



# Vice Box

Spring 2022  
Furniture II  
Professor Richard Prisco

# Design Brief

The Vice Box relies on quality materials combined thoughtfully with reference and research into Streamline Art Deco and English Club furniture periods to achieve the goals of being a functional vice holding cabinet with distinct historic influence. Art Deco shapes and forms combined with the fine leather and abundant wood of the English Club style show these influences. Monumental figures with strong horizontal lines coupled with classic materials all were observed and carried into the ideation for the Vice Box. This cabinet features a top at standard bar height, a bottle stage, glass storage, card and dice storage, and cedar tobacco drawers.

The Vice Box fills the opportunity to be a simple cabinet with a specific purpose and specific historic design references. Measurements, shapes, and materials have the Vice Box fit to be declared similar to furniture from both Art Deco and English Club eras while serving to hold the intended contents. The Vice Box has been designed to best place residentially with owners of a very specific lifestyle. It is intended to accommodate and facilitate high end smoking, drinking, and gaming.

While skinned with leather and curved with Kerfkore, the majority of this unit is crafted out of Alder generously donated to Appalachian State University by Northwest Hardwoods. This alder was glued into panels for the CNC, cut to fit mortises on the mill, and grooved with a cove cut bit to act as handles before finally being treated in two separate ways. CNC cutting of much of the joinery and rounded shapes allowed for more precise construction that could be easily repeated in manufacturing. The alder used on the upper case was all finished with much sanding and a wipe on mixture of polyurethane and thinner. The base of the unit was treated with a three part equal mixture of shellac, graphite, and thinner before being buffed and sealed with the same mixture as the top cabinet.



