



MICHAEL THUT

INTRO

My name is Michael Thut and I am in my second year of the 3-year M.Arch program at the University of Michigan.

Prior to my time at Michigan, I studied both Math and Studio Art at Swarthmore College. These have become foundational to my architecture education and my creative practice. While this book is intended to be presentation of my creative work to this date, it is also a manifestation of me and my interests. I believe the logic, systemization, craft, and attention to detail that are a part of my personality are on display in this body of work. I hope you enjoy my practice.



CONTENTS

01

WATER
HEARTH
P. 4-11

04

USONIA
TOTEM
P. 26-31

02

PAWNED
PLAYGROUND
P. 12-19

05

FROZEN
TIME
P. 32-37

03

MATERIAL
MANAGEMENT
P. 20-25

06

DRAWING
(DOORS)
P. 38-39

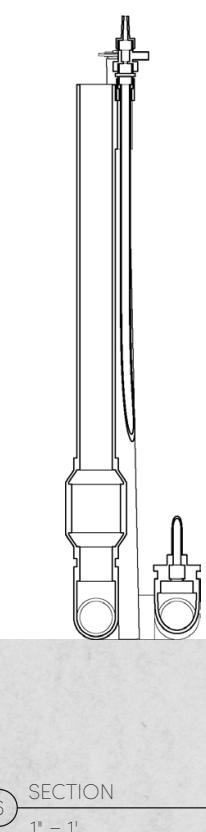
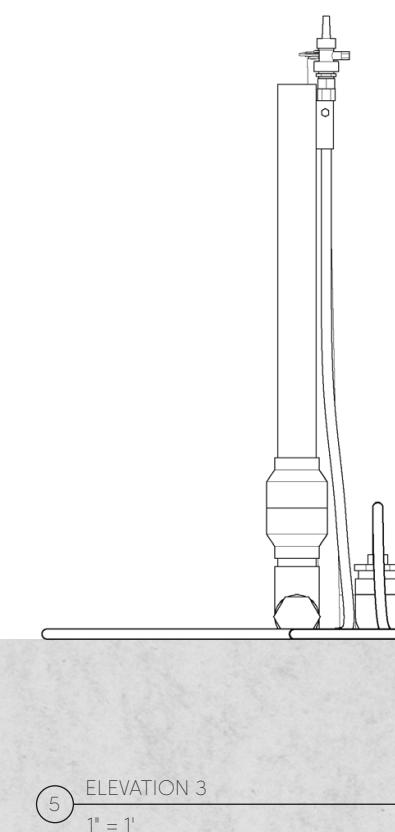
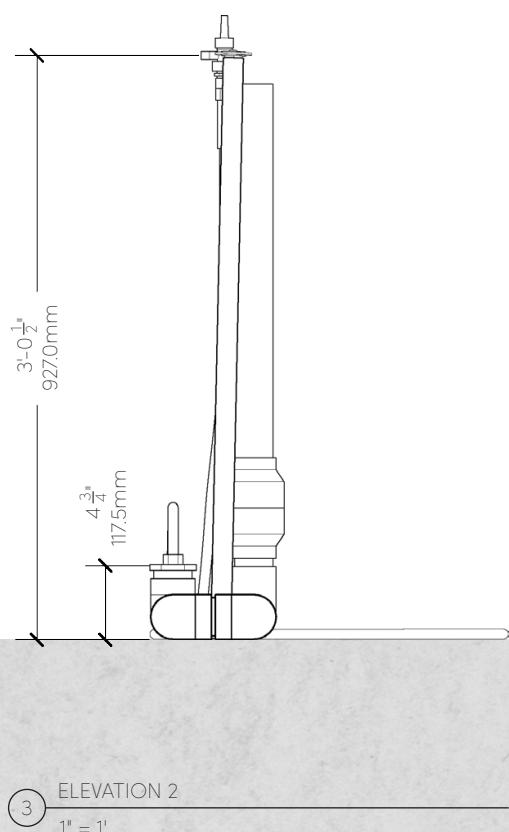
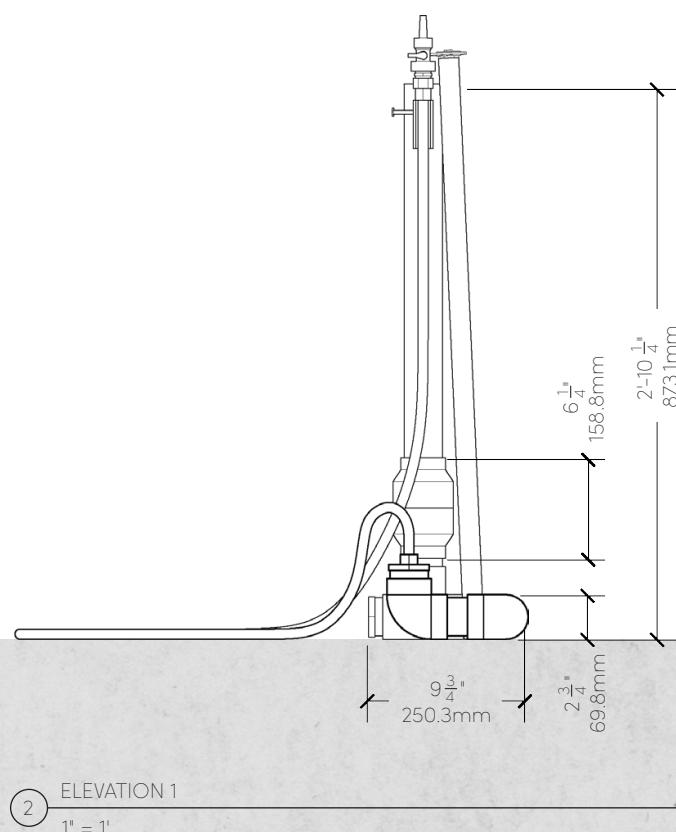
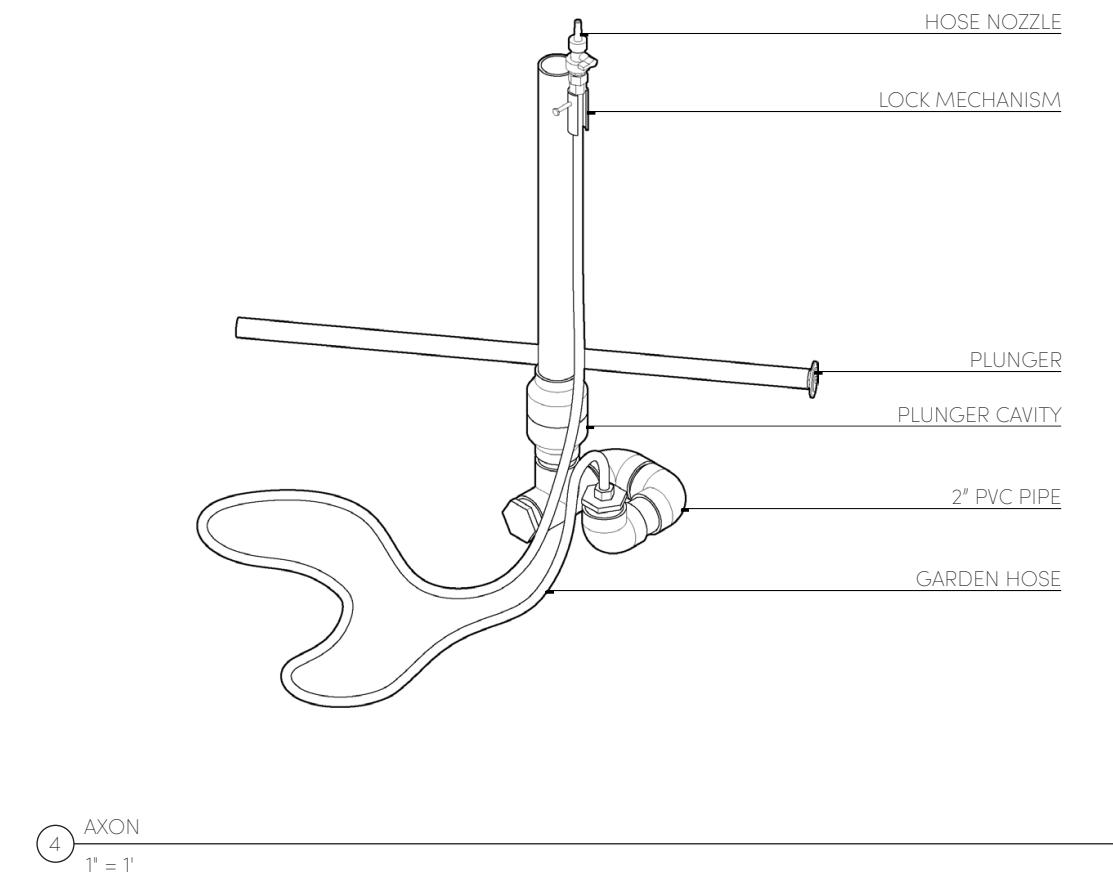
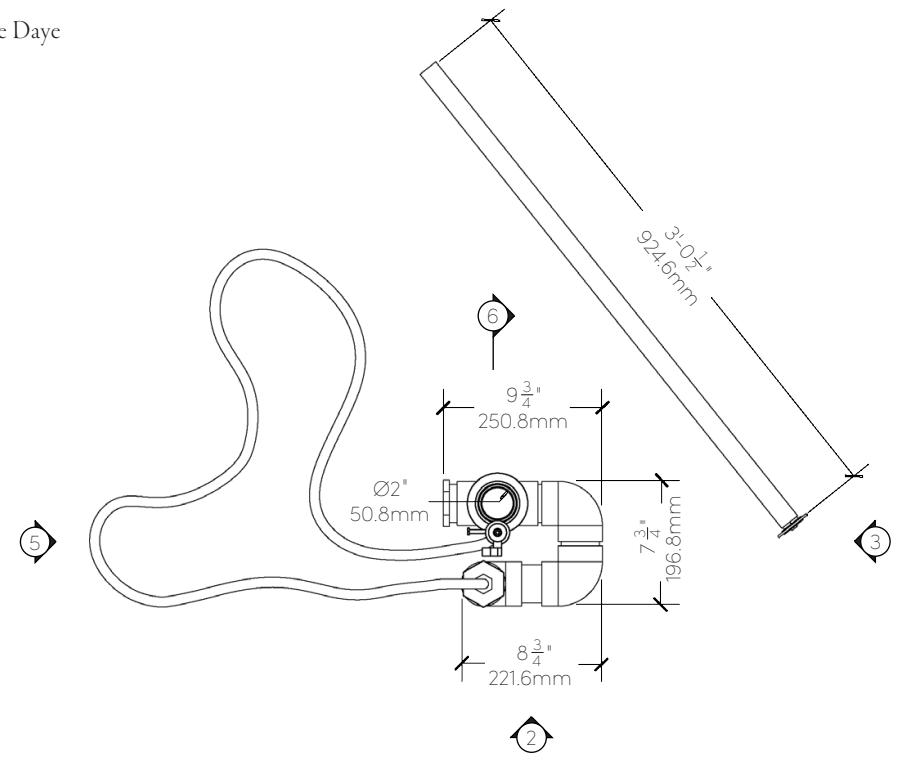
WATER HEARTH

