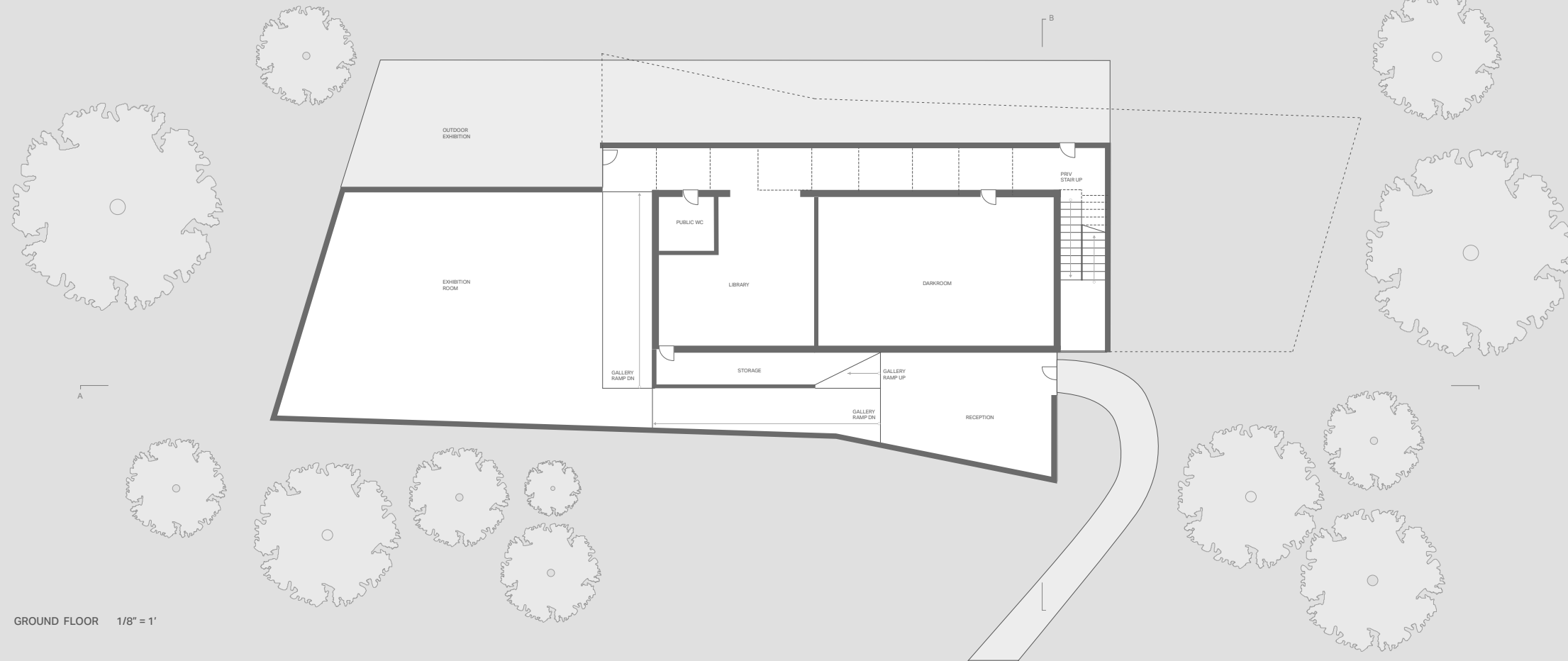
Situated on the forested hills of the Albers Foundation in Bethany, CT, Bresson Box is an artist residency for photographers. The project topography draws from a fragment of Joseph Albers's 1933 print, *Zelts* (Tents), while the residency repurposes an existing angular structure into a new space with a core, outer shell, circulation ramp, and stair. Inspired by the figural works of analog photographer icon Henri Bresson, Bresson Box explores the use of light and dark in creating collective and individual live-work environments for photographers.