# Visual Language

## English Club

Olde English

Red, Gold, white, leather,  
green felt, etched glass

Inlays, moldings, paneling,  
and framings

Capitone Buttons

Curved legs

Dark wood





# Visual Language

## Deco

Streamline Moderne

Precursor to mid-century modern

Hard horizontals

Not as decorative as Miami deco

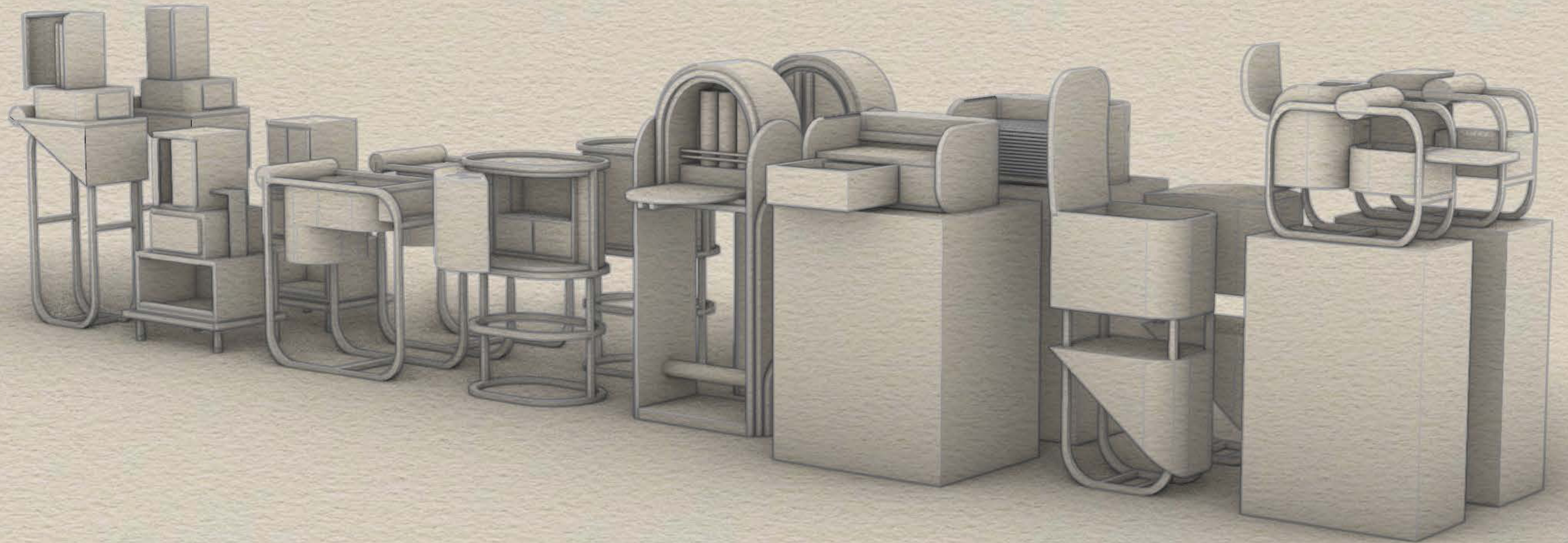
Monumental

Strong hierarchy



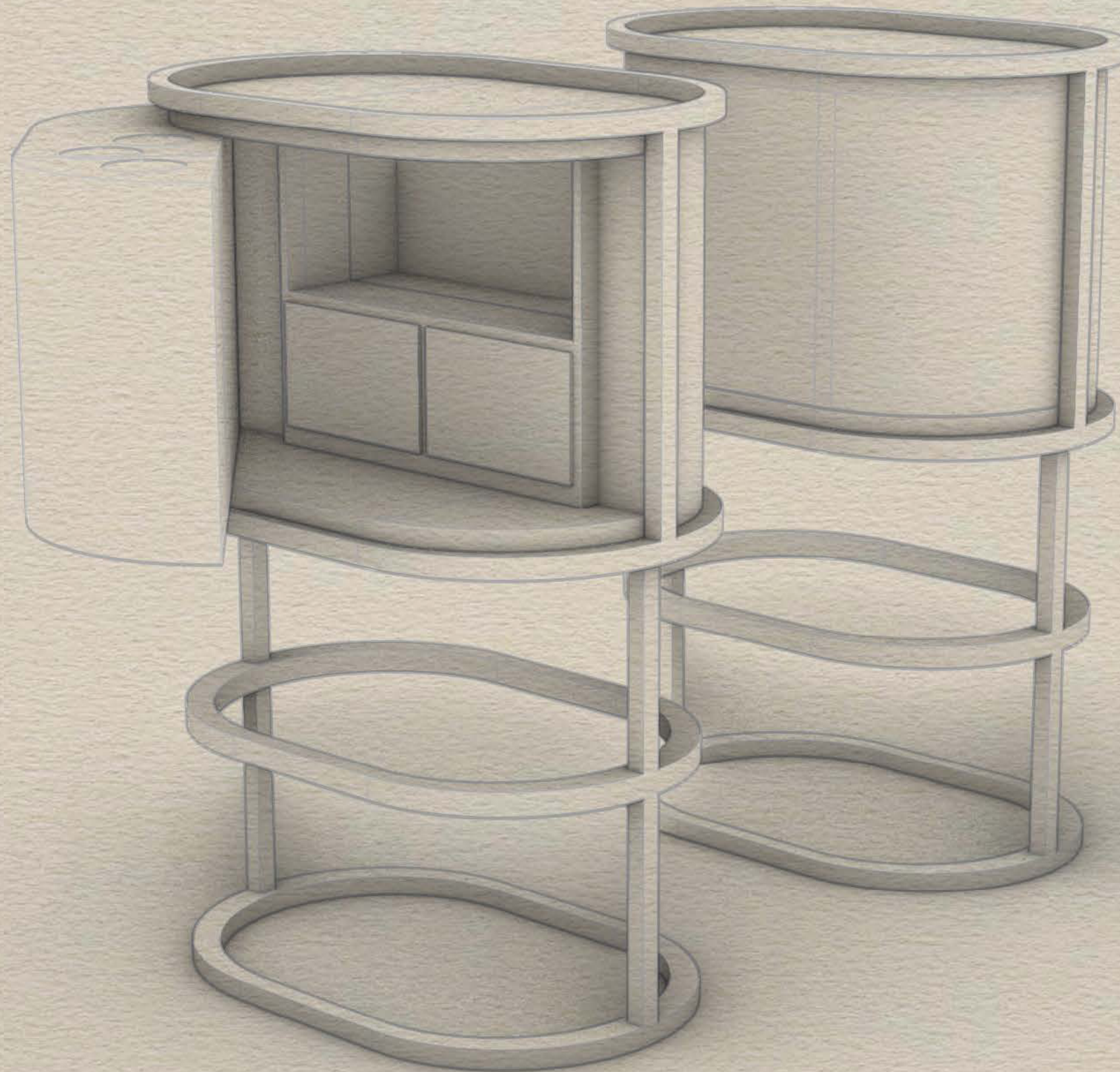


# Initial Concepts





# Selected Concept





# 2nd Ideation





# Final Render





# 1/4 Scale Model

This quarter scale model was crafted out white wood, textured black craft paper, 3D printing filament, archival craft adhesive, and chrome auto body spray paint

Critique of this model led to:

- use of two doors instead of one
  - movement and resizing of open storage space above the drawers
  - the beginning of contemplation of the use of a fourth leg.
- 





# Full Scale Model

This full scale model was crafted out of plywood, MDF, kerfkore, archival craft glue, and textured pleather.