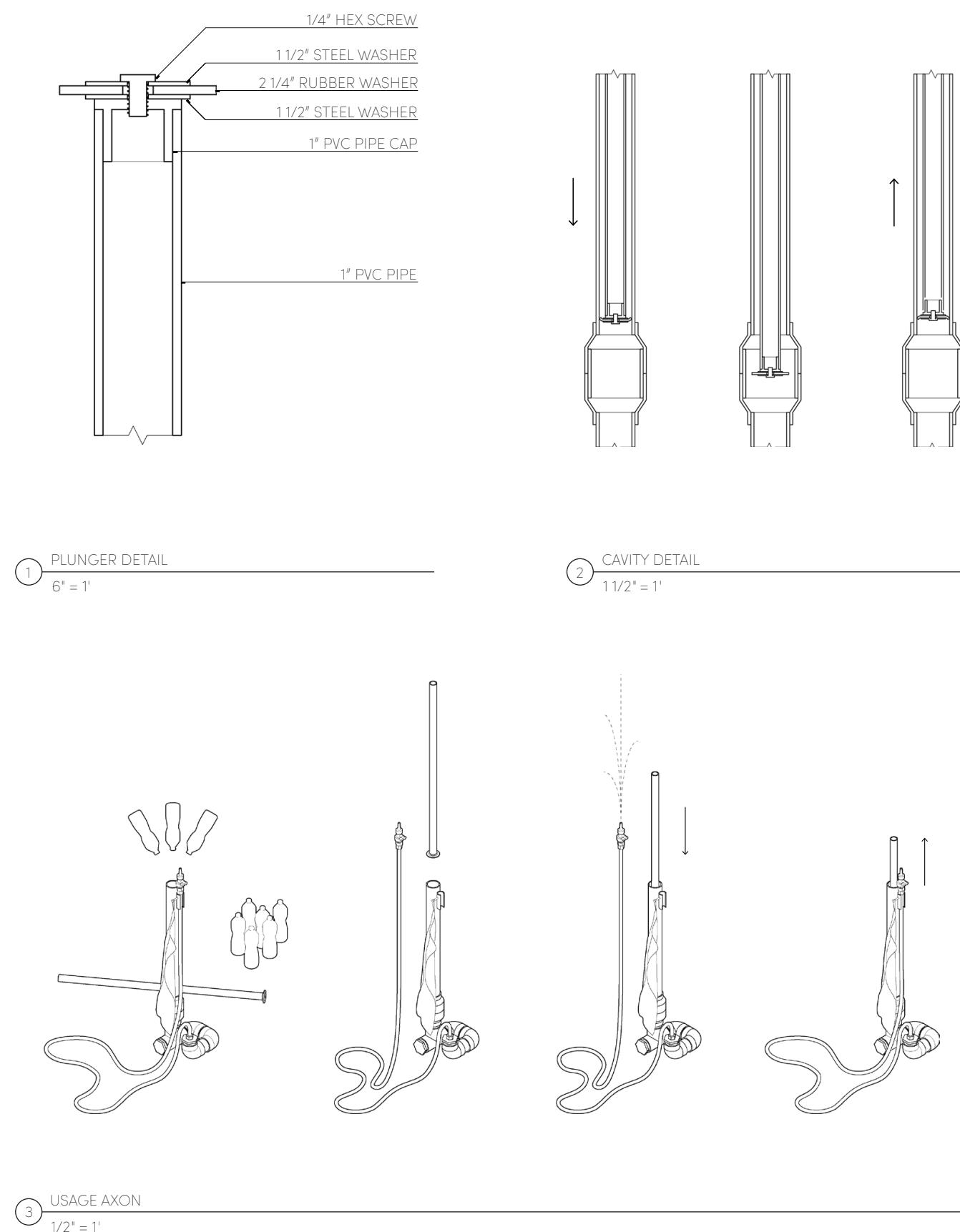
Location: Echo Park, Los Angeles 90026

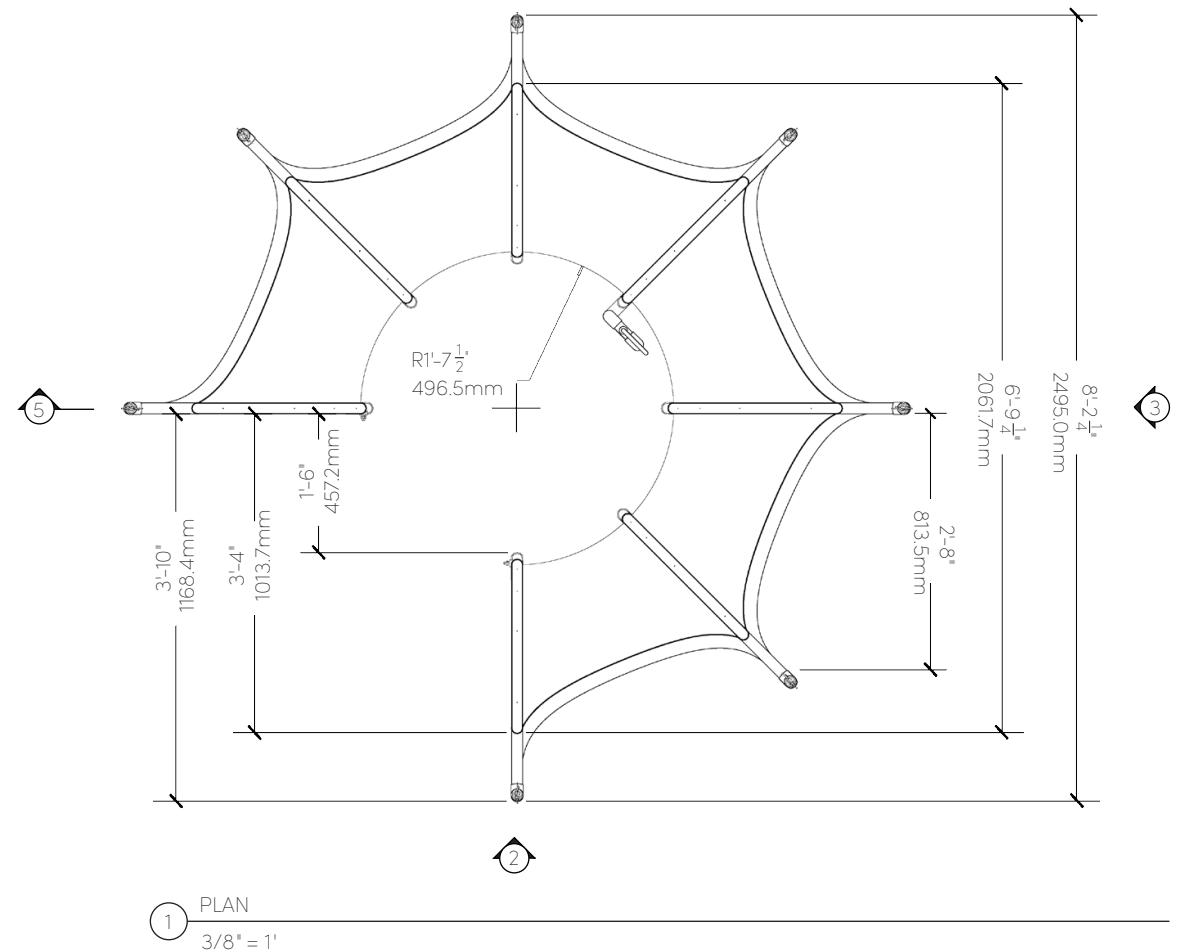
Class: ARCH 552: Institutions - Kevin Bernard Moultrie Daye

Skills Used: Rhino 7, Adobe Illustrator

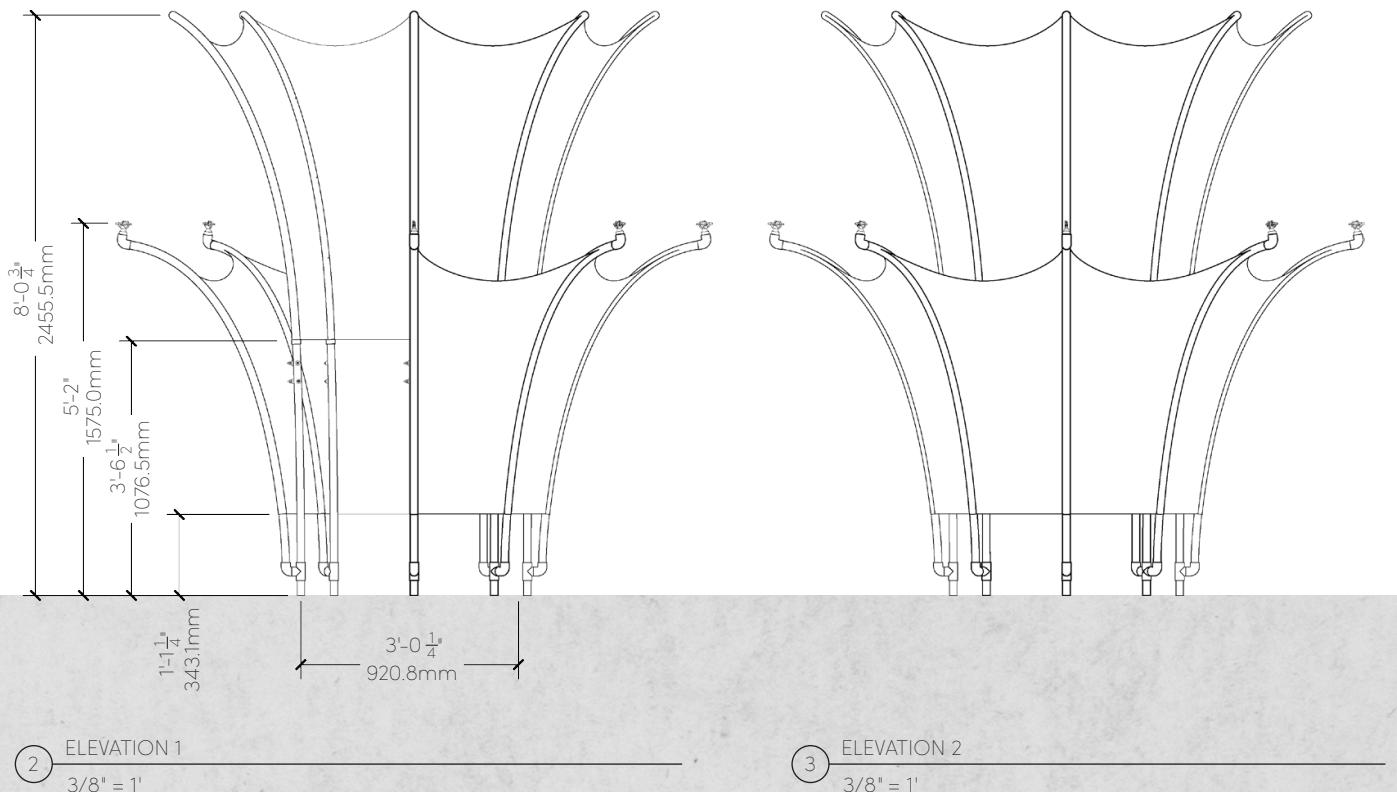
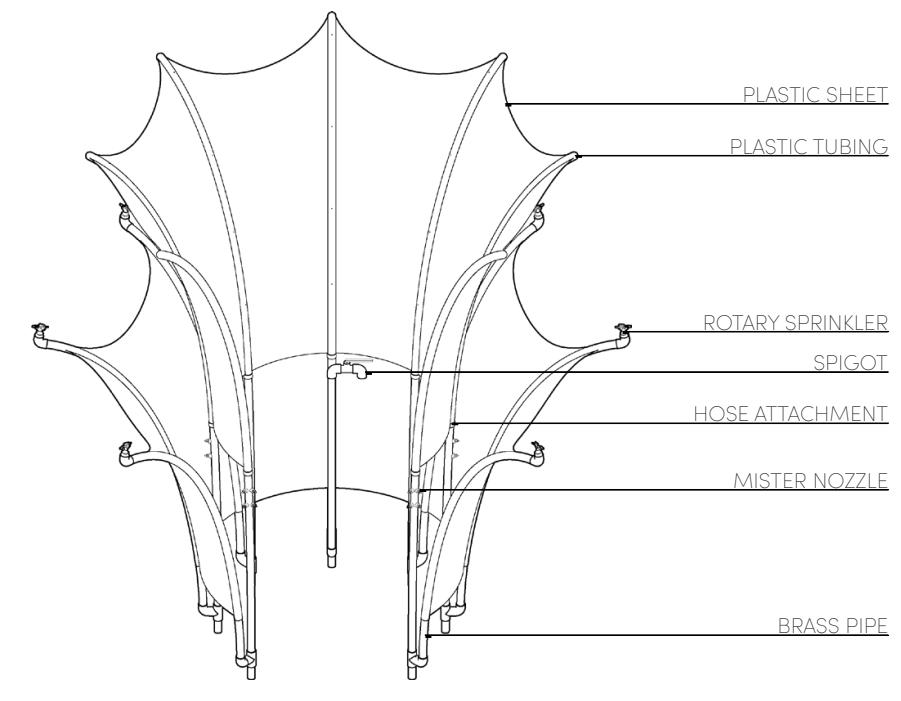
This project sought to address homelessness by creating a collection of public services through the agglomeration of each student's individual project. This allowed us to focus in on one issue with specificity without having to grapple with everything that surrounds this crisis. We had to design two objects with similar tectonics, but at different scales. I focused in on pressurized water systems for washing and controlling one's body temperature. The small object to the right is a personal hose system constructed out of easily accessible, low-cost materials. This allows someone who is unhoused to construct the object on their own, ultimately reducing the cost. A plunger with an oversized rubber washer on the end creates a simple pneumatic system to pressurize the water by hand.