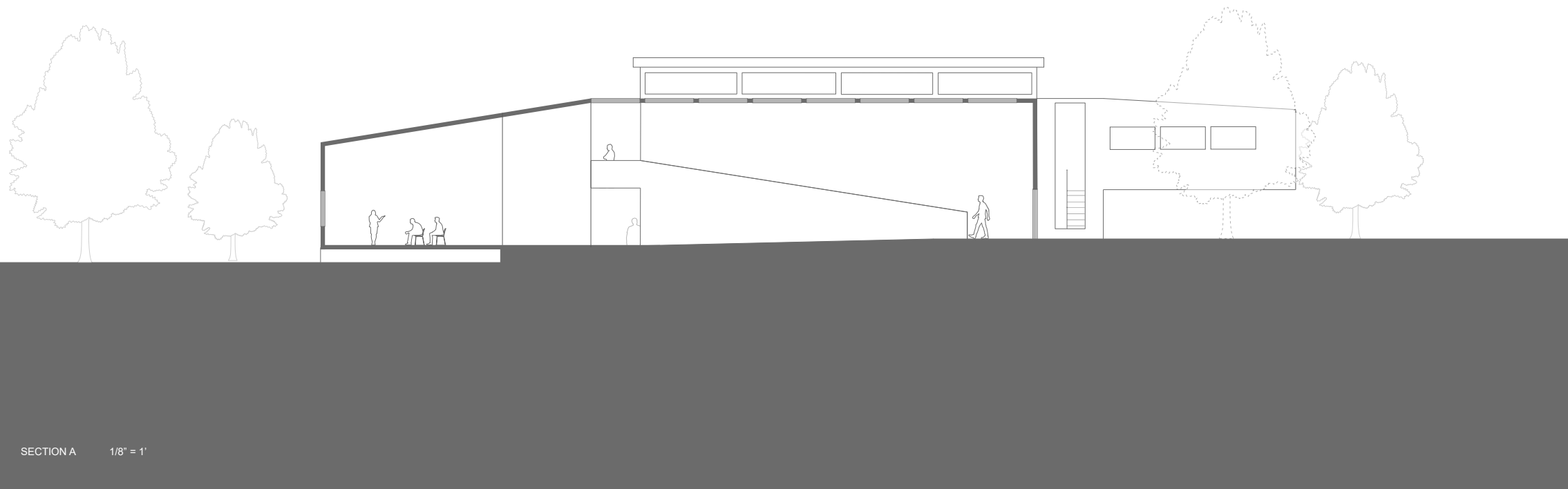


Site plan

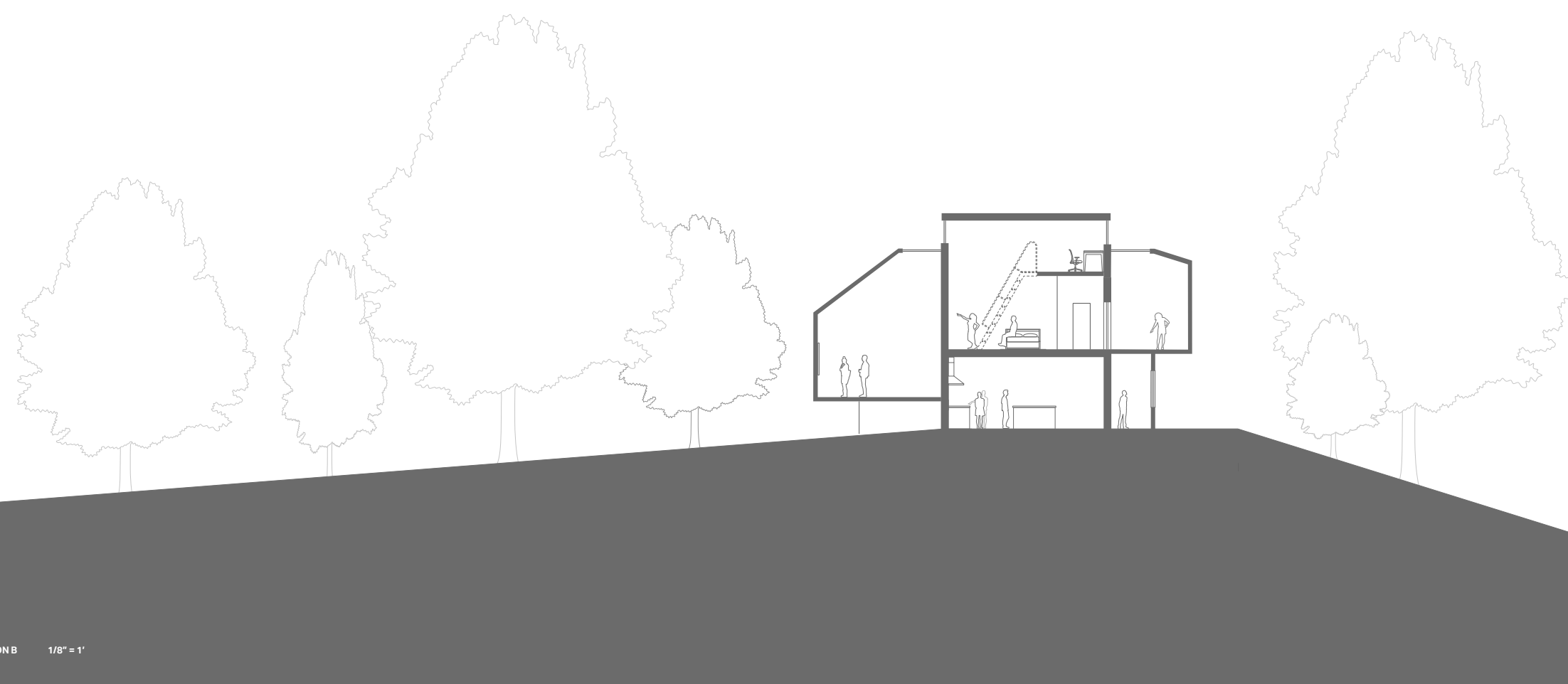






