

MUSEUM OF OUTDOOR ARTS
DENVER, COLORADO

DESIGN AND BUILD INTERNSHIP
SUMMER 2022 PORTFOLIO
ELAINE MANSURE
IND 4900

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Design and Build is a program through Denver Colorado's Museum of Outdoor Arts that provides an opportunity for emerging artists and designers to learn and grow as **collaborative creators**. Since 1991, this program has introduced interns to the **public art process**, from proposals and budgeting to fabrication and installation.

This year, the Design and Build interns worked under the direction of Design and Build Fellow Artist **Scottie Burgess** and Resource Artist **Walter Ware**. Eight interns were selected from a variety of backgrounds to design, budget, propose, build, and install a series of installations at Marjorie Park.

Our group of interns was given a detailed project brief. Our main **project goals**, as specified by this brief, included:

- We would be responsible for creating a body of public artworks in Marjorie Park, centered around the theme of **“Curiosities in the Park.”**
- Our works would be cohesive, designed around **5 specific sites** throughout the park, and integrate well within the park itself.
- We would create one work that utilizes the **casting process**.
- Our budget for all projects would be **\$9,000**.

Design and Build

Curiosities in the Park
Opening on July 27, 2022
Request For Proposal
Proposal Date-6/27/22 1:30-4:00



I. Project Summary

The Museum of Outdoor Arts seeks to commission a body of artworks for temporary display at MOA's Marjorie Park. The theme of the installation is **“Curiosities.”** Artworks should be representational of theme and lend a nice aesthetic value to the site. Installation will represent MOA's Design and Build Program. Total project budget is \$9,000 for design, materials, fabrication, and installation. Installation will be on display from July 27 through at least December 16, 2022, assuming all artworks remain in suitable condition for public view.

II. Stakeholders

The project consists of one primary stakeholder; Museum of Outdoor Arts (MOA).

Founded in 1981 by Developer John W. Madden Jr. and daughter Cynthia Madden Leitner, *Museum of Outdoor Arts* is a non-profit private operating foundation based in Greenwood Village, CO whose mission is 'to make art a part of everyday life'. The museum has operated its program Design and Build since 1991 and has collaborated with thousands of students throughout Colorado on site-specific installations. MOA offers a robust outdoor sculpture collection throughout Englewood and Greenwood Village, hosts temporary exhibitions and events, and owns and operates Fiddler's Green Amphitheatre with tenant AEG Presents. More information can be found at www.moaonline.org.

III. Project Requirements

Project Mandates:

- At least one project should utilize the casting process.
- Projects should compliment one another.
- Interactive artworks are encouraged.

Other Criteria:

- Installations must fit within the preselected sites (See attached diagram).
- Installations must integrate into the site and maintain an appealing aesthetic.
- Installations must be maintenance free.
- Installations must be durable and safe for public view / contact. Public safety and durability is of the utmost importance when considering your design.

STAGE 1: RESEARCH

4

In order to gain an understanding of Marjorie Park (the site of our installations), we **spent time in the park**. I focused on:

- the overall experience of being in the park
- the natural movement of people throughout the park
- other installations already present
- structural and technical limitations/opportunities