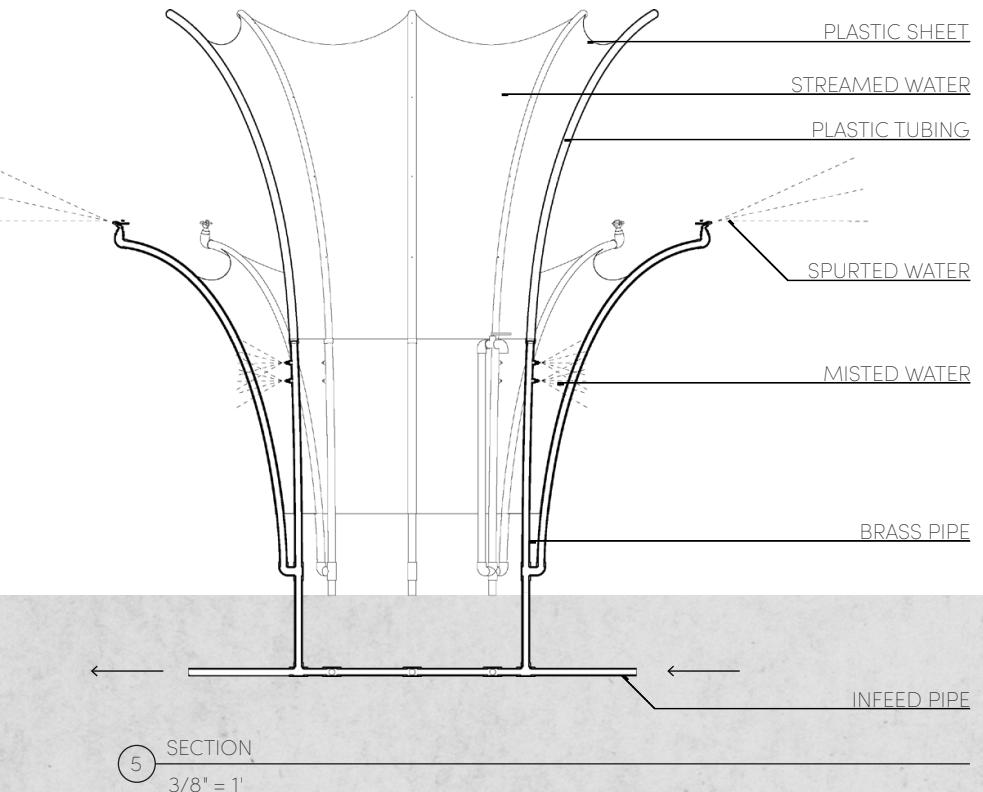




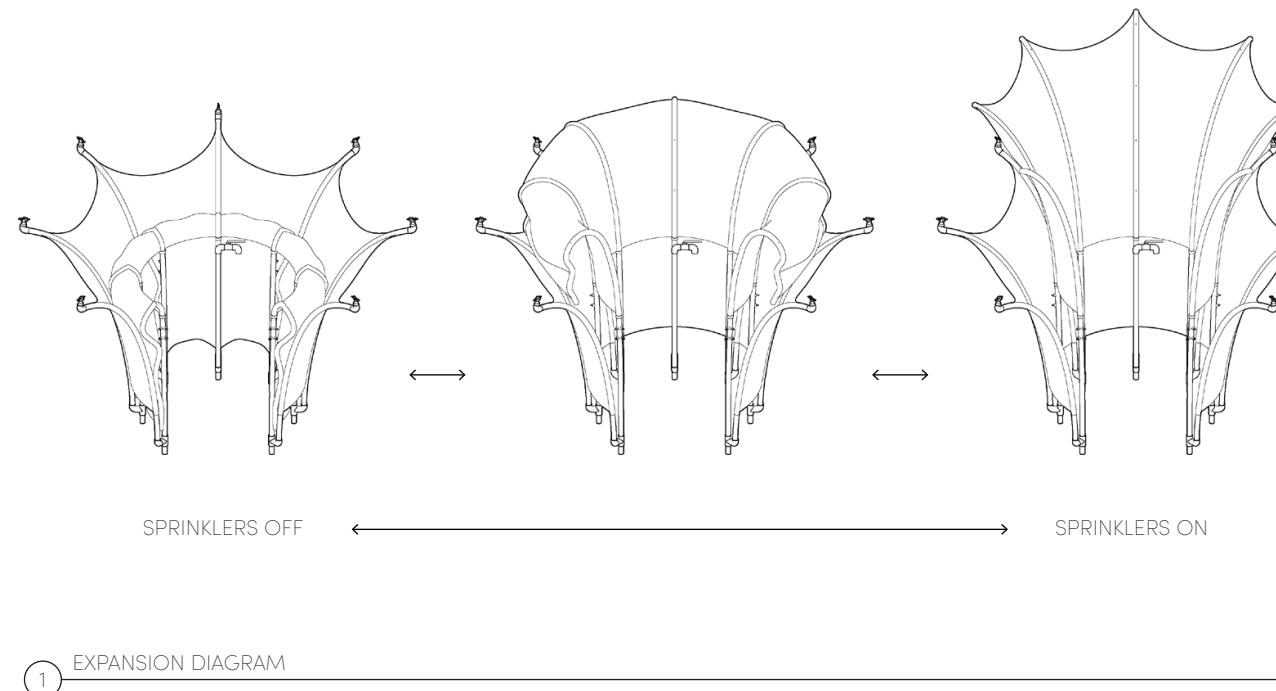
The large object is a product to be funded and implemented by the city. For this reason its function differs from the small object; it must merge the interests of the unhoused community with the clients'. This led me to design a large, inflatable sprinkler that blooms every time the city is watering the grass. Water is dispersed through rotary sprinklers across the surrounding ground while misters provide a cloud of privacy and slip n slide like holes in the plastic bloom give individuals access to streamed water. This effectively turns the process of watering the park grass into a spectacle that encourages play for the general public while providing access to pressurized water for the unhoused.



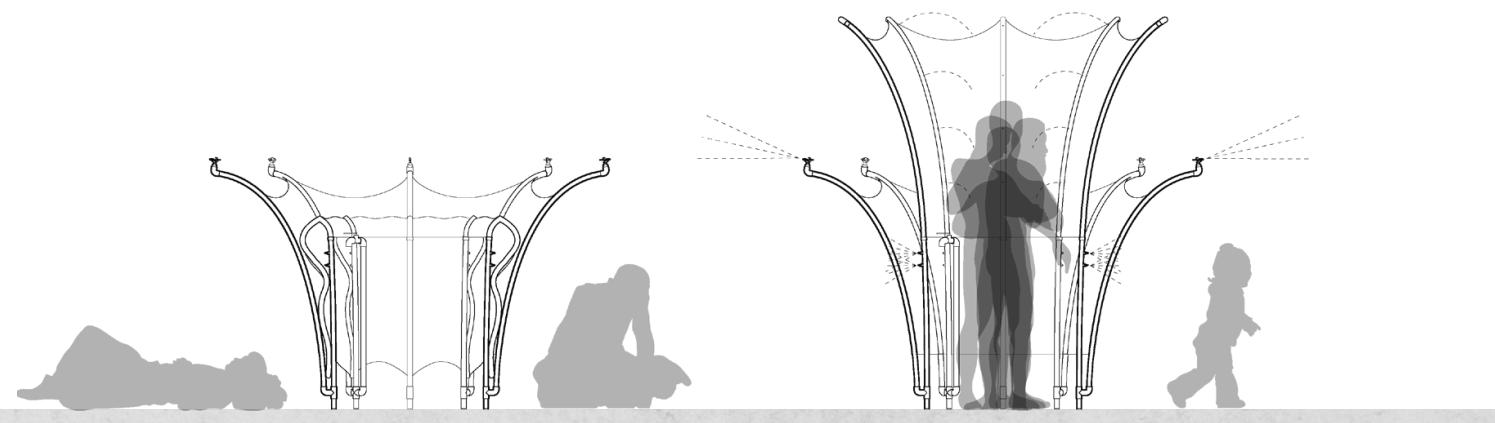
(3) ELEVATION 2
3/8" = 1'



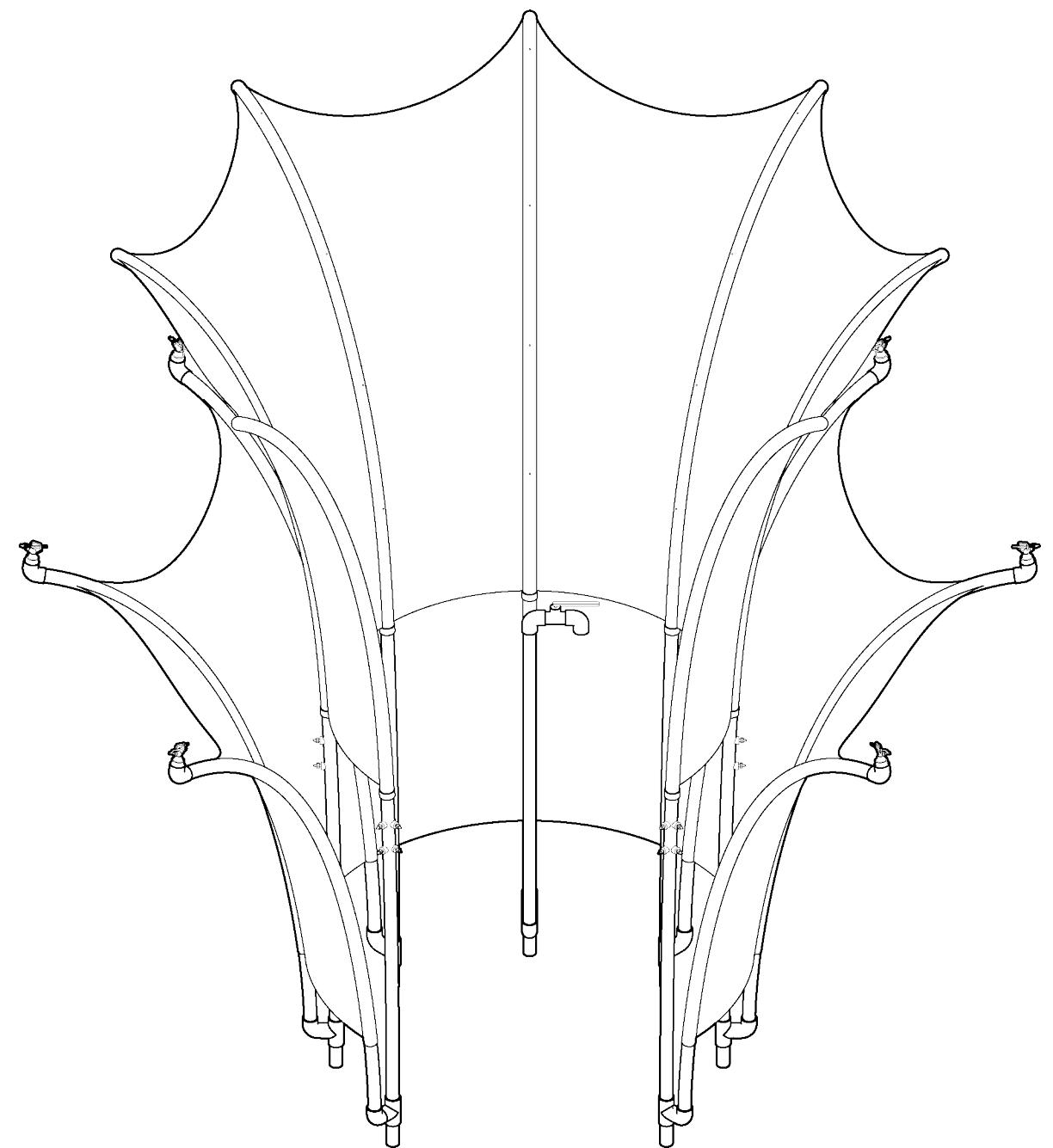
WATER HEARTH



1 EXPANSION DIAGRAM
1/4" = 1'



2 HUMAN ENGAGEMENT DIAGRAM
1/4" = 1'



3 AXON
3/4" = 1'

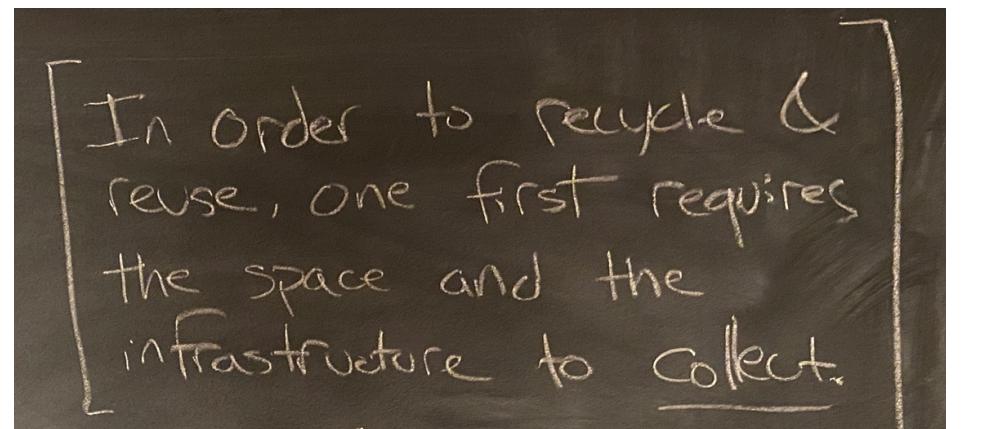
PAWNED PLAYGROUND

Location: Ann Arbor

Class: ARCH 422: Situations - Catherine Griffiths

Skills Used: Rhino 7, V-Ray, Adobe Suite (Illustrator, Photoshop)

This project encouraged students to reconsider the collection and arrangement of materials as architectural space. My material for the semester was plastic and I dove into the idea of recycling and reusing leftover material that has already served its intended purpose. We had to envision a temporary space on an abandoned site in Ann Arbor, so I constructed a sorting facility for plastic waste that provided open space for children to recycle by repurposing old materials into toys. The end result reminds me of brutalist and adventure playgrounds where children learn through experience by taking calculated risks.