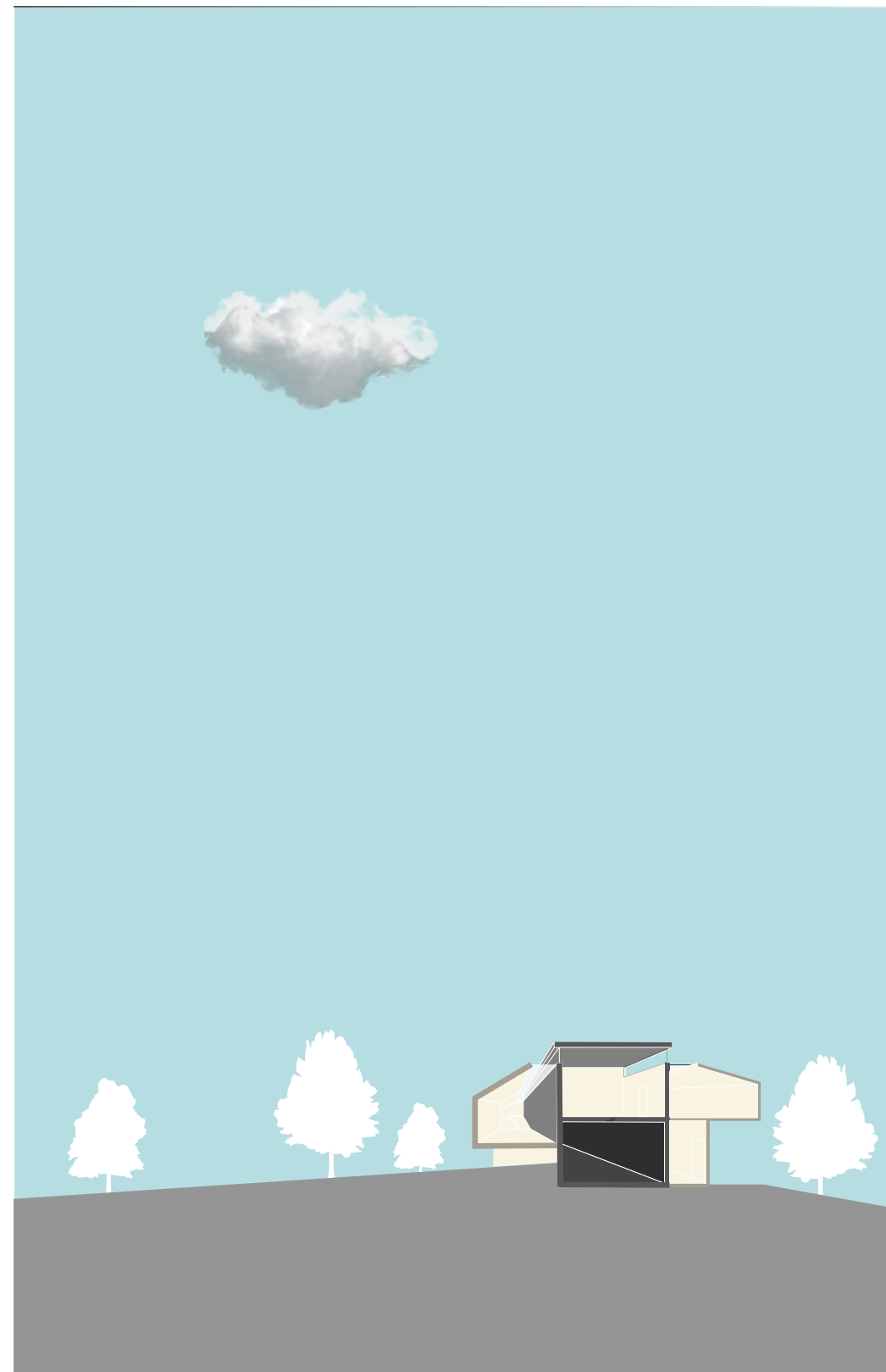