Critique of this model led to better understanding of:

- real world dimensions
- the CNC process for this case goods' wooden parts
- storage ergonomics and placement
- leather placement and application process for this piece.

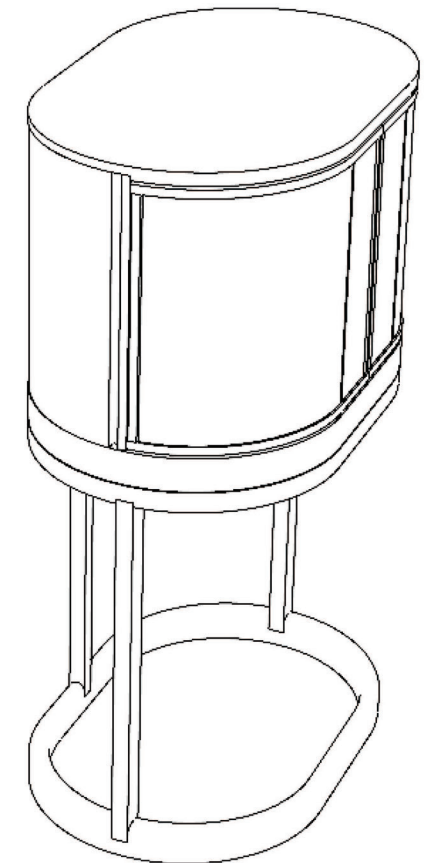
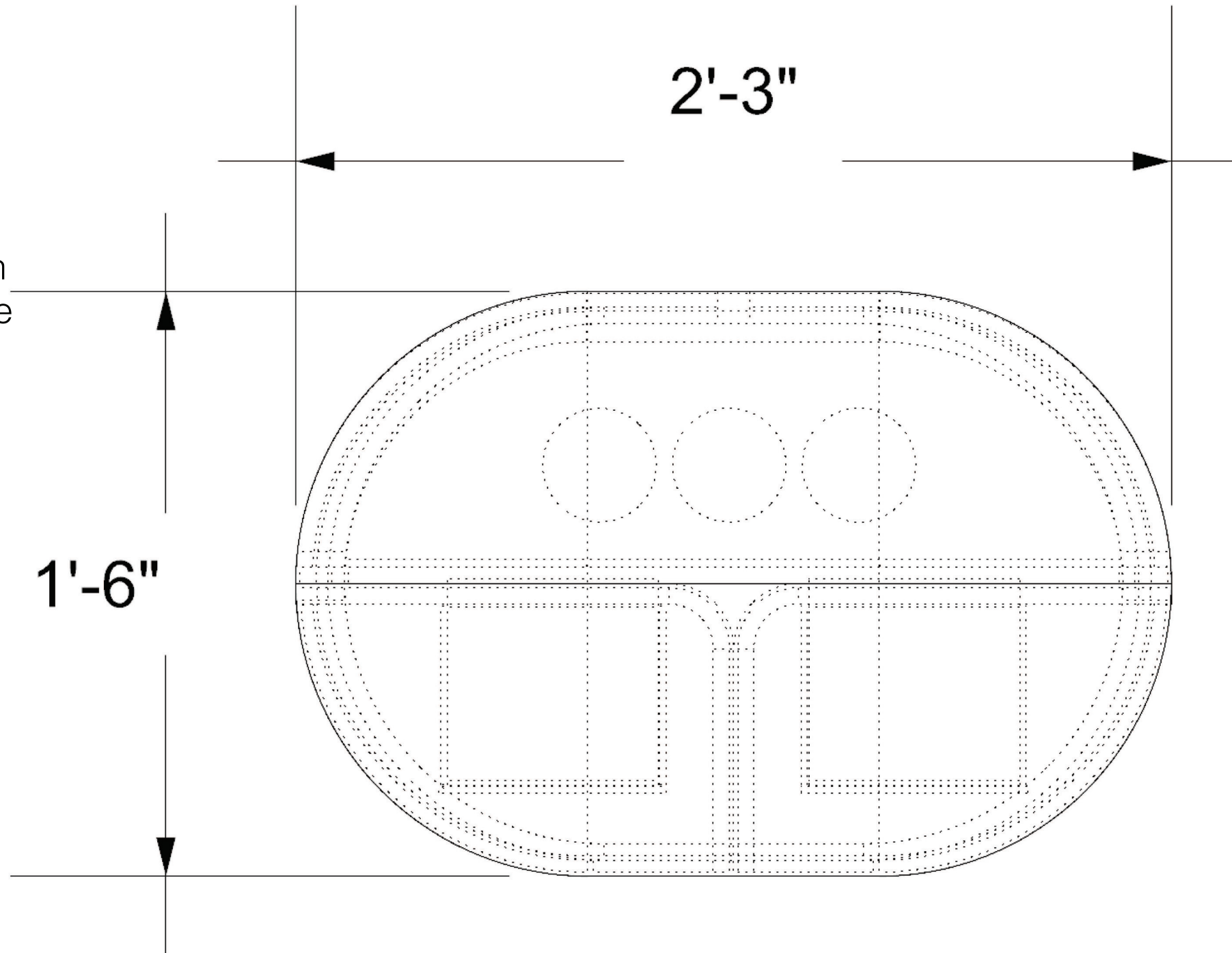