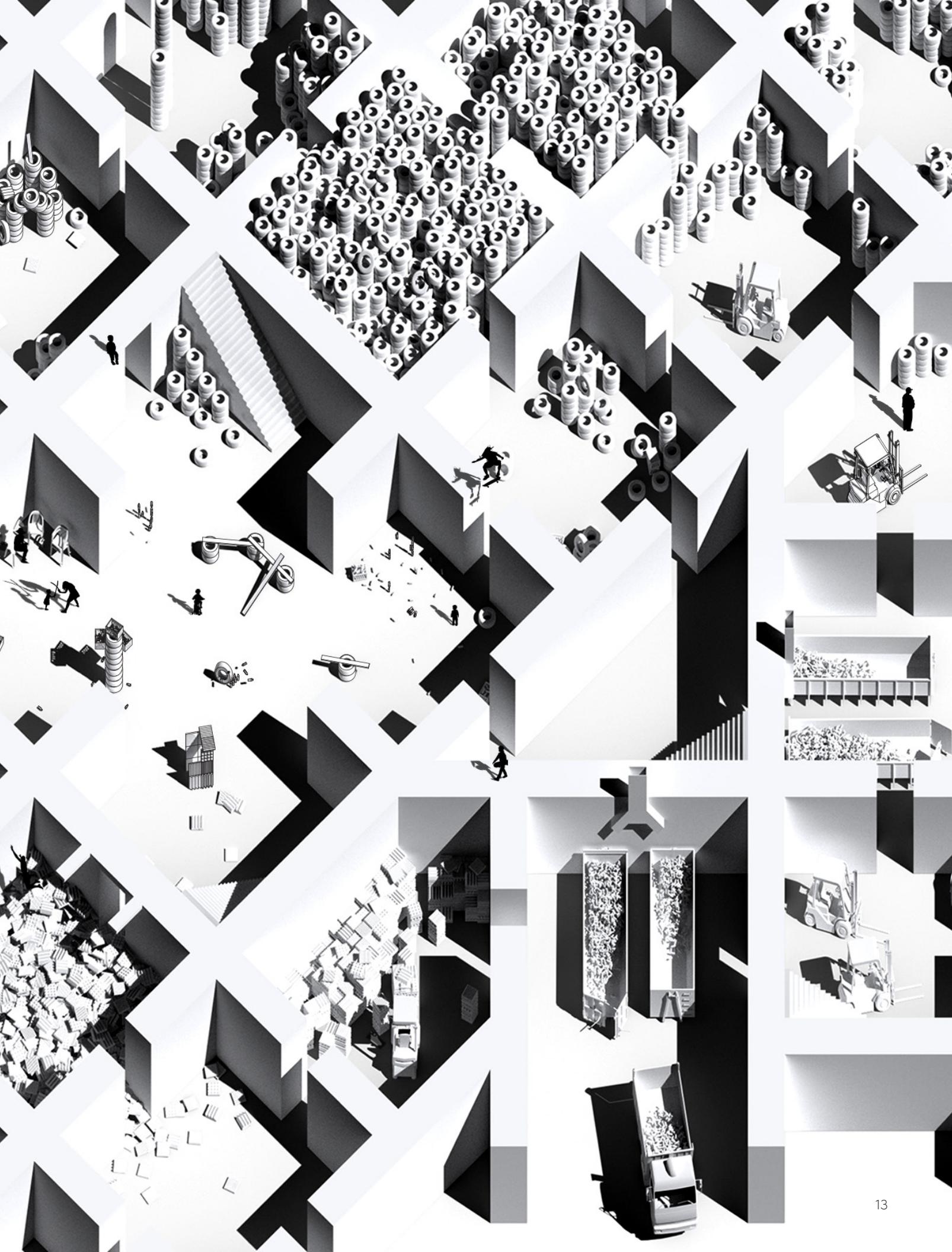


QUOTE

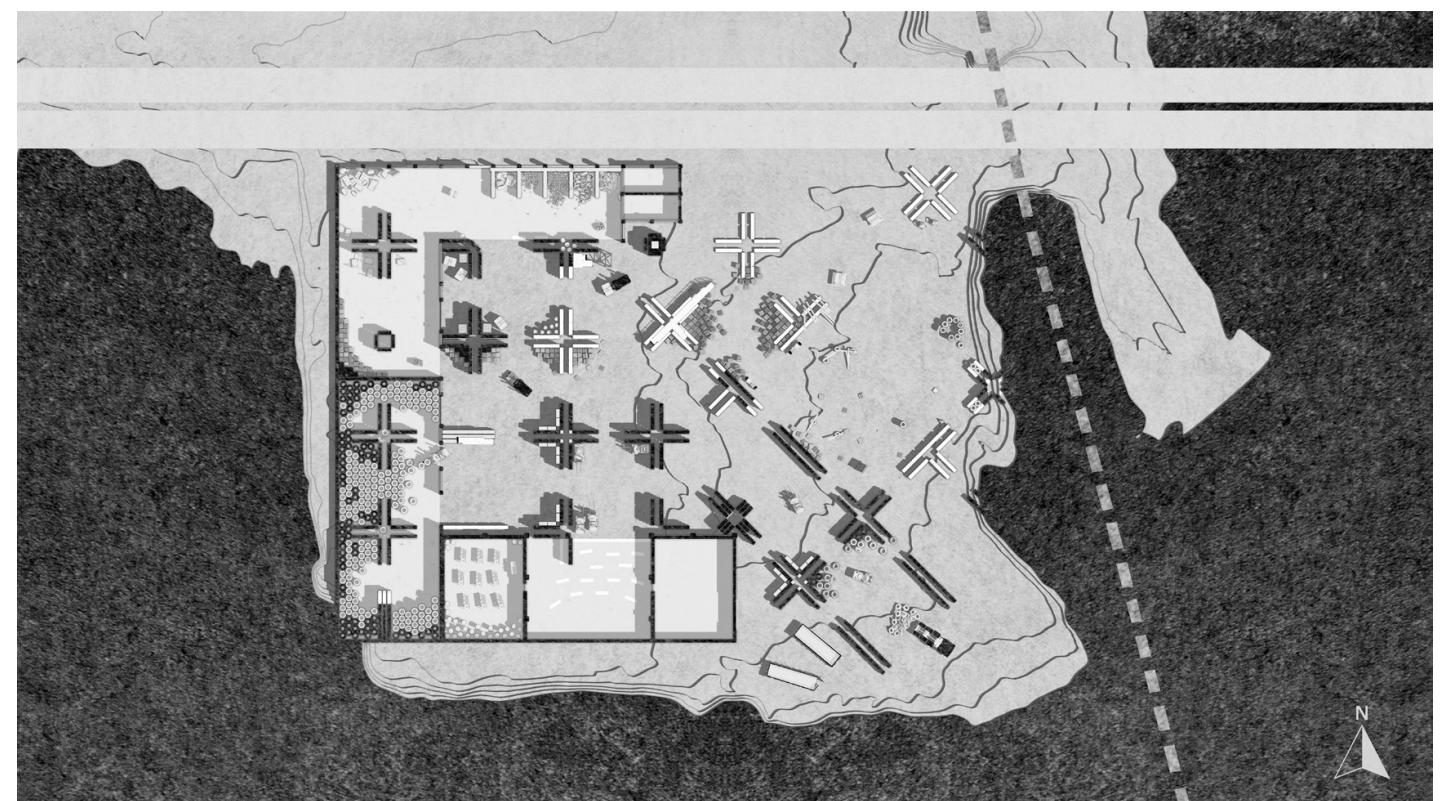
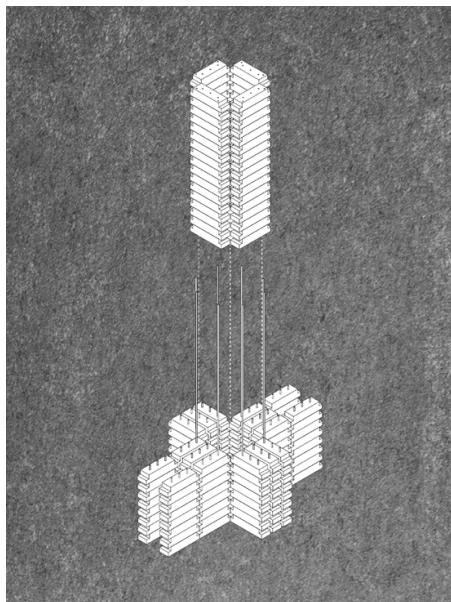
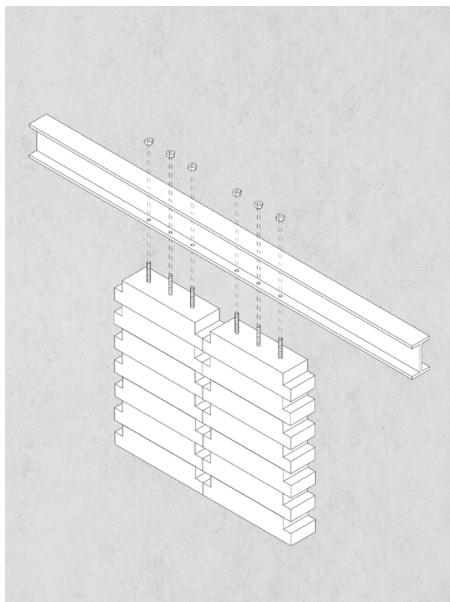
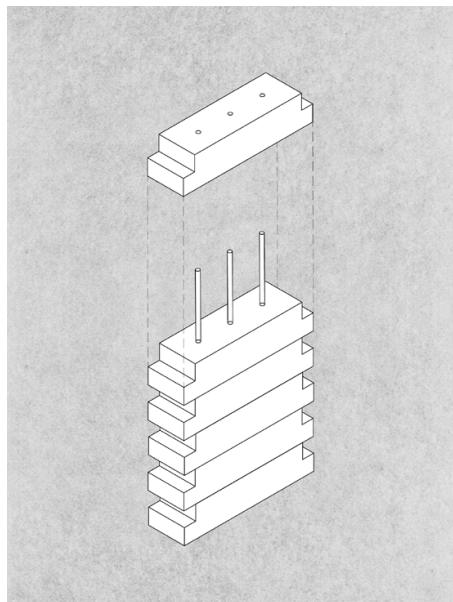
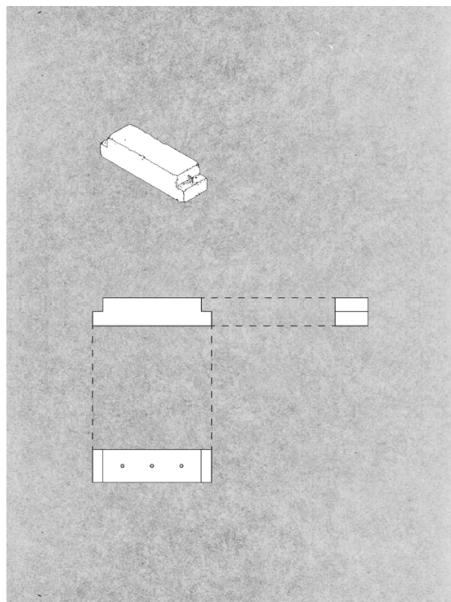
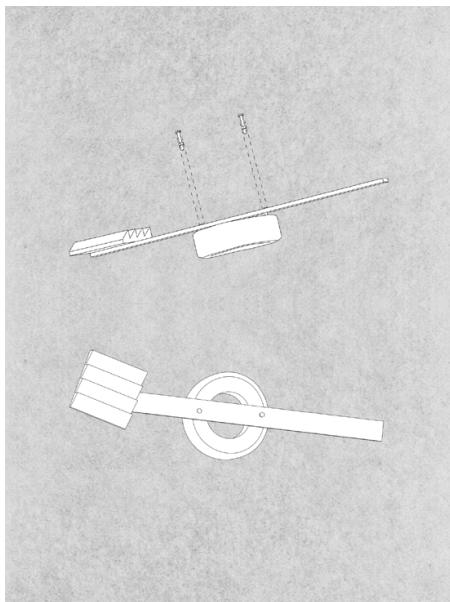
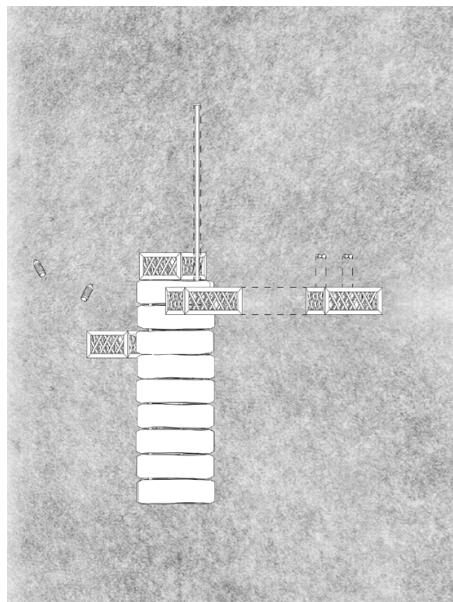
To the left is a personal quote that captures the main theme of the project; that is the storage and management of materials for recycle and reuse.

DRAWING

The image on the right shows an infinite space of plastic collection and storage that provides open areas of space for engagement with the material in a playful manner.



MICHAEL THUT



TRADING CARDS

To the left are a series of drawings that show some assemblies throughout the project; they form playground equipment, structural support and architectural structures themselves.