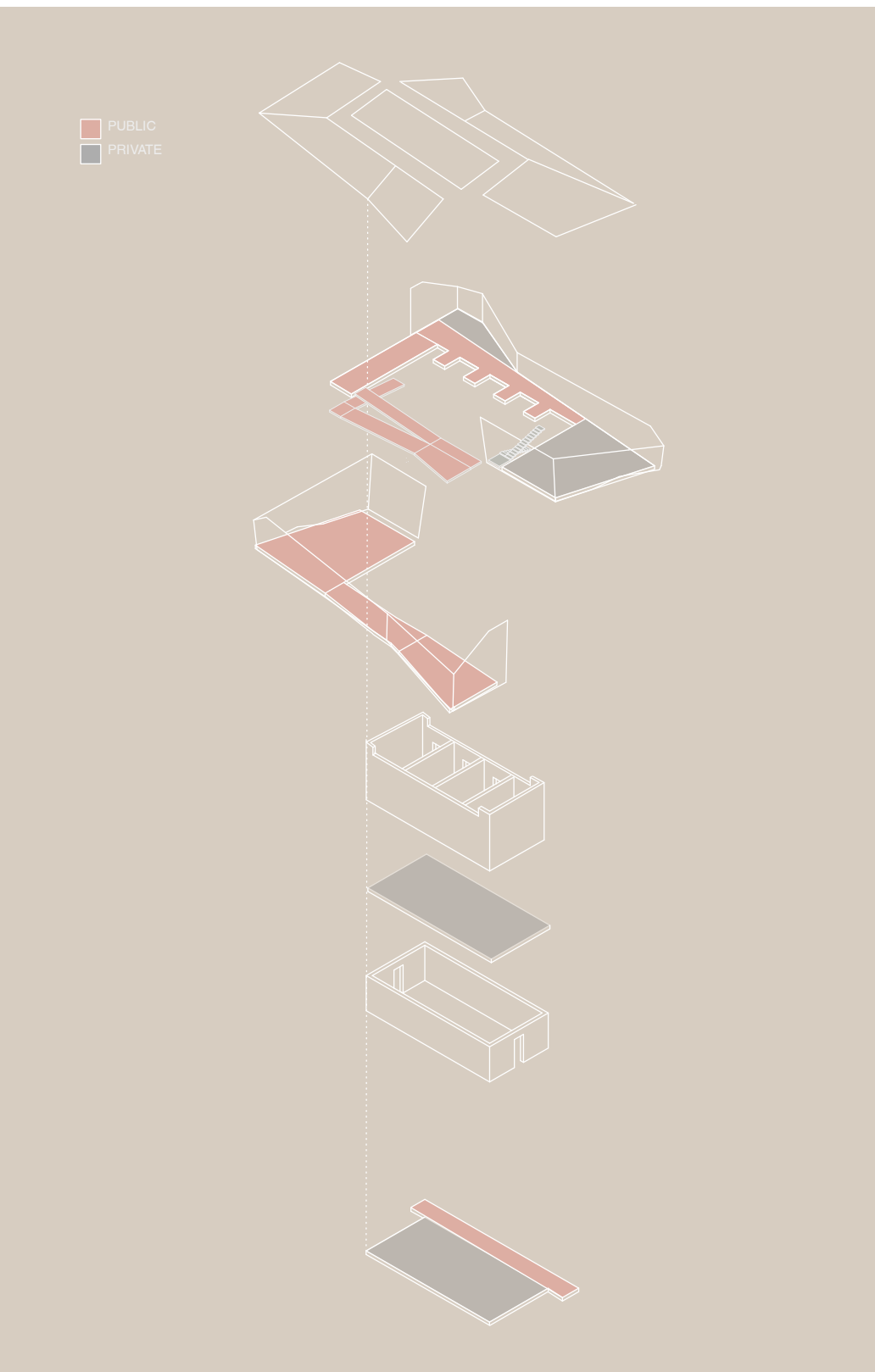


SECTION A 1/8" = 1'



SECTION B 1/8" = 1'