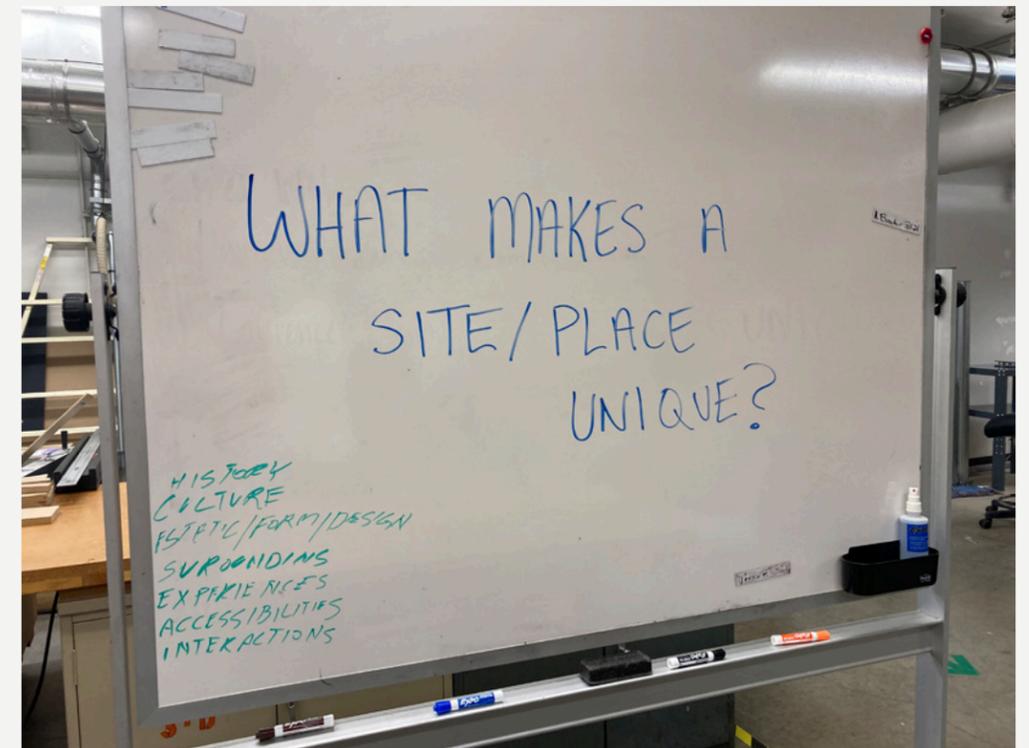
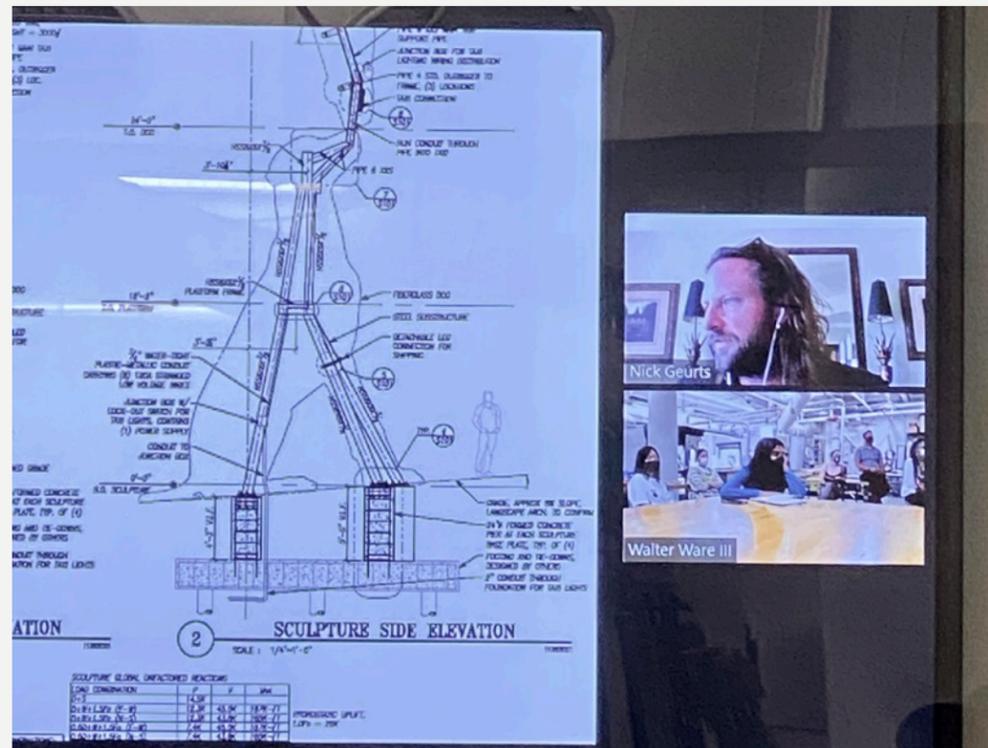
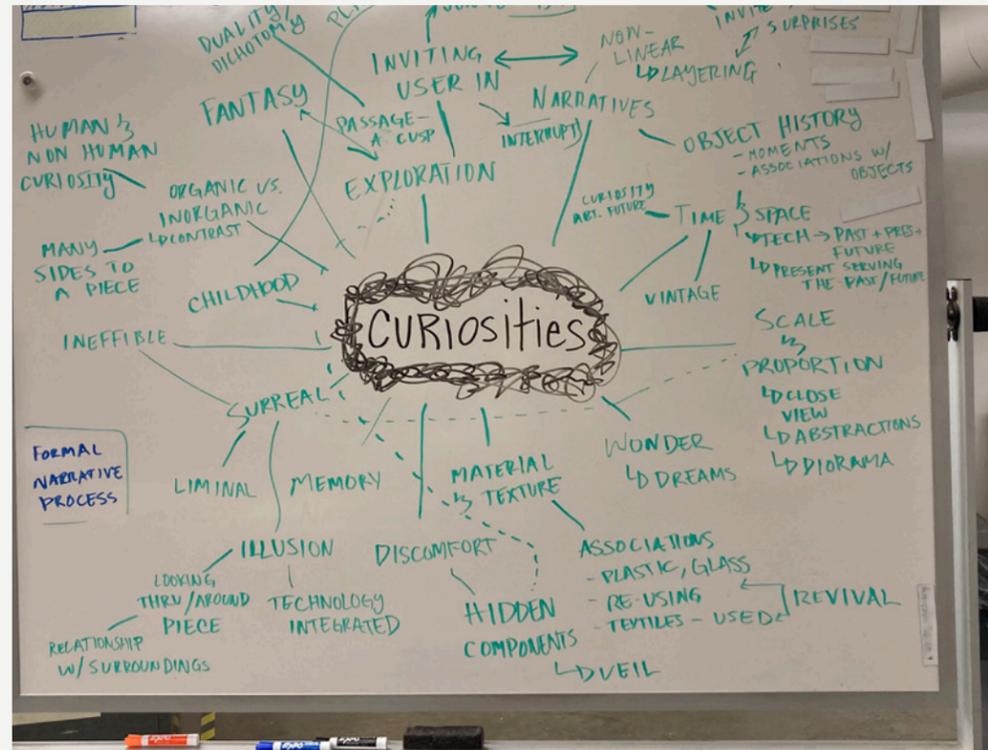
We investigated public art throughout Denver and surrounding areas to gain inspiration.

The work of other artists both helped me better understand our theme of “Curiosities” and also introduced me to the vitality of art and design in Denver.

STAGE 2: IDEATION

Before we began our individual ideation for the site-specific installations, we worked together as a group to fully understand our prompt. Through group discussions and fast-paced brainstorming activities, we **grew a collective understanding of our brief.**

We also met with **structural engineer Nick Geurts** to gain a more comprehensive view of the necessary considerations when designing a public artwork.



EXPLORING POSSIBILITIES

Initially, each intern created **individually-generated ideas** for each of the four sites (the fifth site had a pre-determined theme). I created two to three ideas per site (pictured below), to be discussed alongside the ideas of my peers.

MINI DIORAMA (IDEA #1)

CURIOS:
WHAT IS BEHIND THAT DOOR?

↑
FOCAL POINT, DRAWN IN BY PATTERN & SCALE

OPTICAL ILLUSION - NOT QUITE AS DEEP AS IT APPEARS

CURVED PATCH (IDEA #1)

- CONNECTION TO VESICA
- CURIOSITY - WANT TO WALK THRU AND UNDER
- UNEXPECTED / UNUSUAL OBJECTS

SOMETHING UNEXPECTED UNDER - A MIRROR?

THE CUPOLA (IDEA #1)

CURIOSITY
- WHO LIVES HERE?
- WHY WOULD THEY COLLECT THESE OBJECTS? (VALUE?)
- 360° VIEW OF CURIOSITIES - LIKE A TREASURE HUNT

COLLECTED OBJECTS

THE NEST OF SOME CREATURE, SUSPENDED

MATERIALS
- BRANCHES/TWIGS
- FOUND OBJECTS

BOARDWALK RAILING (IDEA #1)

- THE FIGURES ARE CURIOUS
- EVOKES CURIOSITY - WANT TO PLAY / MOVE FIGURES

WOVEN - IMPRESSIONIST SCENE / VIBE

BRONZE FIGURES - EXPLORING "WORLDS" - CAN MOVE BETWEEN SPACES

MINI DIORAMA (IDEA #2)

CURIOS:
- INTIMATE SPACE
- OFTEN "FORBIDDEN"

↑
WIRE SMALL LIGHTS INSIDE

↑
POSTERS OF NOTABLE BANDS THAT HAVE BEEN TO FIDDLERS GREEN

CURVED PATCH (IDEA #2)

OG / SIMPLEST VESICA

CURIOS:
- SOMETHING IS HAPPENING FROM THE SIDE, WHAT ABOUT UNDER?
- OVERLAPPING CIRCLES, DIFF. HEIGHTS
- NOD TO DENVER AS A UNIQUE PLACE

VIEW FROM BOTTOM (DICHOTOMY)

THE CUPOLA (IDEA #2)

CURIOSITY
- AN INTIMATE MOMENT IN A PUBLIC PLACE
- WANT TO LOOK INSIDE
- CONNECTION TO EMOTION

↑
FROSTED ACRYLIC / PLASTIC, FABRIC, SILHOUETTES SLIGHTLY VISIBLE

BOARDWALK RAILING (IDEA #2)

WOVEN SHEETS OF TURT / FABRIC - CITY & MTNS.