PLANS

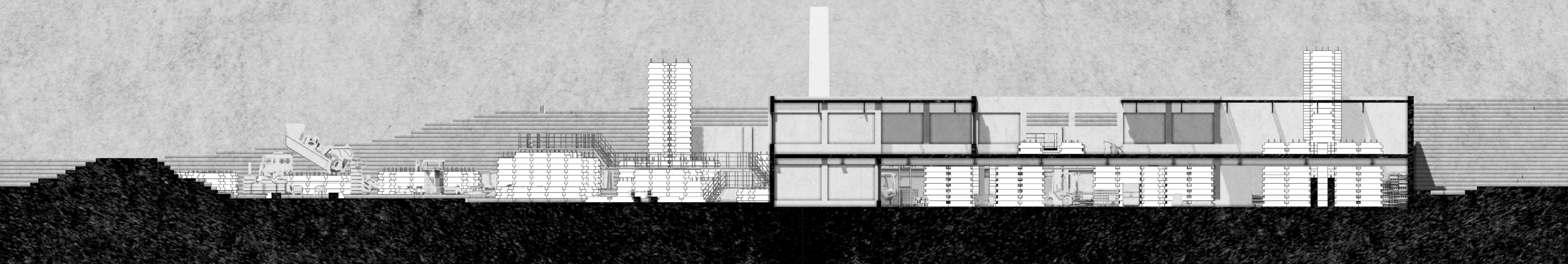
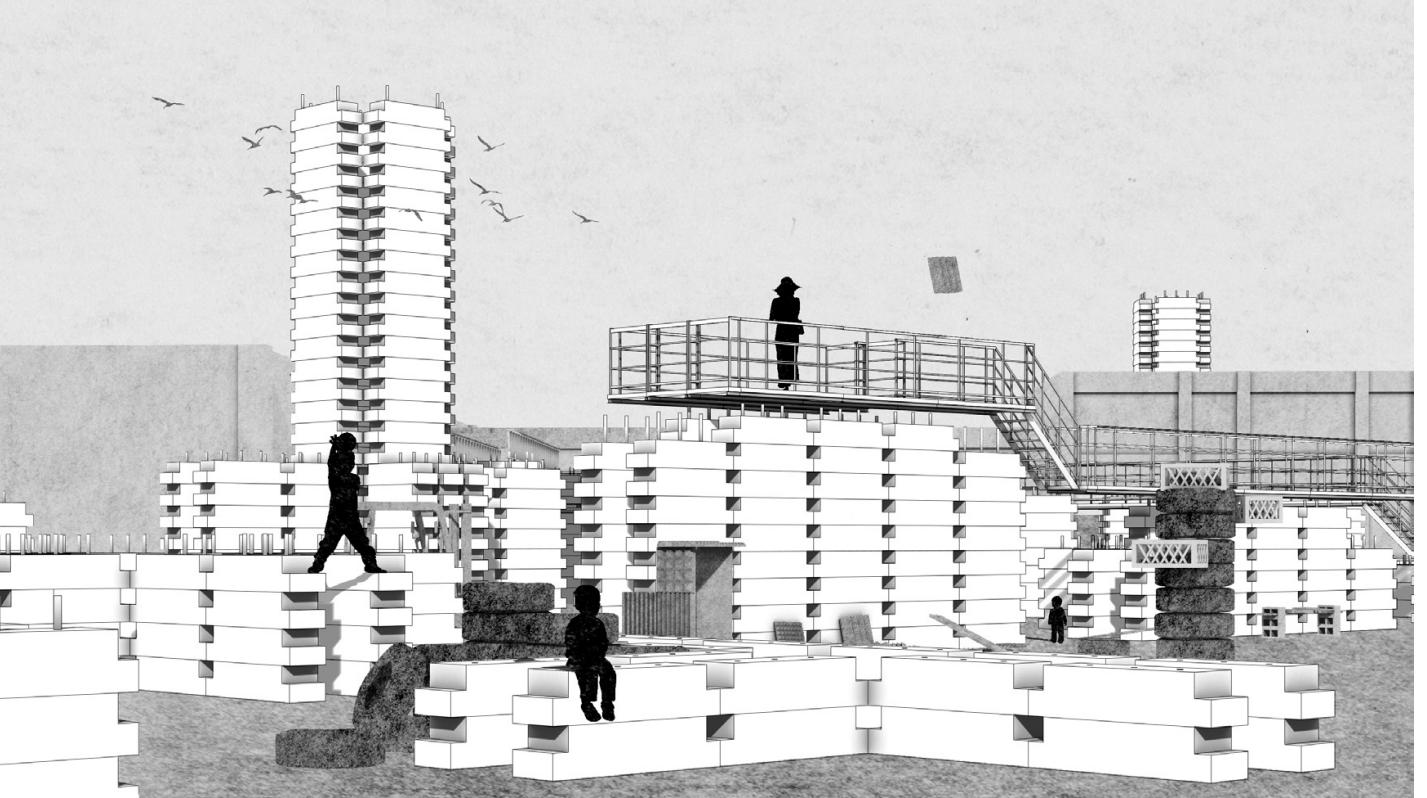
Above is a set of plan drawings. They help to show the overall organization across the site in conjunction with the height variation of the concrete block and the ground.

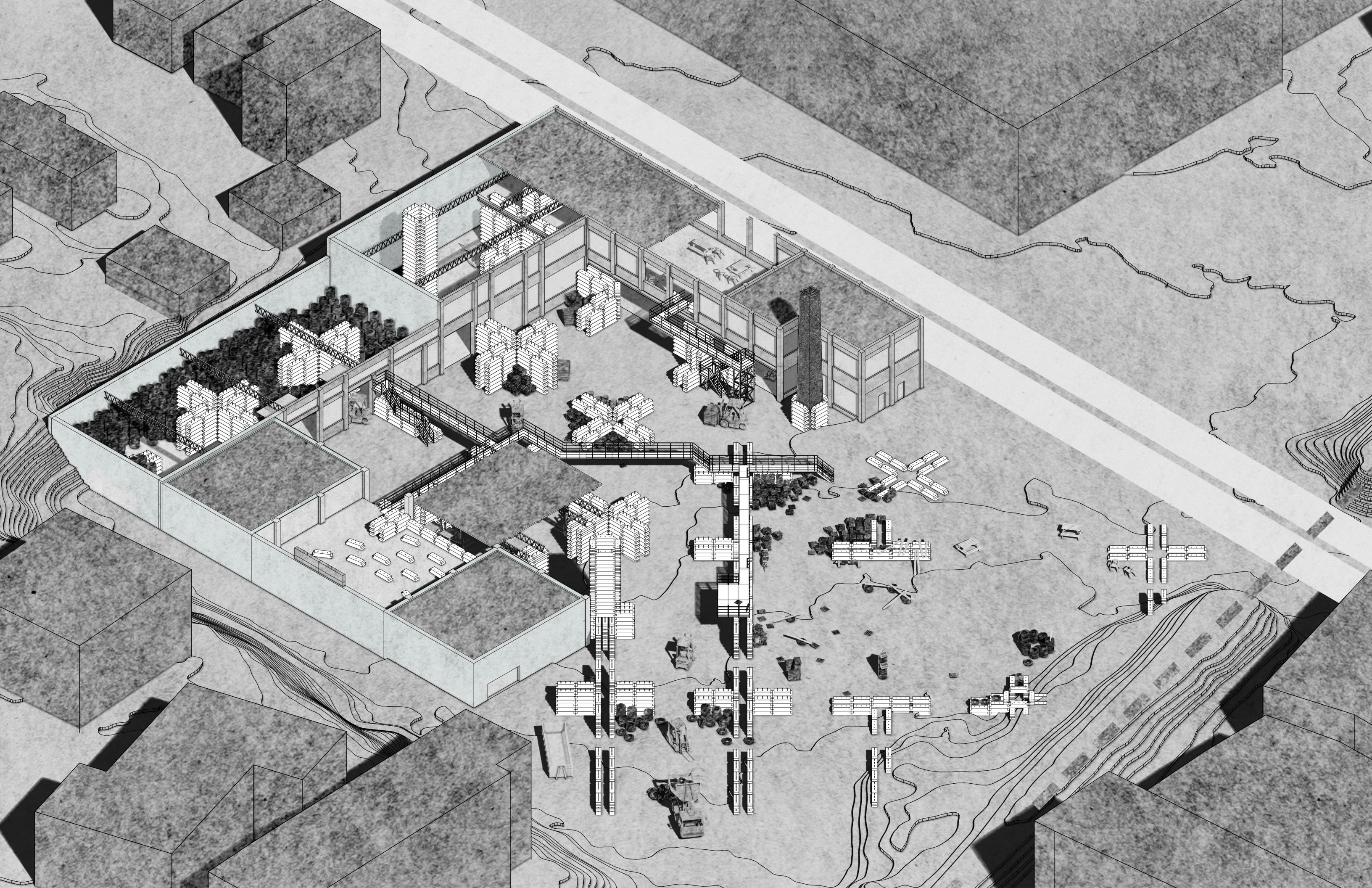
DRAWING

The image to the right is a perspective of the large communal play area. It shows how the concrete blocks help delineate space for sorting and storage, while also becoming play structures themselves.

SECTION

The section below details a cut through the pre-existing building. It showcases how the concrete blocks are dispersed across the open courtyard and throughout the building.

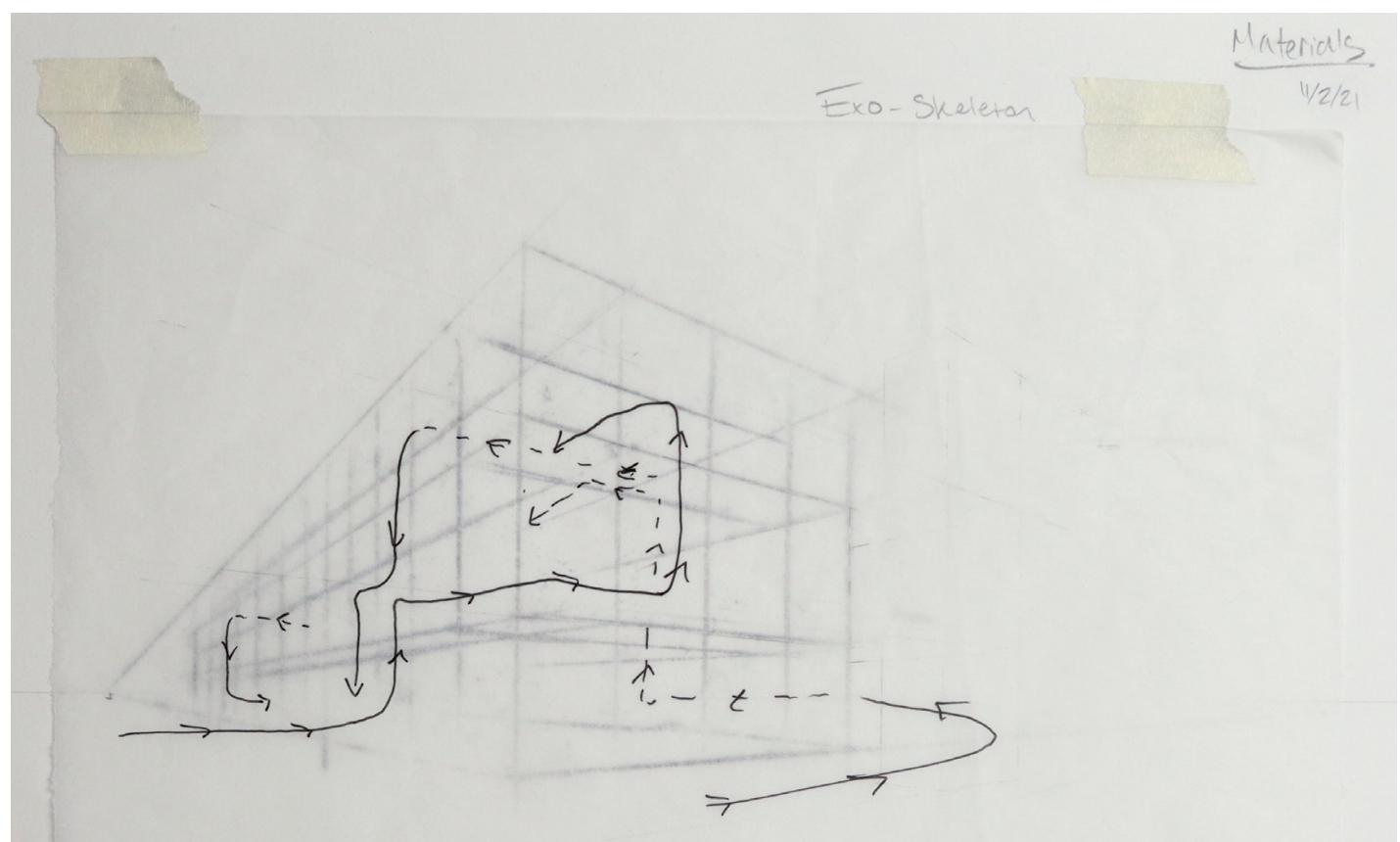




MATERIAL MANAGEMENT

Location: Suburban Neighborhood
Class: ARCH 412: Form - Adam Fure
Skills Used: Rhino 7, Adobe Suite (Illustrator, Photoshop)

The goal of this project was to design a multi-family housing unit situated within a studio neighborhood in suburbia. The studio collectively decided to tie our neighborhood together through the theme of ex-communication. Many of my classmates took this as qualifer for the people they would be designing for, but my interest in sustainability and materials drove me to shape my building around the process of recycling and re-purposing ex-communicated household items. Thus, the central theme of the project became an exterior facade system that facilitated the management of this leftover material.



DRAWING

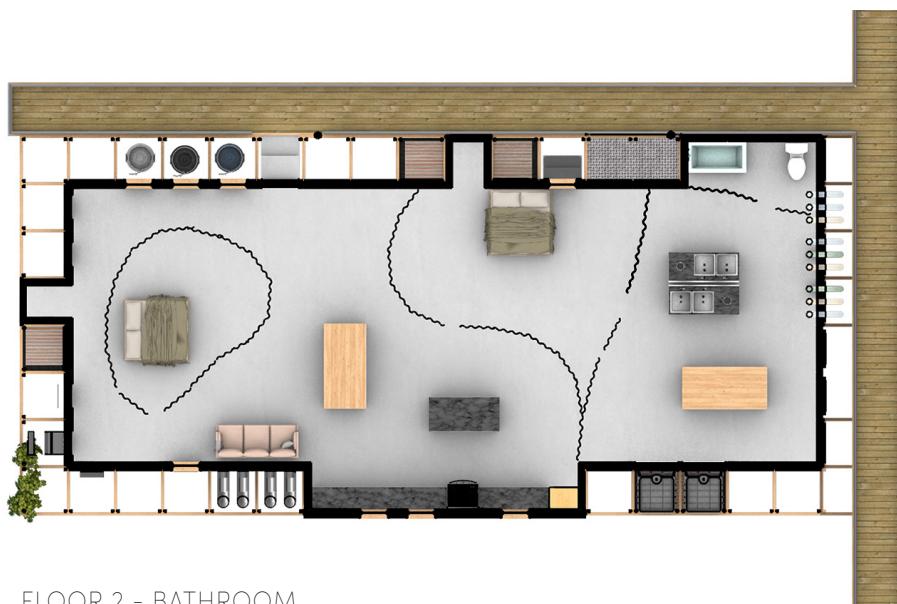
To the left is an early drawing that captures the main theme of the project; that is the storage and management of materials in an external facade for recycle and reuse.

PLANS

Rendered plans show the program for the building. Each floor has a programmatic focus centered around managing waste for the building.