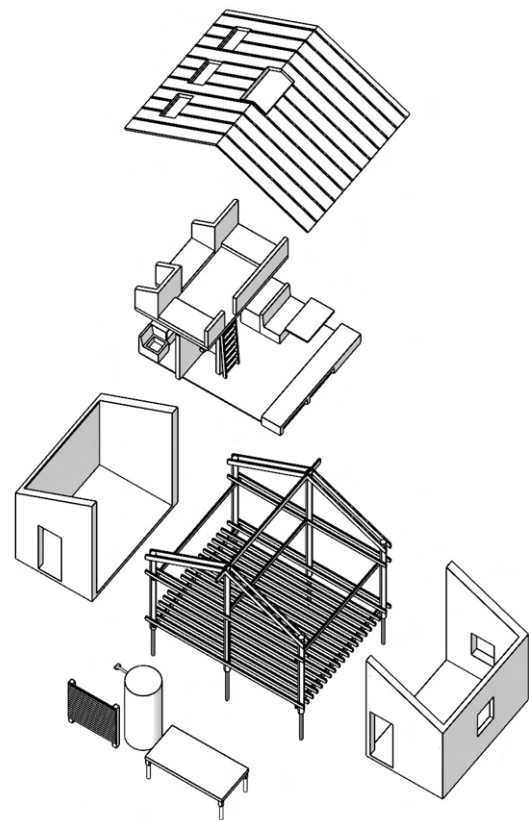


Program / circulation diagram

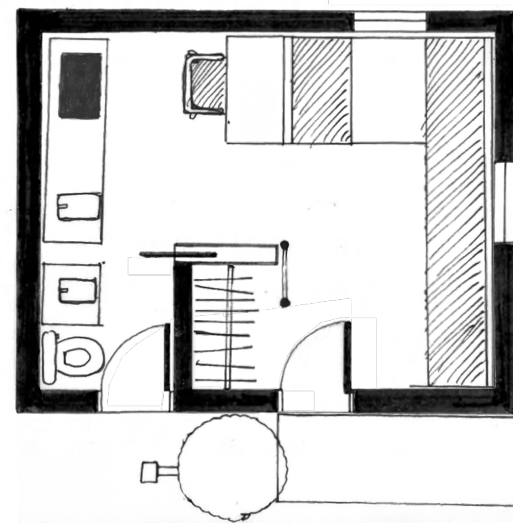
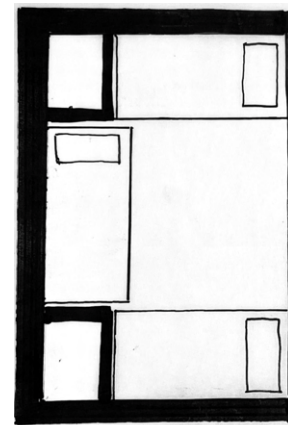
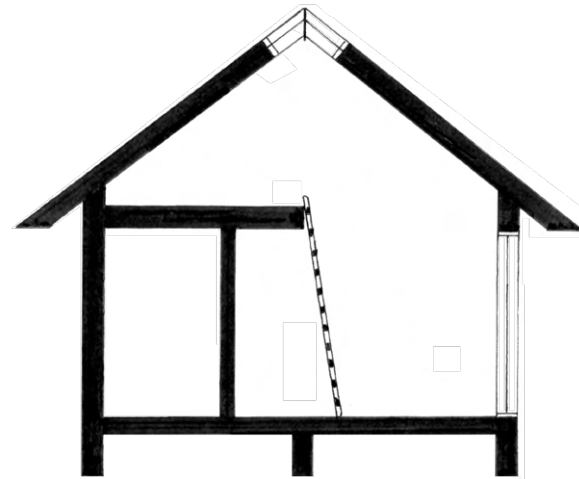


## DIS Foundations Frame House

Located on the western coast of Denmark, Frame House is a kit of parts tiny summer cabin. The house employs modularity and simplicity to create an easily assembled, sustainable kit of parts cabin. Pillars create frames in which different materials can fill. Opaque and transparent walls create different effects on the interior. Sleeping space is in the loft, while the main floor is precisely programmed for other essential tasks.