LITTLE BOTTLES (NEED TO THINK ABOUT PATCHING)

CURIOS:
- IDENTITIES
- WHOSE CLOTHES?
- INVITES CURIOSITY (LARGELY DUE TO SCALE)

MINI DIORAMA (IDEA #3)

CURIOS:
- FAMILIAR + UNFAMILIAR
- WHAT IS HIDING?
- SETS TONE - UNEXPECTED

COMBINATION OF 2D (LANDSCAPE) & 3D (CREATURES)

CURVED PATCH (IDEA #3)

CONNECTION TO IDEA #3 OF CUPOLA

CURIOS:
WHAT IS UNDER THE GROUND? (ONLY SEEING PART OF THE PICTURE)

THE CUPOLA (IDEA #3)

CURIOS: WHAT TYPE OF CREATURE?
- UNEXPECTED (UNDER WATER)
- CAN'T SEE WHOLE BODY

↑
WIRE + TEXTILES?



As a group, we spent a day **discussing** our individual ideas. For many of the ideas, we **combined aspects of multiple ideas** to create a stronger proposal. Some ideas were nixed completely, while others were only slightly adapted from their original form.

The Curved Patch: Two Panel Vesica

Concept and Design

How can we explore the mutual balance that is required in an industrial and natural environment for a city like Denver? At the base of the Rocky Mountains, the city's rich cultural scene and diverse ways of life parallel the grandeur of natural beauty constantly surrounding us on the horizon. Drawing a conversation between the city's natural and artificial engaging aspects, the *Two Panel Vesica* highlights this necessary balance we must continuously investigate within our collective relationship to our geographic landscape. The piece invites curiosity; like a Venn diagram, the viewer is encouraged to engage visually with the synthesis of the organic and industrial as one walks around the curved path. The three-dimensional quality of the piece creates a varied experience as one revolves around it. Using semi-transparent screens to mount skyline structures and topographical landscapes, the viewer asserts their autonomy to change the equilibrium between our environmental and urbanized impacts as one contemplates our experiences and environment through the park. People of all ages and backgrounds will be reminded of the architectural and natural attractions the city has to offer and how we can further explore our relationships with the two.

Technicalities and Construction

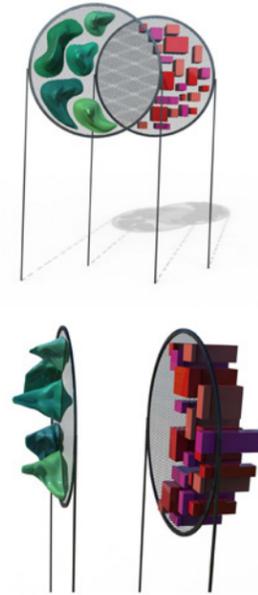
We will construct the majority of the project in the studio; only the final installation will be done at the site. The panels will be composed of perforated metal and framed with either bent tube steel or sheet metal, whichever is more economical and viable for the project. The "mountains" will either be created out of formed sheet metal or shaped and burned wood (dependent on the ultimate cost and availability of materials). These "mountains" will be attached through welding (if they are metal) or joinery methods such as dowels, dominos, or biscuits in a "sandwiched" fashion through the perforated metal. The "buildings" will be constructed out of bent sheet metal and welded to the perforated metal panel. If metal, the parts will be powder-coated; if wood, they will be burned and painted. Each panel will be elevated with tube steel (welded to the individual panels). The tubes will be mounted with a ground anchor, such as poured concrete. This will be further discussed with structural engineer Nick Geurts.

Budget

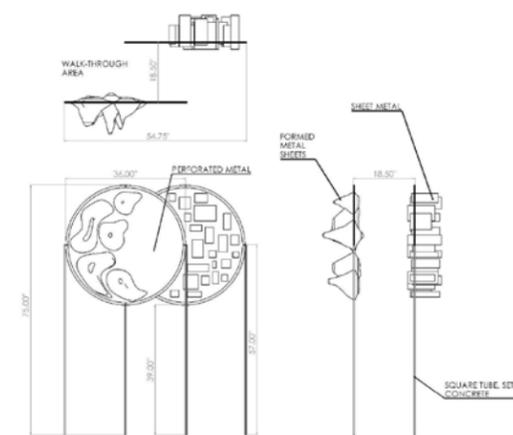
Panels: Perforated Mild Sheet Steel (1/4" staggered hole): \$58.50/ft² (40"x40": \$280)
Base: 1" square mild steel stock: 99¢/pound (scrap), \$10/ft (new); 95" \$34x4
Frame: bent square tube or cut 14g cold rolled sheet steel: \$58.50/ft² (120": \$55; 20"x20": \$80)
Buildings: Sheet Metal Bendable: \$58.50/ft²
Concrete Base: 6 bags 50\$ (if 80lbs per bag, 5\$)
Mountains: Sheet Metal, wood? (grinding solid wood) (

Total:

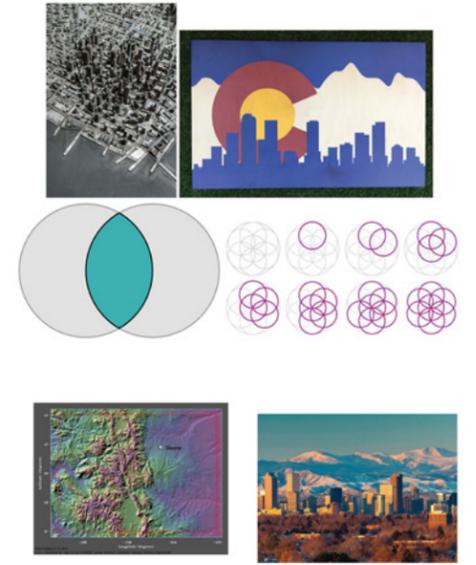
Images and Dimensions



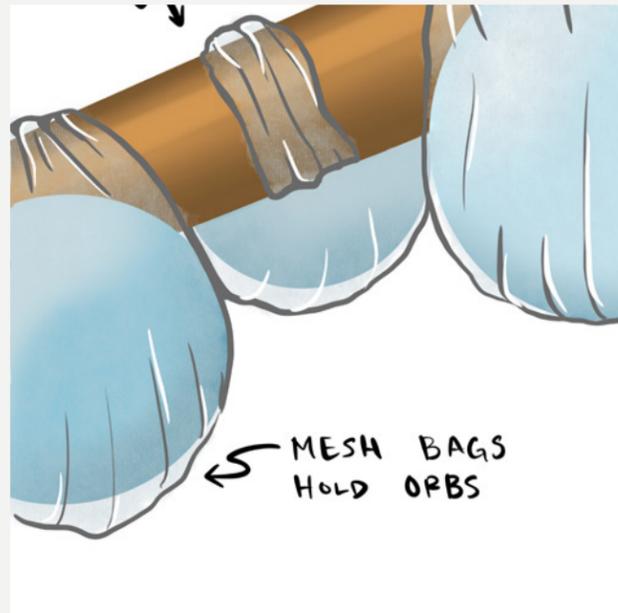
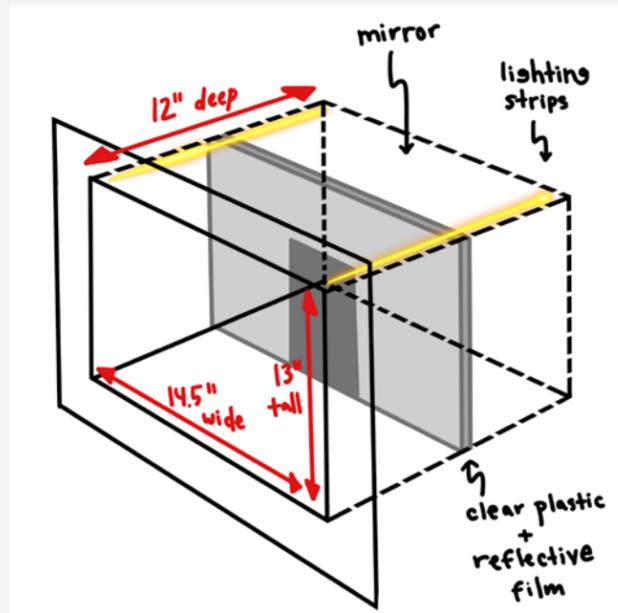