# Engineering

Top view with hidden lines and perspective line render.

Critical and general dimensions using standard drafting conventions.

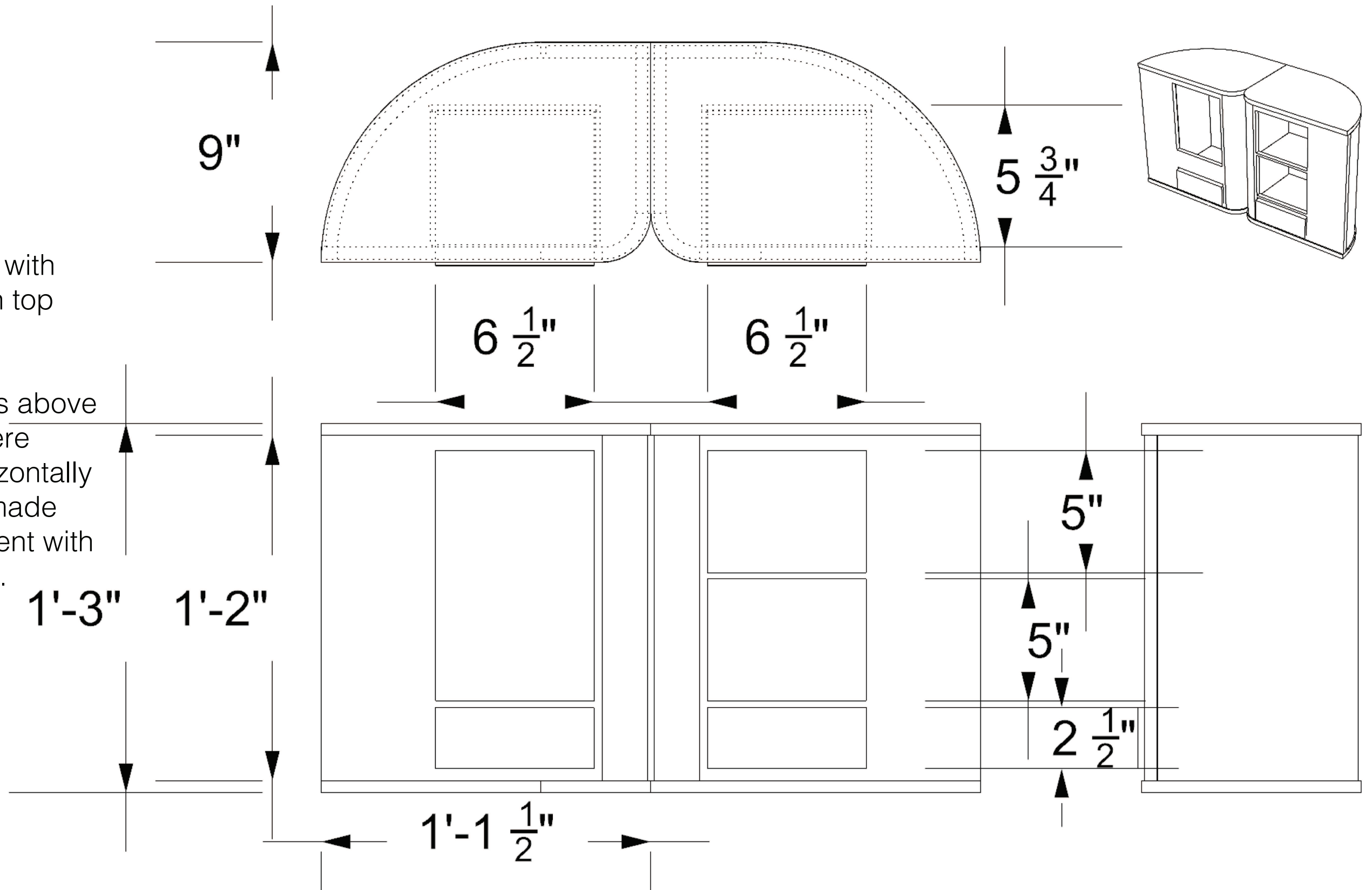




# Engineering

Views of doors with hidden lines on top view.