*Opaque model diagram*



*Opaque model*



*Transparent model*





*Lighting conditions in transparent model*



*Lighting conditions in opaque model*

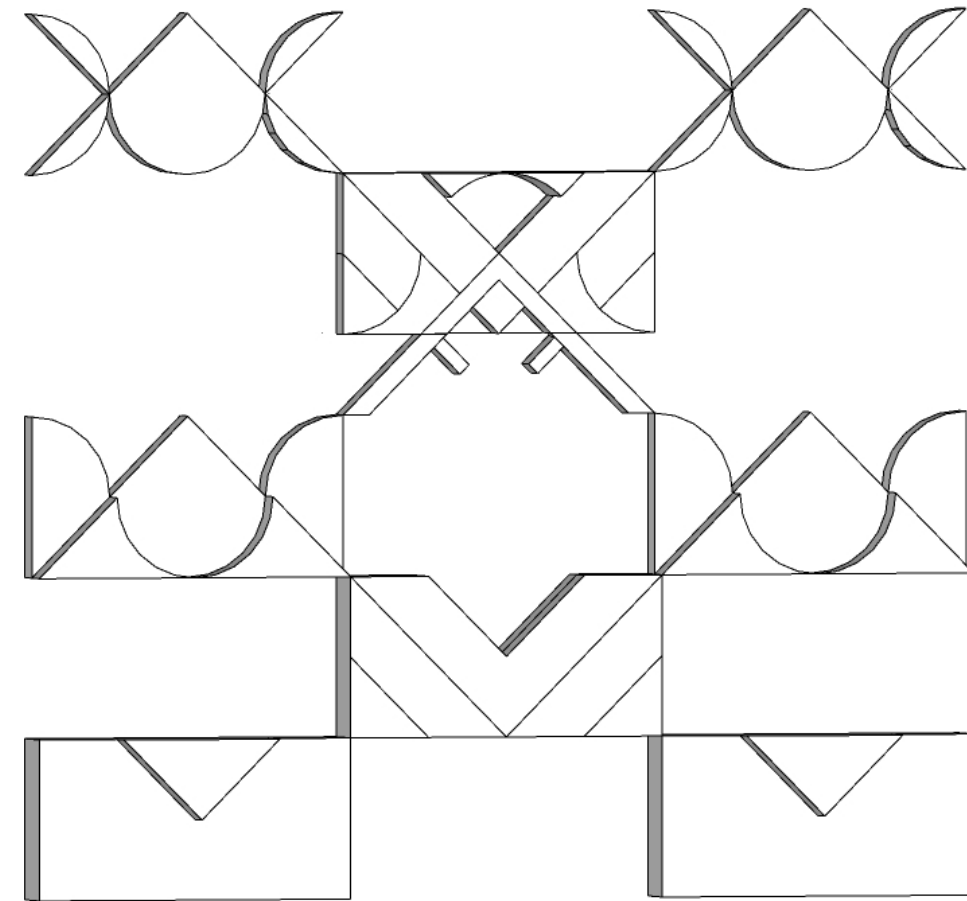
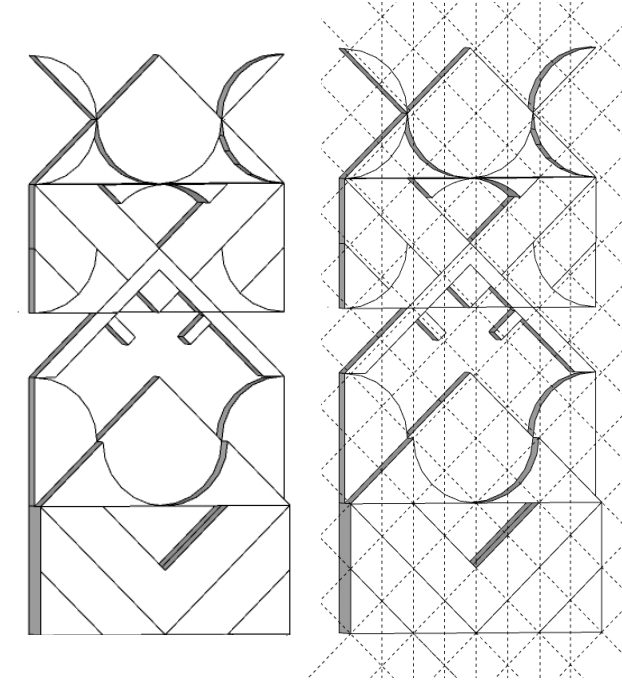
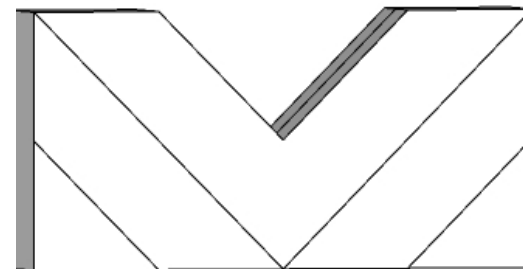
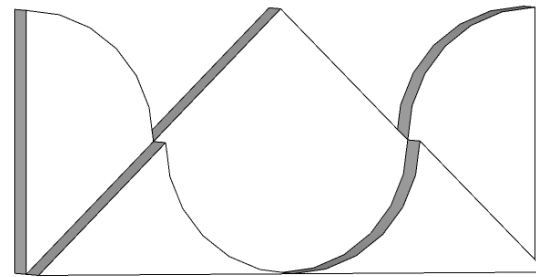
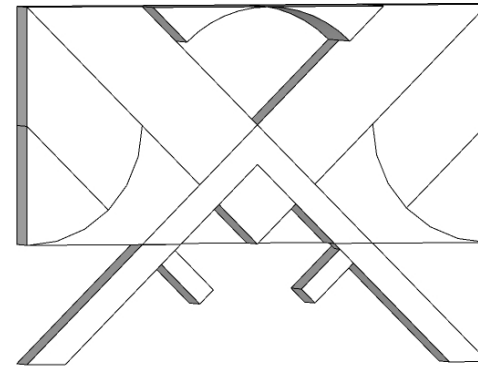
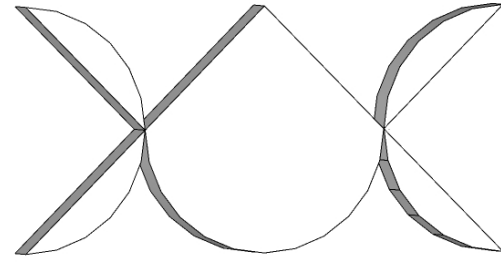