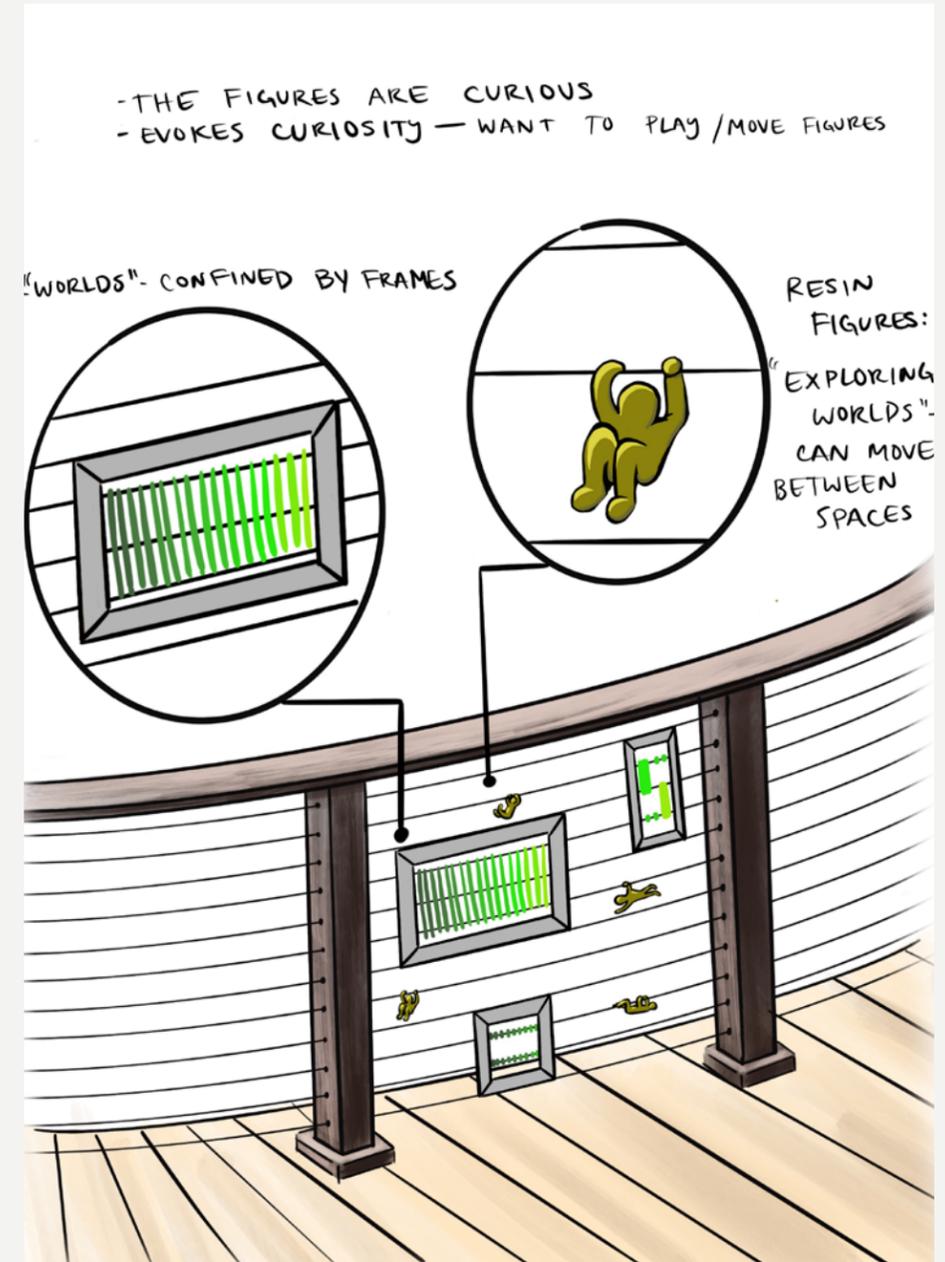
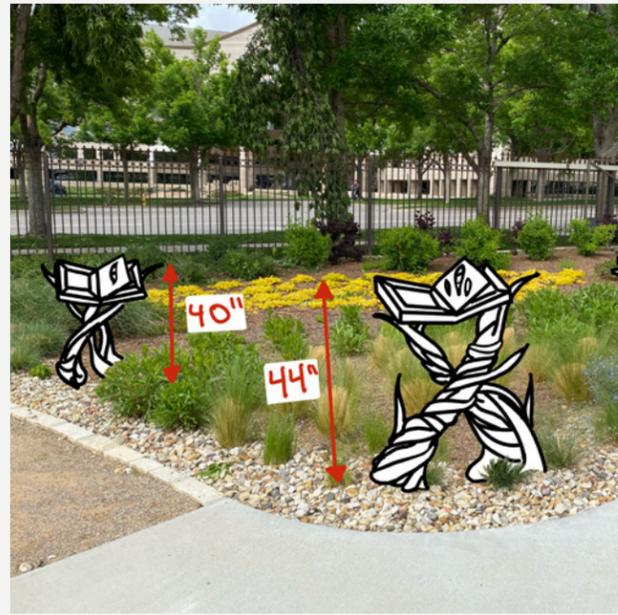
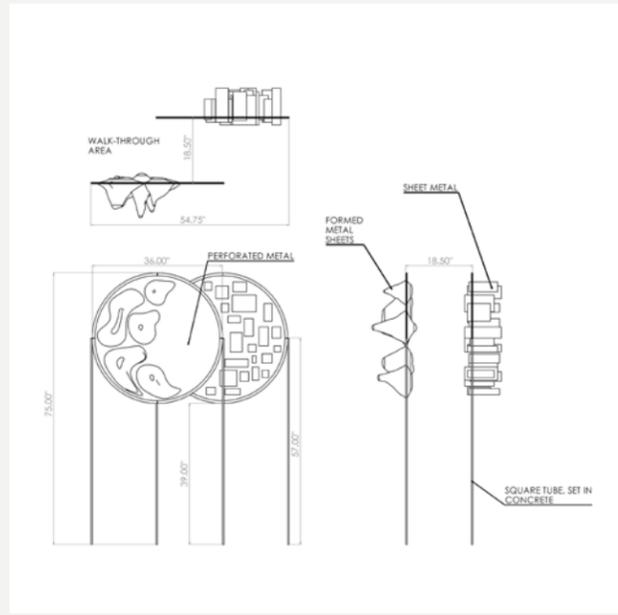
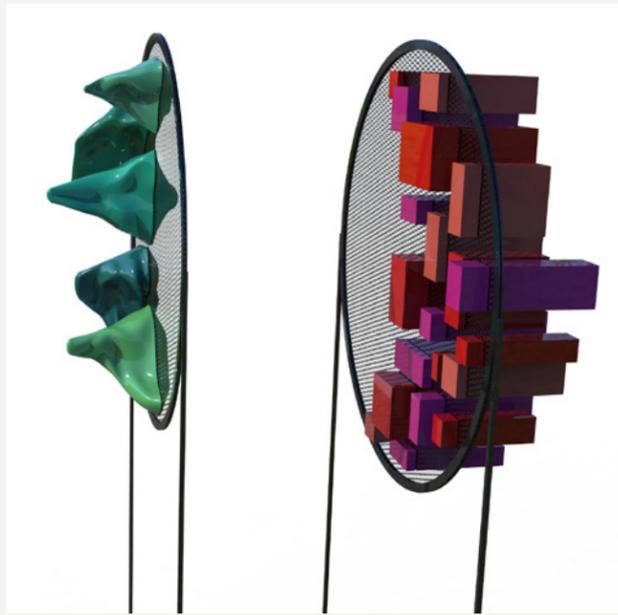
Technical Drawing