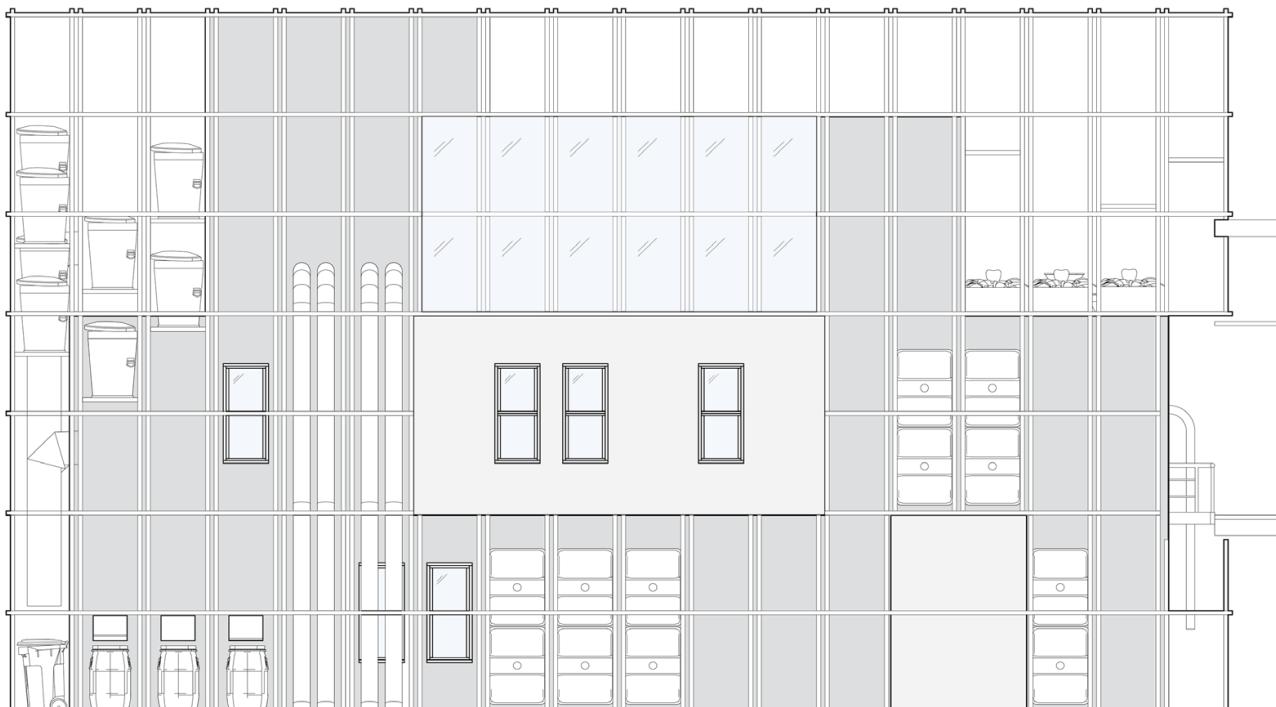
FLOOR 3 - FOOD



FLOOR 2 - BATHROOM

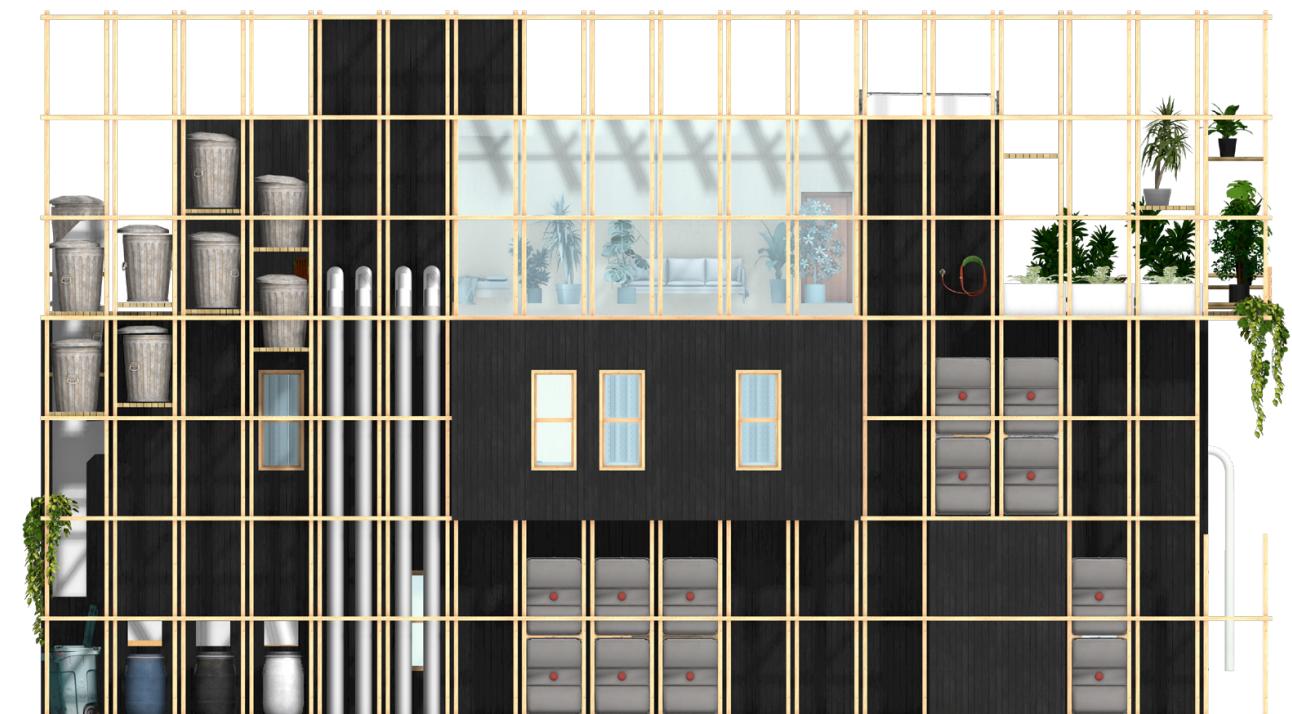


FLOOR 1 - ELECTRONIC



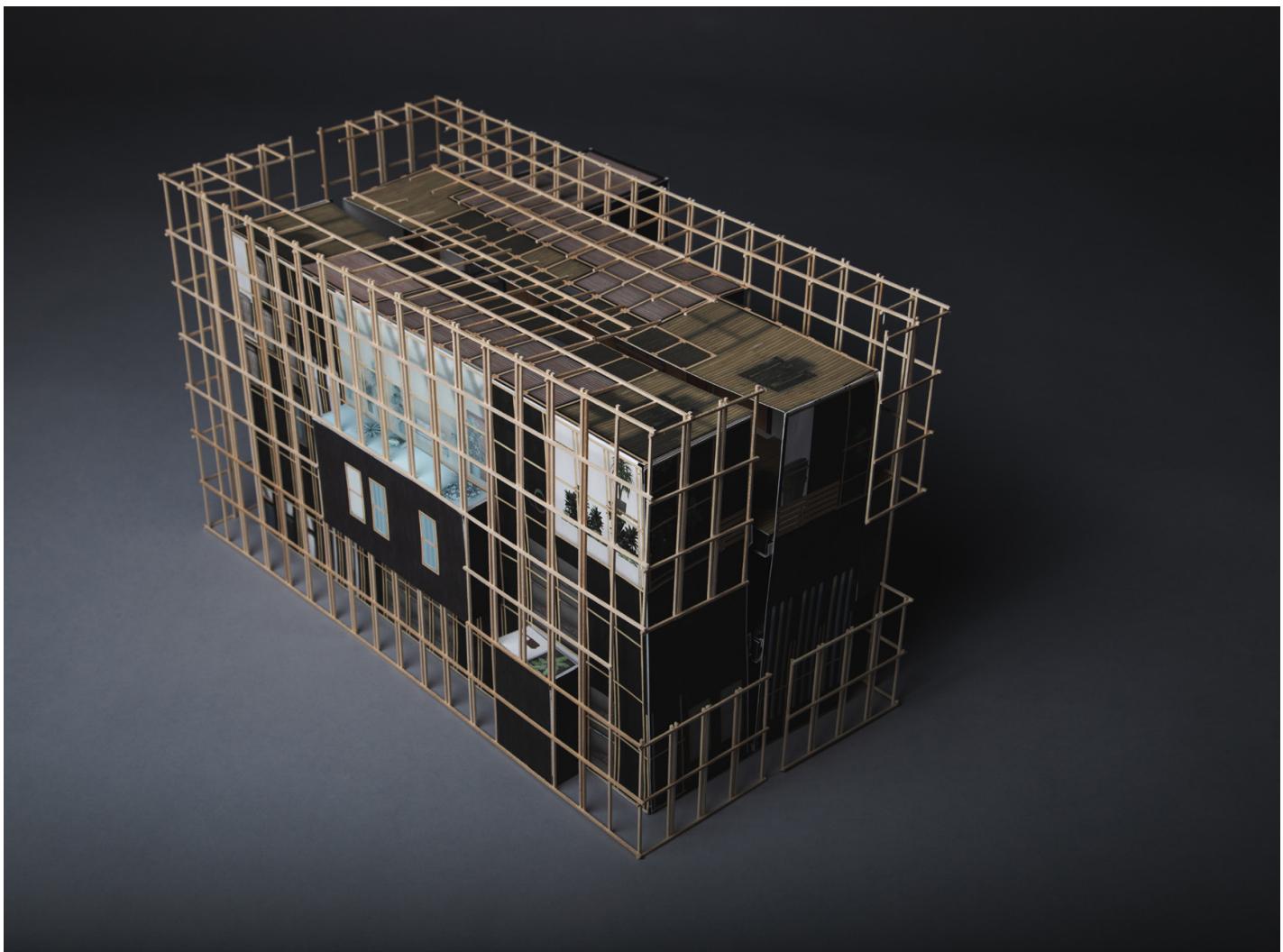
ELEVATION - WEST FACADE

A drawing of the west facing facade is on the left. The gridded wood structure functions as a storage skin for the waste management functions of the program.



ELEVATION - WEST FACADE

The rendering above provides the same content, but in a different mode of representation. This helps to emphasize the objects and the activities that take place in the exterior facade.



MODEL - FULL

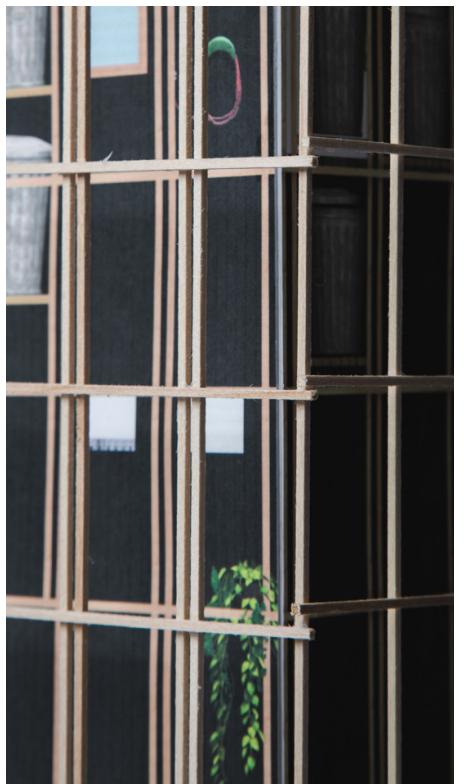
To the left is an image of the entire model. The wooden structure paired with the printed paper showcase the versatility of exterior facade in sorting a multitude of materials.

MODEL - SECTION

Above is a section cut of the final model. This more clearly shows the way the exterior facade starts to shape the interior program.

MODEL - DETAIL

A detail of model is shown to the right.

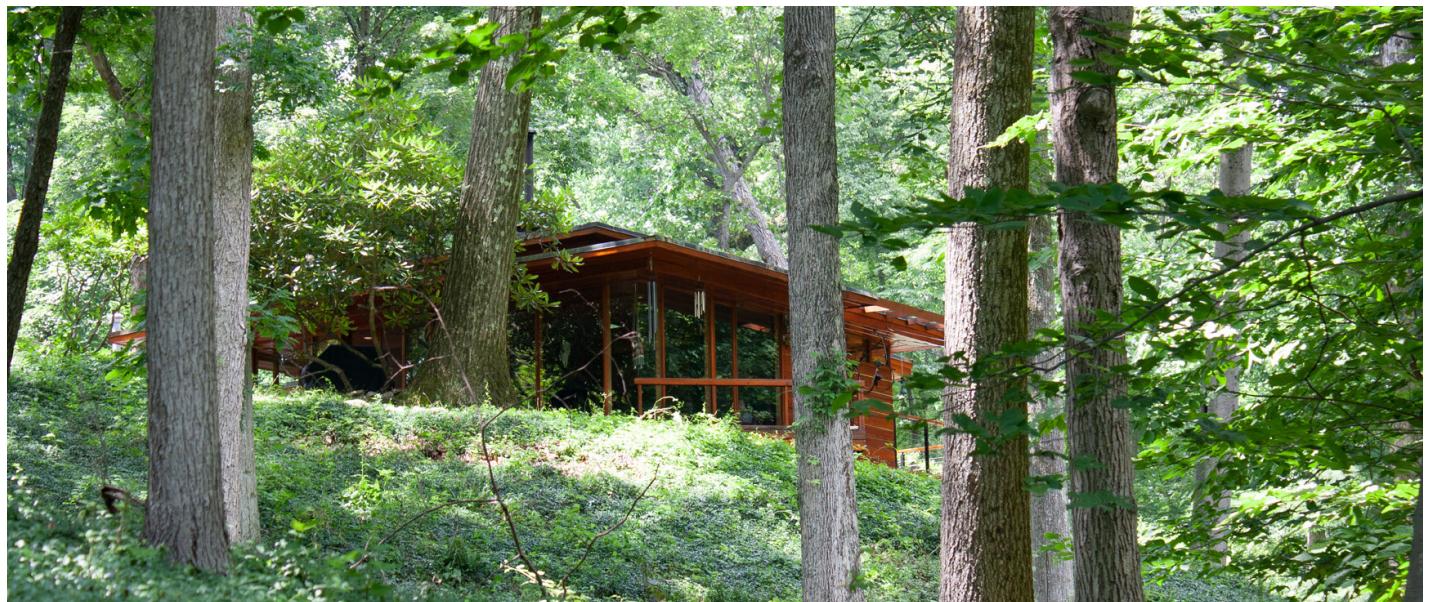


USONIA TOTEM

Location: Usonia Neighborhood - Pleasantville, NY
Class: ARCH 402: Foundation Studio - Eduardo Mediero
Skills Used: Rhino 7, Adobe Suite (Illustrator, Photoshop)

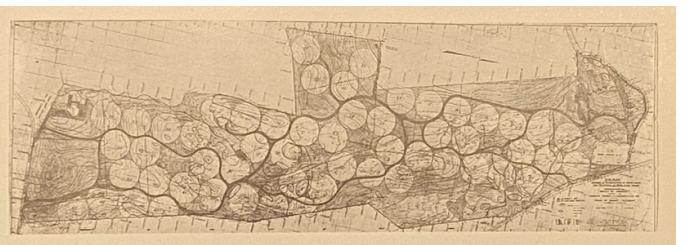
As the first project in Michigan's graduate foundation studio, I was asked to draw my surrounding environment. These drawings became documents to analyze the world. From them I was asked to extrapolate my understanding of the space from the plan and elevation into a line diagram. This became the basis for a speculative model in Rhino.