*Study models*



# ARCH 306 ORNAMENT BLOCKS

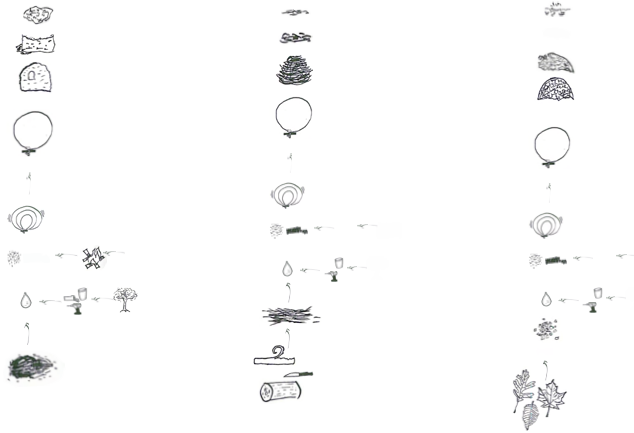
Ornament Blocks is a system of geometrically ornamented cinder blocks that stack and connect into more complex forms and shapes. Each block is divided along diagonal axis such that its edges align with the end points of the other blocks so that the transition is seamless, regardless of which block is used in the sequence. After applying the ornament blocks to the New Haven Sub Police Station, the case study for this project, the human eye registered more facade detail and stayed engaged longer than compared to the facade comprised of conventional cinder blocks.





# ARCH 250 EARTH PODS

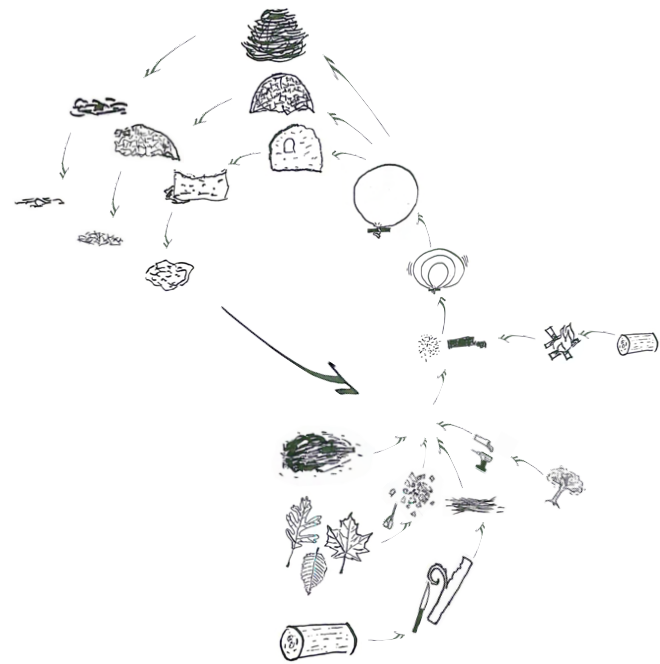
Earth Pods is a study on the potential of biodegradable structures made from site-based materials and processes. This particular study is located on a densely forested deciduous site in Putney, Vermont. Four different pods emerge and decay with the north eastern seasons: dirt, saw dust, leaf, and bark pods. The material calendar illustrates the availability of materials for each month and the process of creating each pod variation.