Inspiration



After refining our initial ideas, we decided upon **sixteen directions** with which to move forward (three to four per site). In small groups, we spent the week **creating and writing an RFP** (Request for Proposal) for each direction. Above is an example of an RFP that I worked on with my peers. Each document included the concept overview, technical details, budget, renderings, technical drawings, and general inspiration for the idea. We presented each proposal to Cynthia Madden (Founder and Executive Director of the Museum of Outdoor Arts) and Tim Vacca (Director of Programs and Communications). Based on these presentations, **they chose the final directions that we would pursue.**



Above are a few of the **visual components** that I created to be included alongside the written portions of our RFP's. A variety of CADD models + renderings, simple technical drawings, detail drawings, and general overview images were included to elucidate our thought processes.

STAGE 4: PROTOTYPING

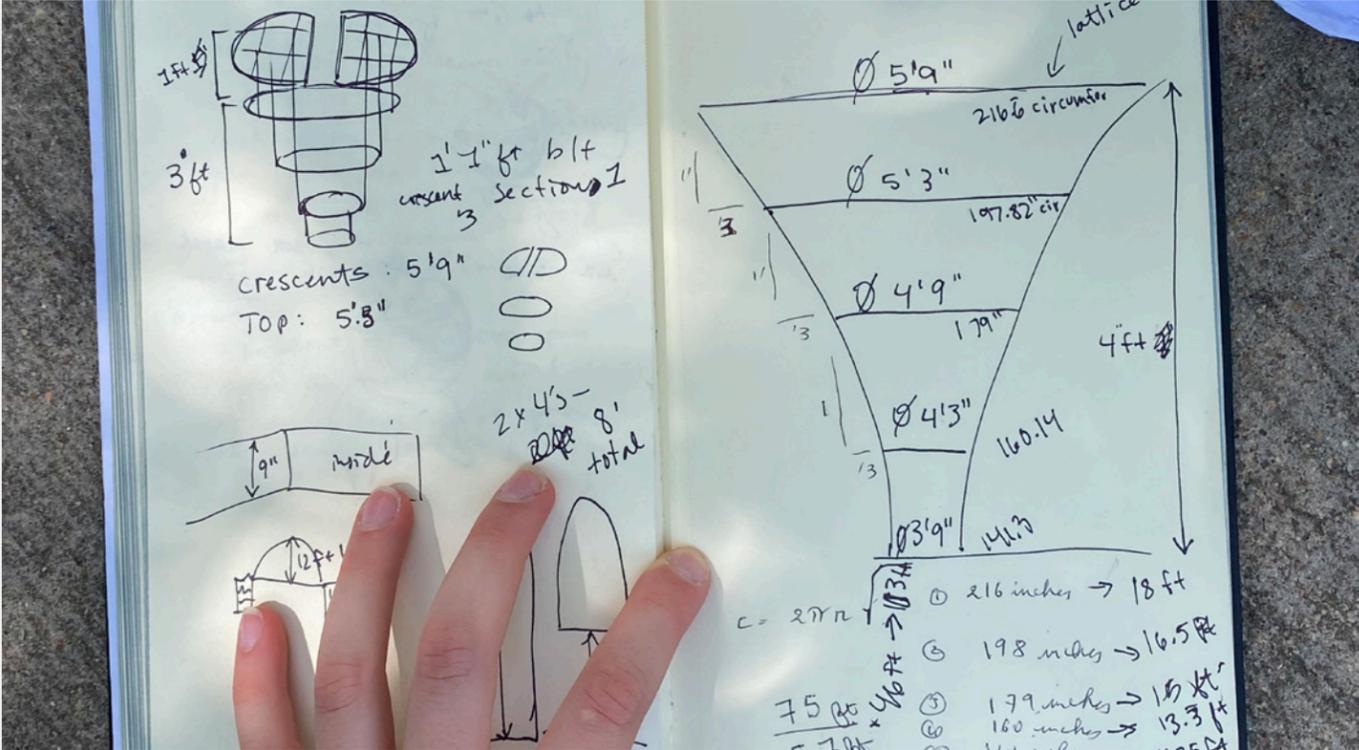


Alongside our RFP's, we created **material tests and full scale detail studies** for several of our concepts, and presented these alongside our written proposals. These prototypes ranged from color and material examples (far left) to resin printed 3D models that would be included as a part of the installation.