PHOTO



MAP

Below is a photograph I took of the Usonian house I drew. It's situated in the middle of the forest, with a hearth as the focal point of the living room.
To the right is a drawing of the neighborhood taken from "Usonia New York Building a Community with Frank Lloyd Wright" by Roland Reisley with John Timpane.

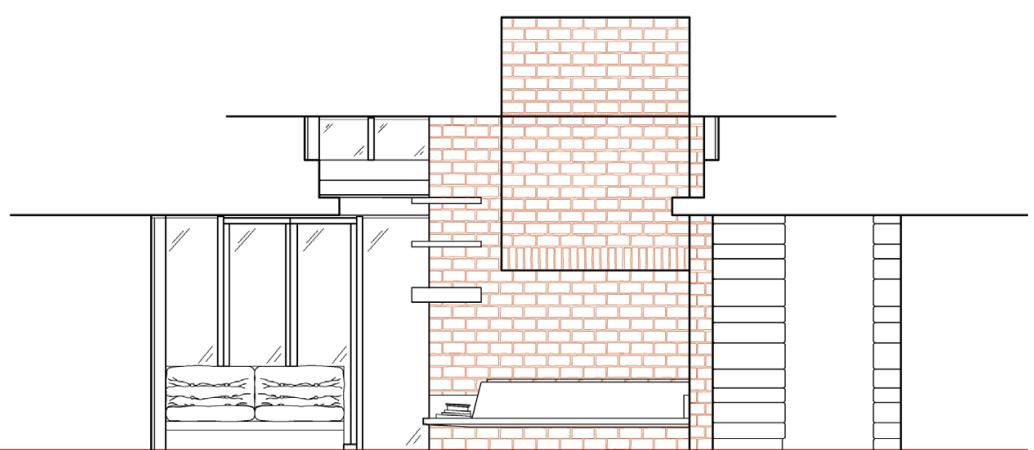
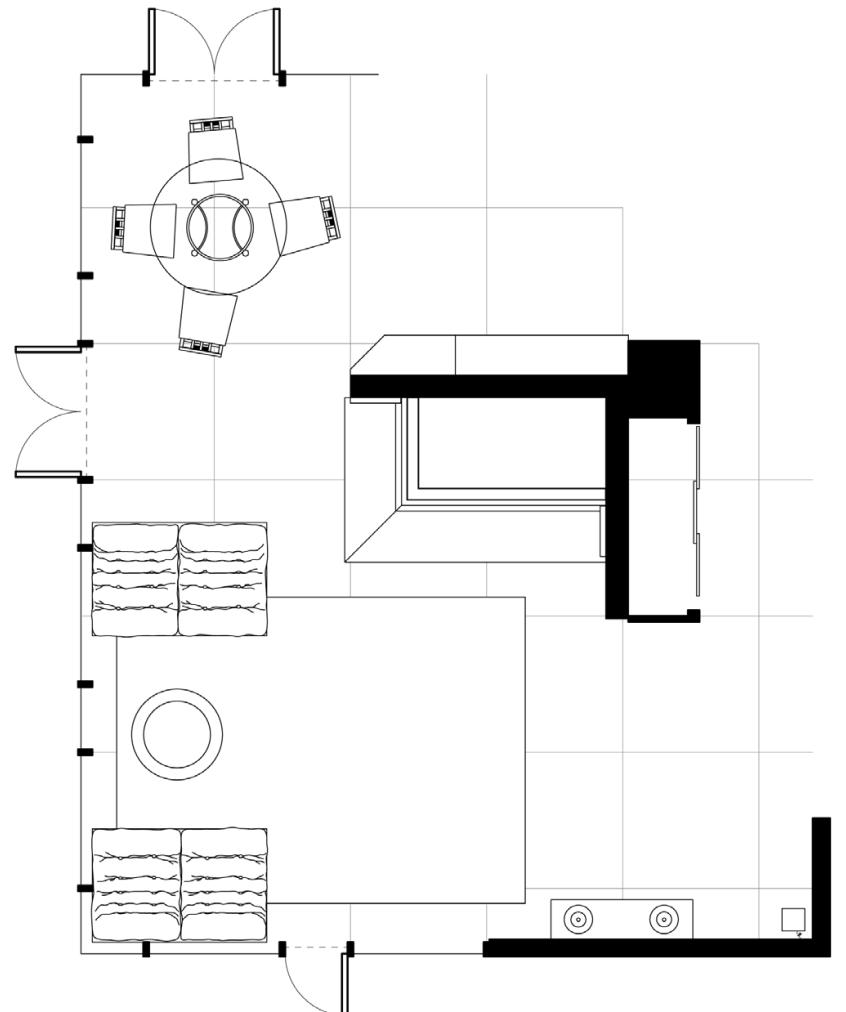


PLAN

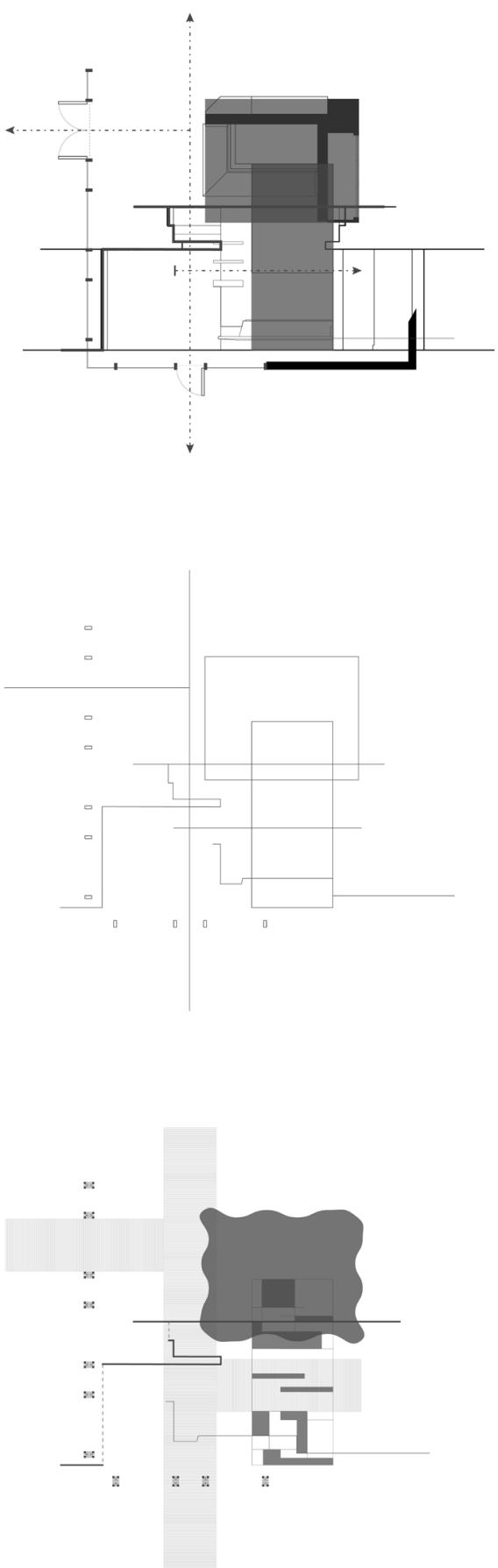
A plan of the living room is shown above. The large L in the middle is a built in brick fireplace. It is the focal point of the space.

SECTION

The section to the right further emphasizes the importance of the brick mass, while showcasing other aspects of the room, like the floor to ceiling glass windows and the clerestory.



The project's main constraint was a set of restrictions on the number of moves I could make in Rhino. I treated it like a game and strategically consolidated my moves (like PlanarSrf and BooleanDifference) by applying them to multiple objects at the same time. This offered me with the most flexibility to create a unique sculptural object.