*Study on material taxonomy for dirt, bark, and leaf*

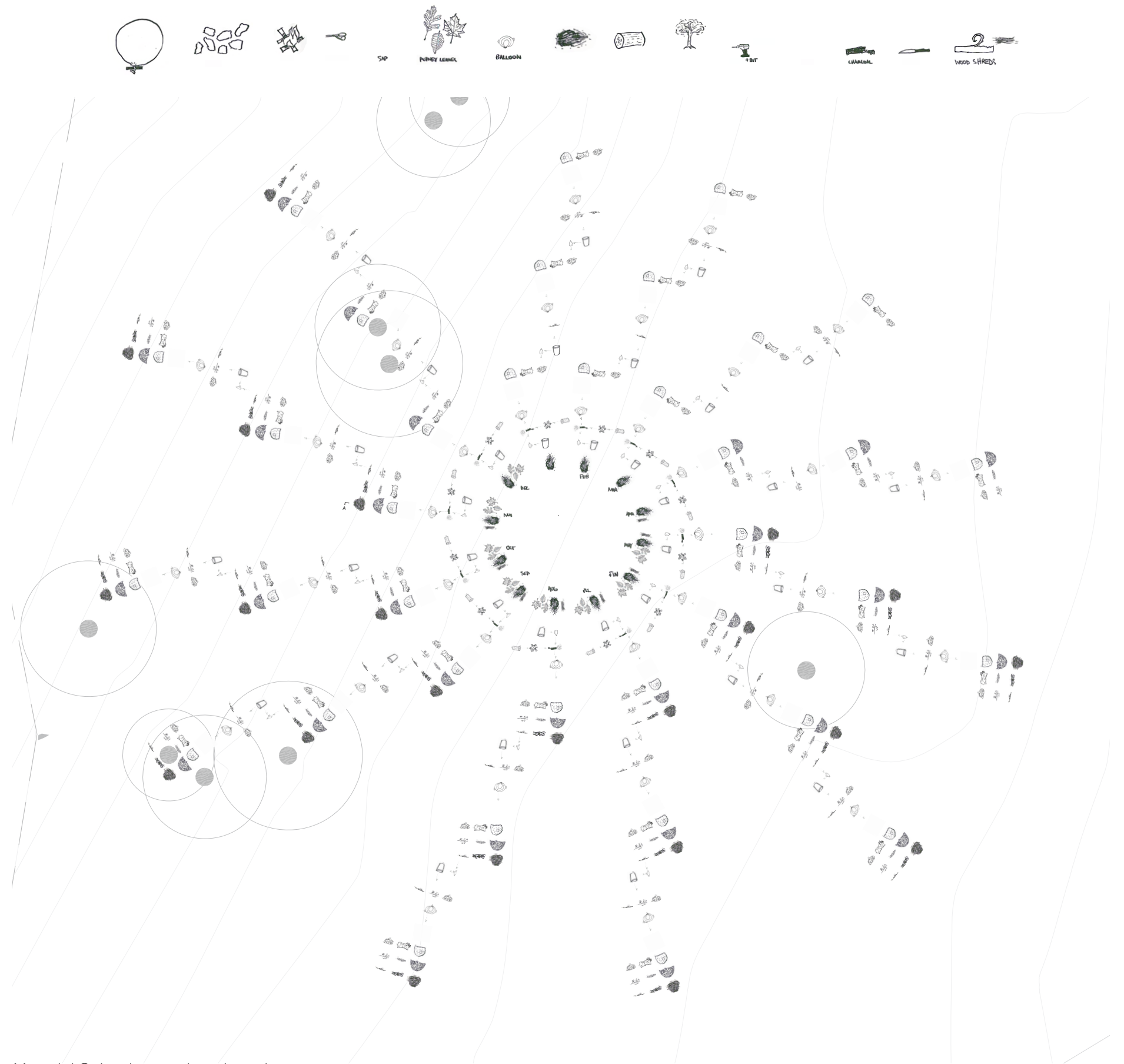






## Glue, Form, Decay, Relocate

Earth Pods in Putney, Vermont are built with the seasons and decay as time progresses. Each season, a visitor can create a new Earth Pod around the site.



Material Calendar overlaid on site plan