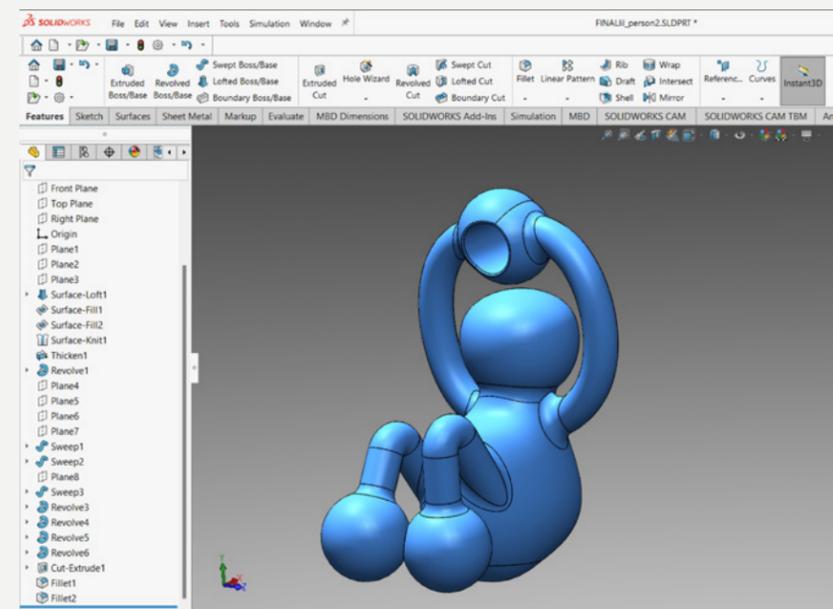
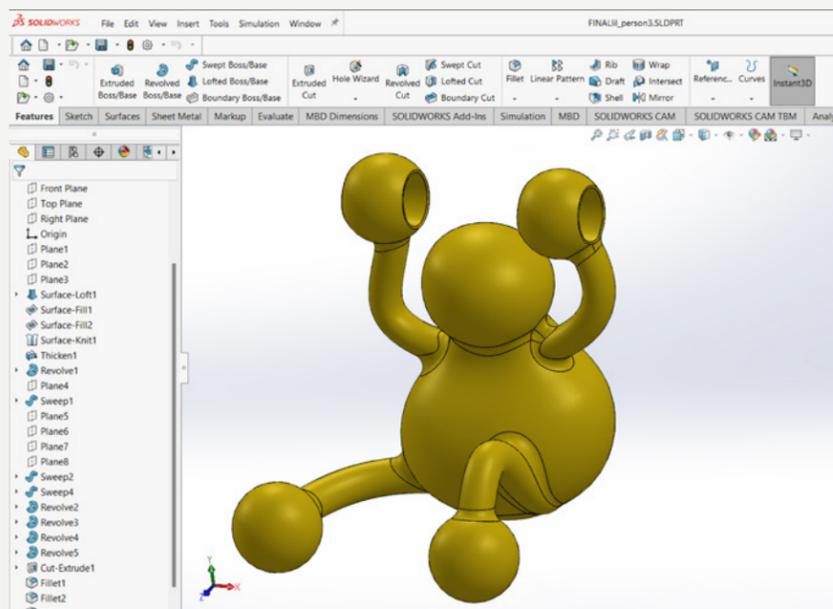
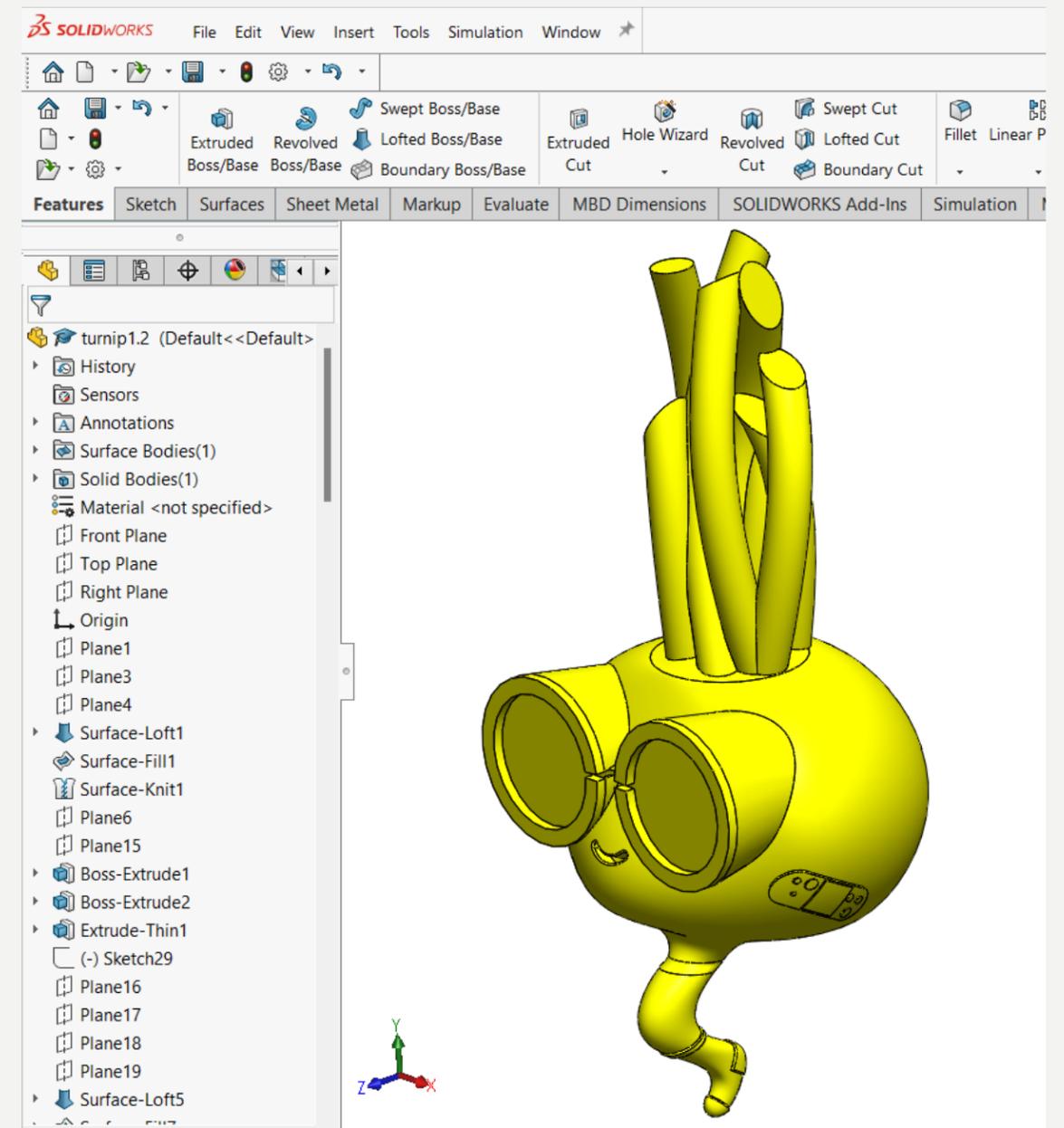
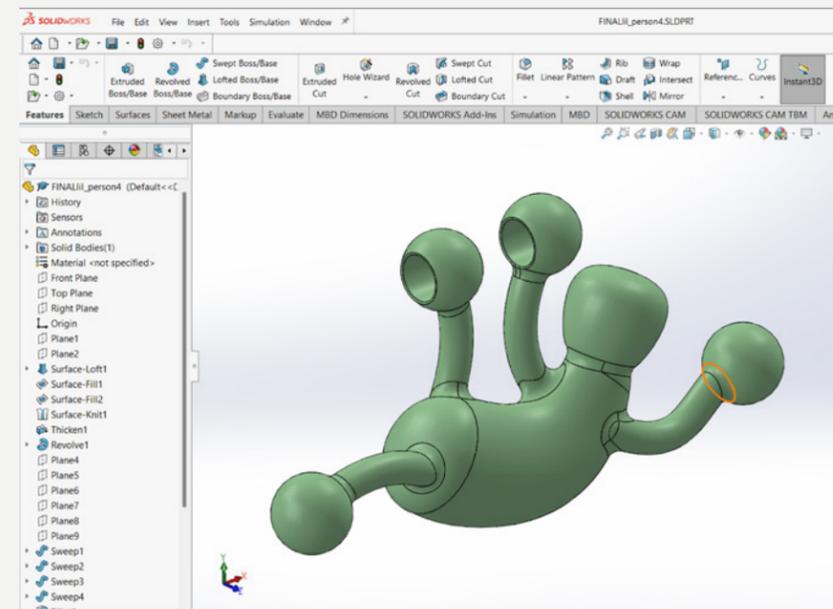
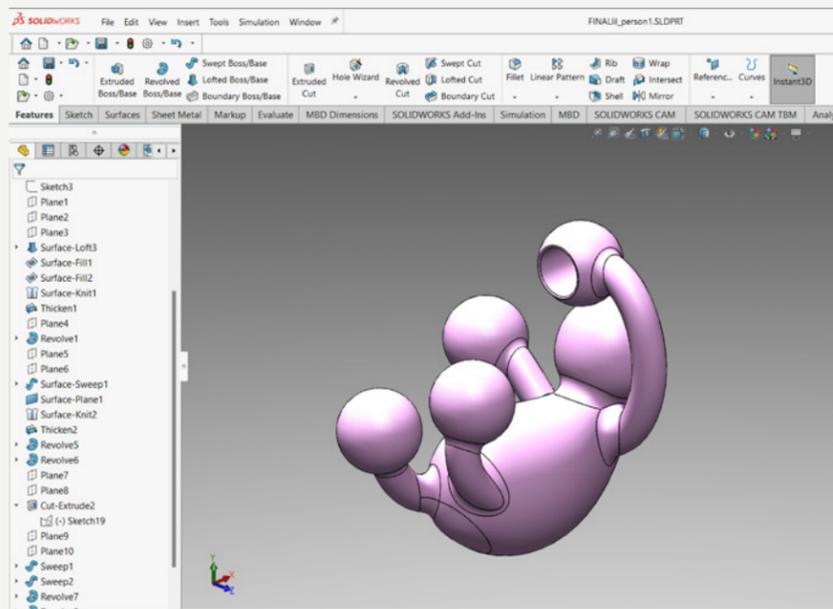
Our first step in fabrication was **finding materials** that fit the budget, design intent, and logistical function of our design direction.