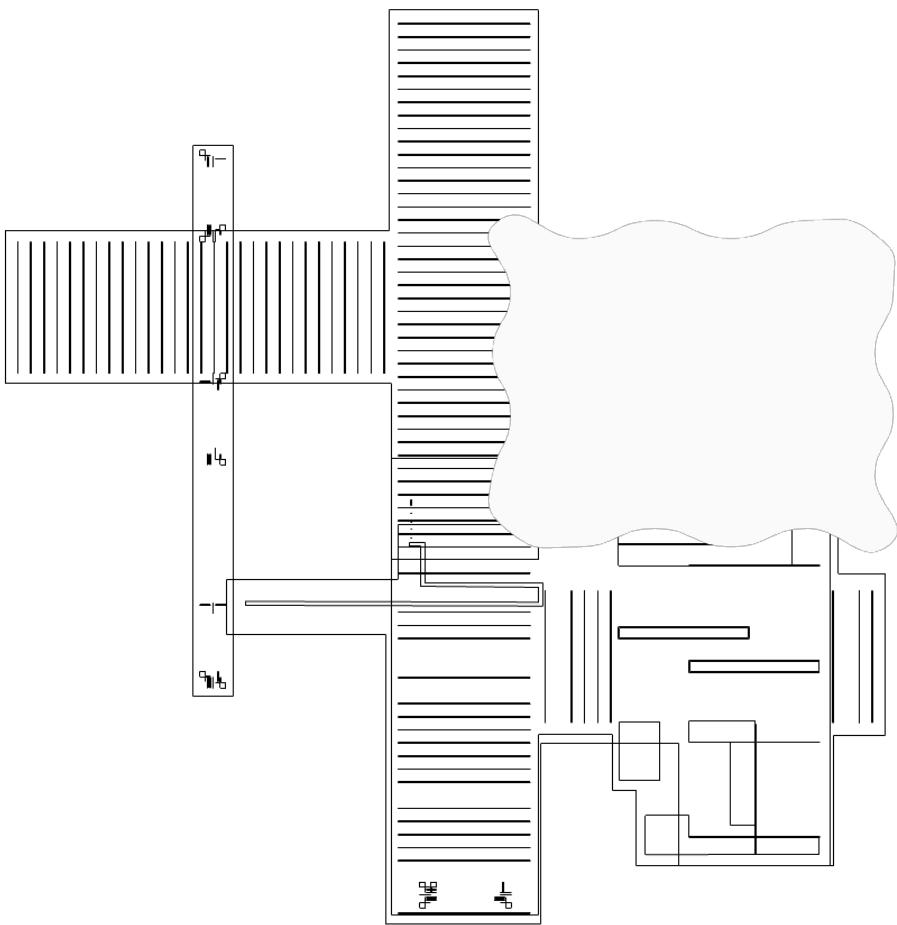


DIAGRAM

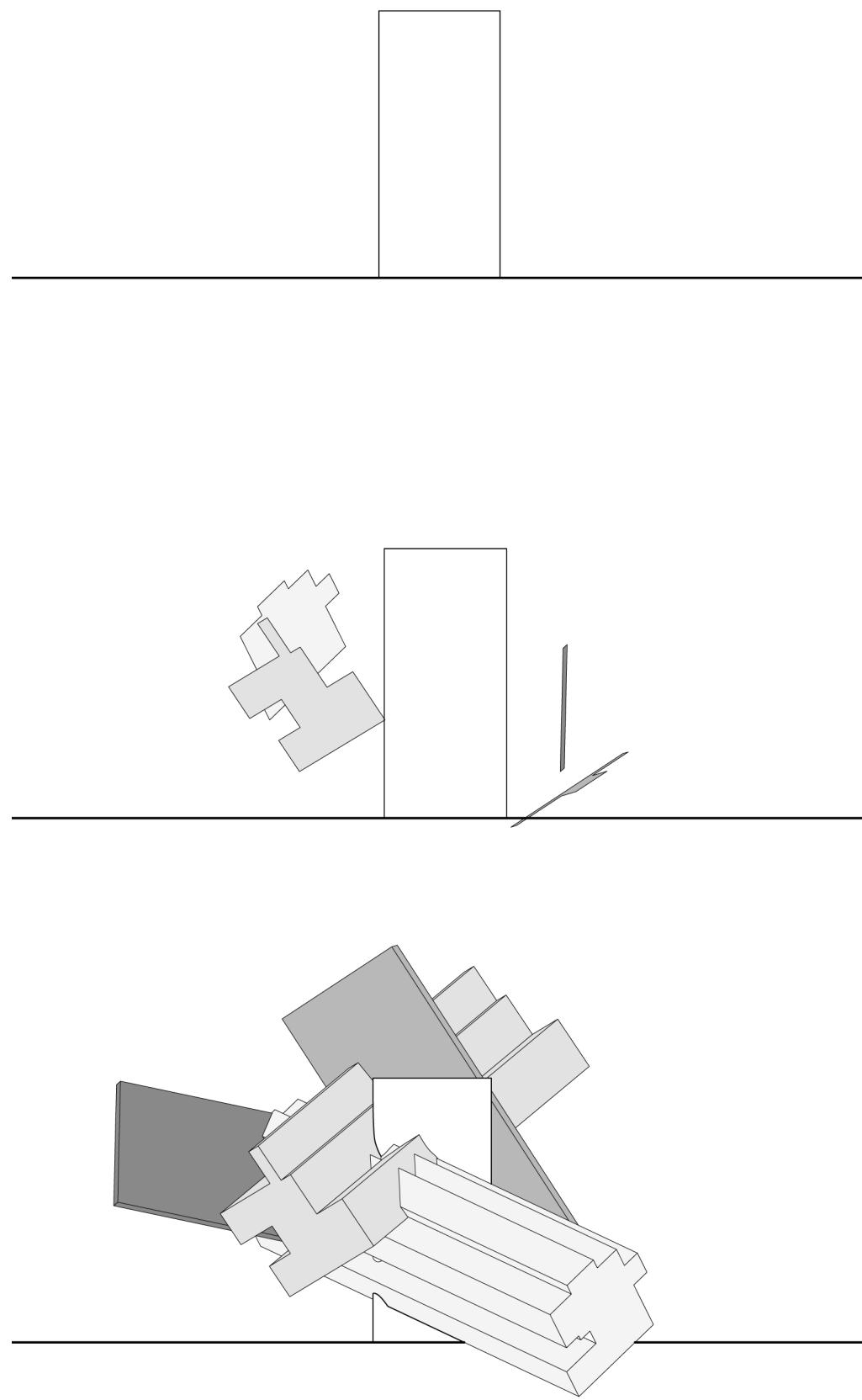
The line diagram to the left details the process of extrapolating information from the plan and elevation to create an exaggerated diagram of the space.

MODEL

I extruded the large blob in the diagram on the left to create a solid mass (shown above). To the right the plan of the site shows the column situated amongst the surfaces that will eventually carve the form.



PLAN - CUTTING SURFACES

**DIAGRAM**

The diagram to the left details the process of rotating and extruding various surfaces that cut into the main column.

MODEL

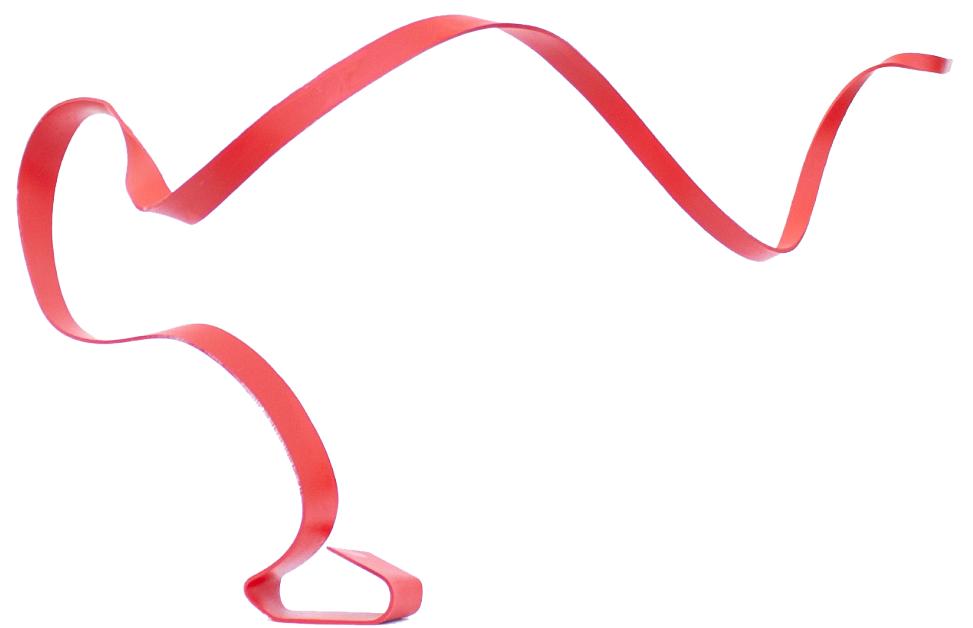
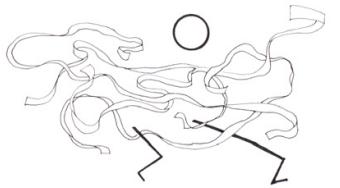
The render to the right details the surfaces and voids created by the subtractive process.



FROZEN TIME

Location: List Gallery, Swarthmore College
Class: Senior Thesis - Swarthmore College
Skills Used: Metalworking, Woodworking, Sewing

While the origins of this work were experimental, developed through ribbons and the bending of aluminum scraps, the curvilinear forms remind me of visual representations in Multi-variable Calculus and Differential Equations. The visual connection between math and these forms became the starting point for my senior thesis show.



SCULPTED PHOTOGRAPHY

The images to the right were experiments at capturing doubly curved forms in space.

SCULPTURE

The bent aluminum sculpture to the right creates a still image of the curvilinear forms. The dimensions are 8" x 12" x 5".





STUDIO INSTALLATION

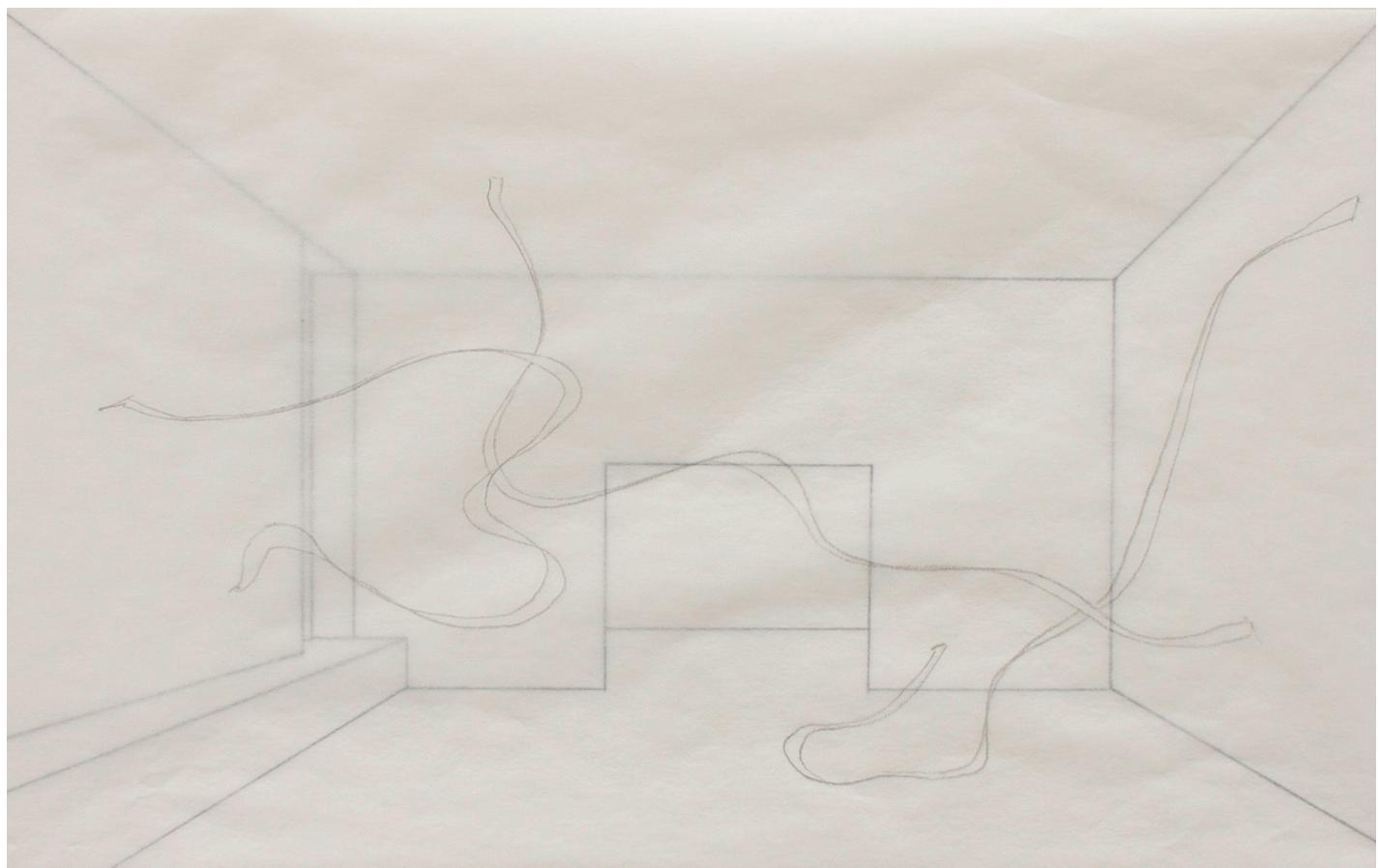
The image to the right shows the process of scaling up these curves to shape space. The reflectiveness of the metal made it the material of choice for the entire installation.

DRAWING

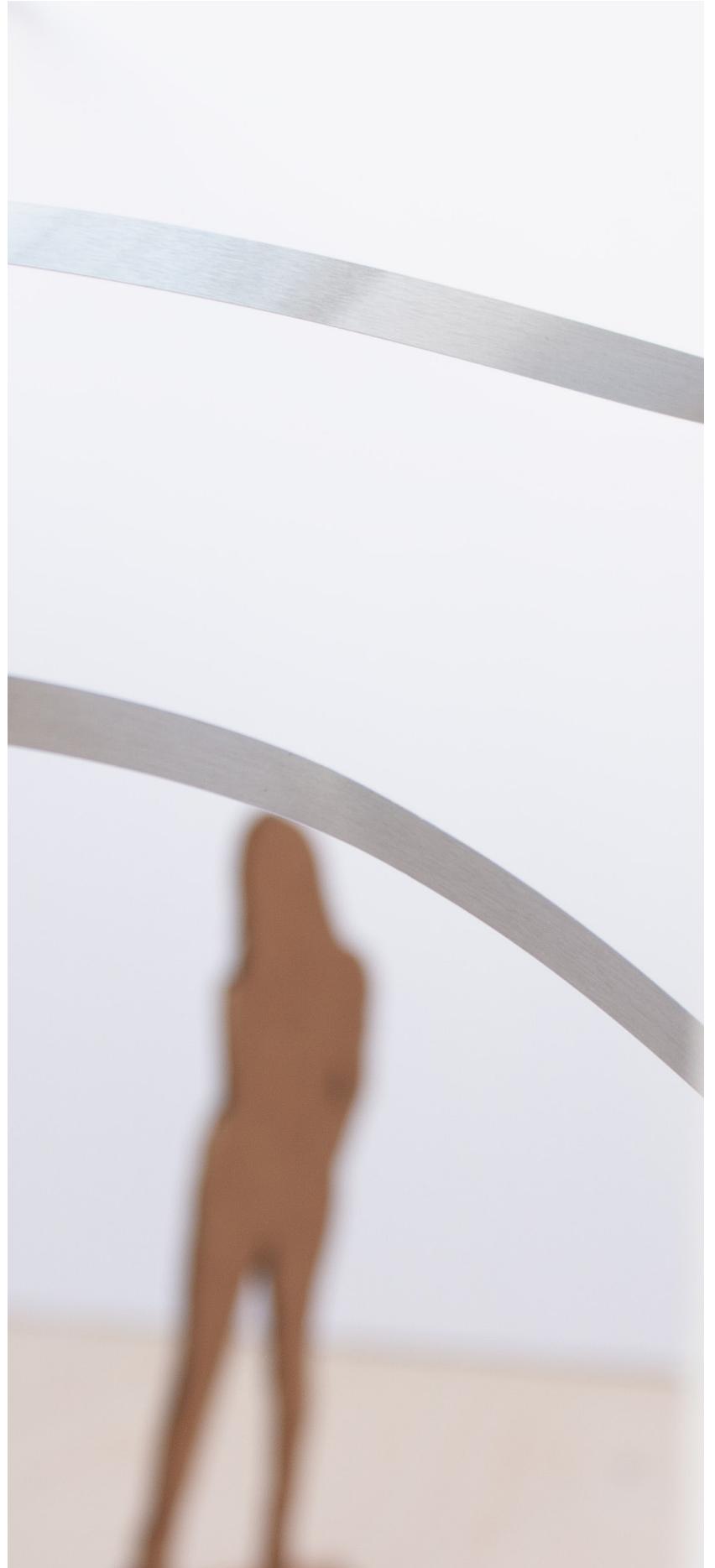
The drawing below shows the transition of these curves into the gallery space.

STUDIO INSTALLATION

The image to the right is a detail of a scaled figure in a model of the installation.



I enlarged the scale of the curvilinear forms to create an immersive installation for a solo show. This was meant to shape the otherwise banal, white gallery in a subtractive manner creating a delineated path through the space. Although Covid-19 disrupted the installation, my experiments and artistic process transformed the way I perceive a body in space/time prior to the beginning of my formal architecture education..





DRAWING (DOORS)

Location: 418 High St. Ann Arbor MI, 48104

Class: ARCH 509: Directed Drawing - Melissa Harris

Skills Used: Hand Drawing, Photography, Adobe Photoshop

This is part of a collection of drawings that I produced in a free hand architecture drawing course. Some of these are one offs while others are drawings on top of my own previous printed drawings. This process can be repeated ad infinitum, creating abstraction on top of abstraction.