We worked together to calculate the amount of a variety of materials that we would need, and problem-solved through supply chain issues along the way.

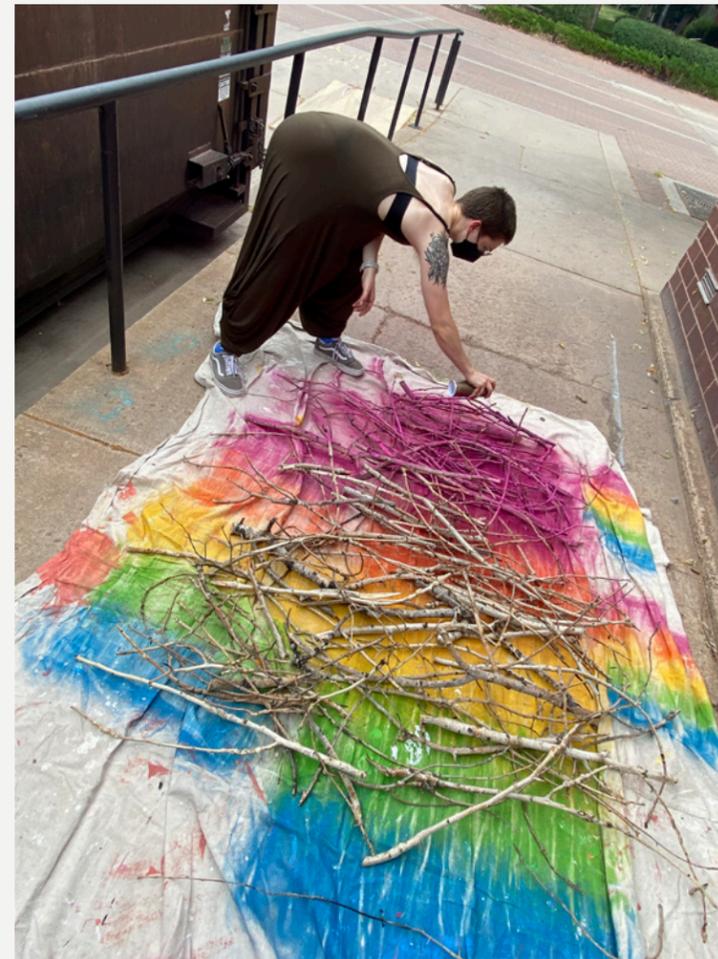


MATERIAL PROCUREMENT



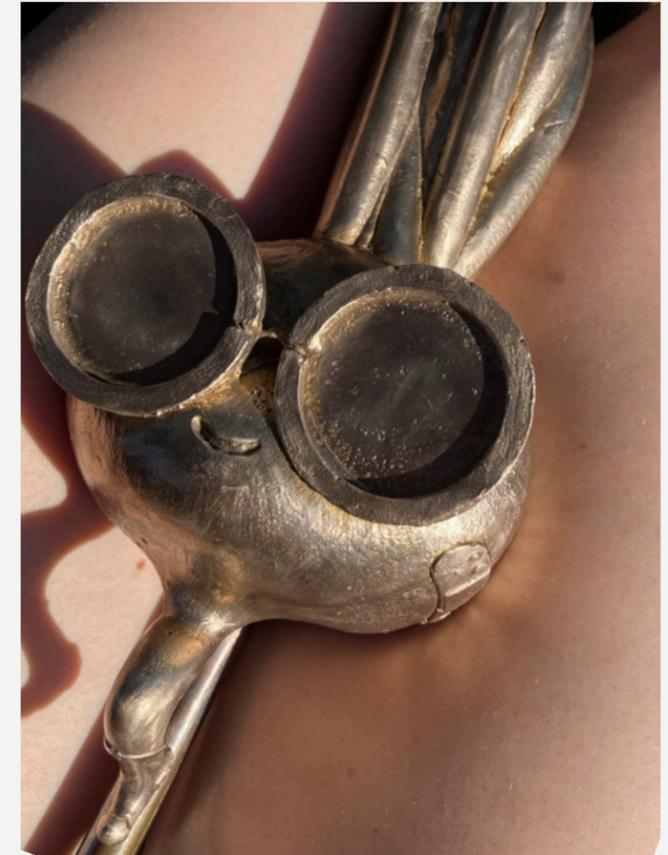
I created CADD models for components of two sites. The first site featured **small figurines** that held onto a railing cable. I modeled four unique “little friends” that would be later 3D printed in resin. The second site featured cast bronze **embodiments of identity**, so I modeled the form on the right to be 3D printed and cast in bronze.

I appreciate that this internship allowed me to participate in a **variety of types of fabrication**. Processes with which I was familiar before (e.g. 3D printing and creating forms out of wood, pictured below on the left) were coupled with processes that I was less accustomed to (e.g. large-scale painting and the metal casting process, pictured below on the right). It was valuable to have interns with a variety of backgrounds present for this project.





Two processes that I grew more familiar with throughout the course of this internship include **3D printing** in resin and **bronze casting**. I printed 68 figures, cleaned up their form with a sanding tool, and painted them for one of the installations (pictured on the left). For our individual “identity pieces,” I learned the process of casting, creating a wax mold, creating a plaster mold, and pouring bronze (pictured below).





As a group, we spent three days installing the work that we had been creating together. It was valuable to be able to learn the planning and processes needed to create a successful installation with minimal work done on-site.

CONCLUSION



Throughout the course of eight weeks, our group learned about the museum exhibition process through direct experience. We successfully ideated, budgeted for, proposed, and fabricated installations around the theme of **“Curiosities in the Park.”** Pictured above are the final pieces that we installed in Marjorie Park.

A CLOSER LOOK



Unseen Creature approaches the concept of the “unknown” through featuring a highly colored, mysterious nest.



The Long Hallway exists within a miniature diorama, and asks the question: what is behind that door?



The Framed Worlds features small figures “traveling” between different “worlds” enclosed by frames.

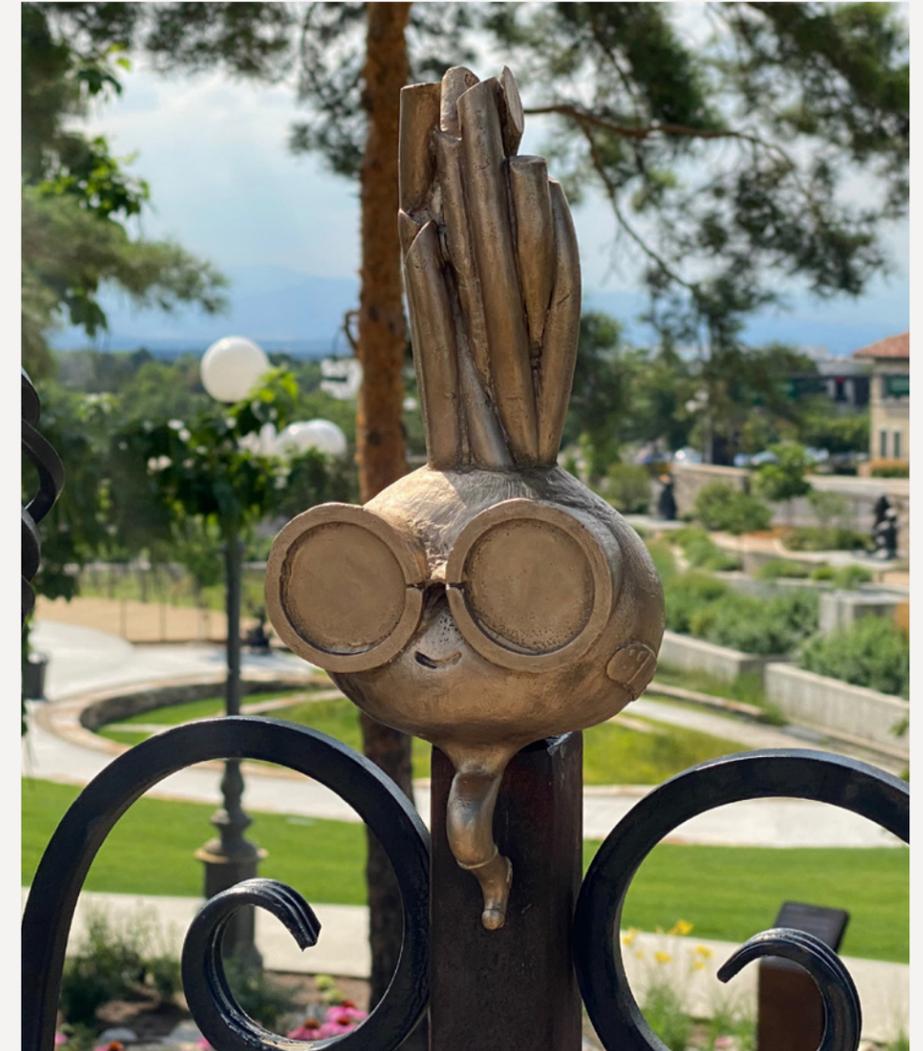
A CLOSER LOOK



The Stone Garden creates the illusion of fantastical rocks balancing atop one another, akin to cairns.



Wander Off exists below the boardwalk, and depicts a rabbit in motion.



We Are features personal expressions of identity in the form of bronze statues. Each intern created their own.