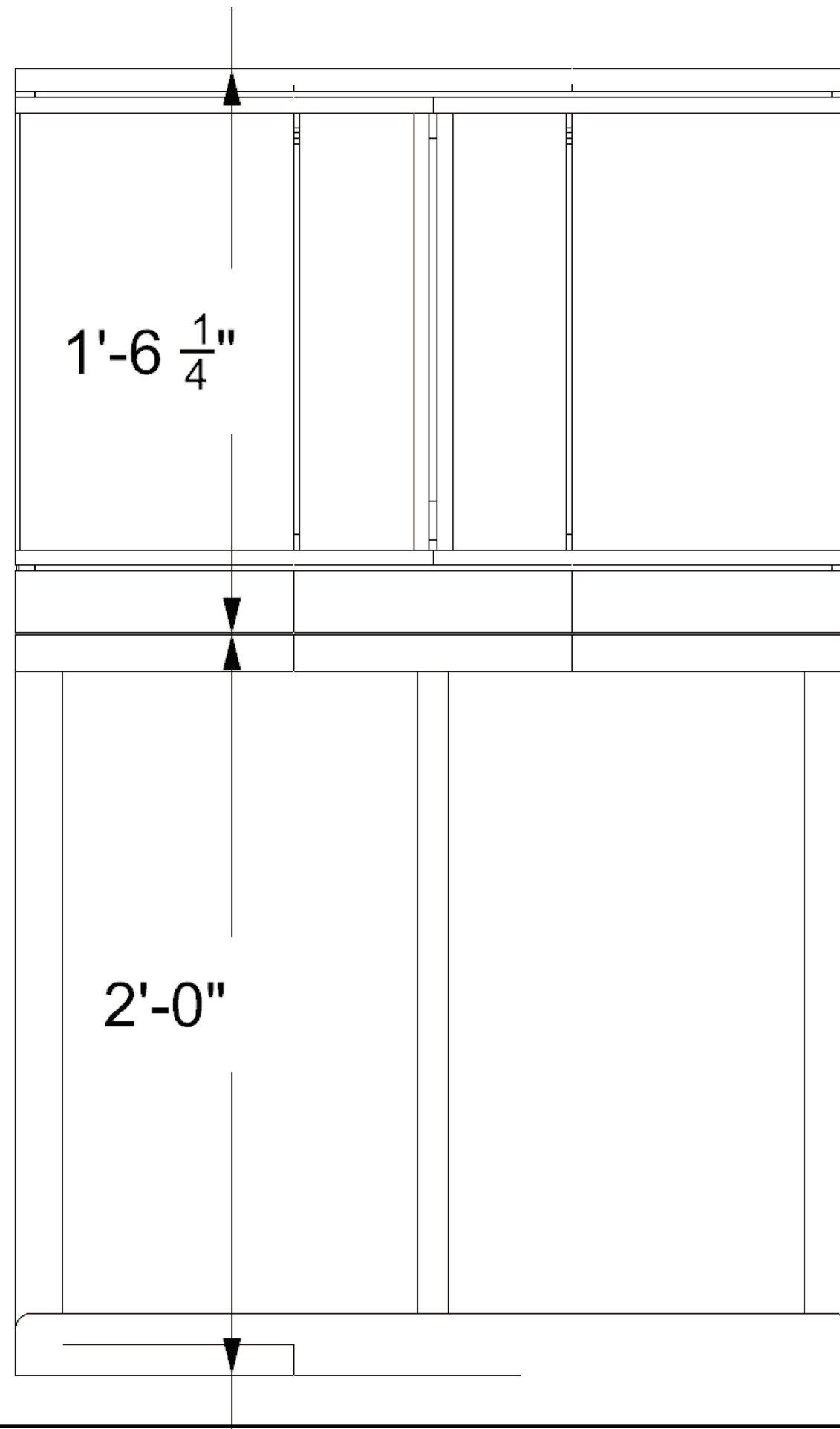
The open areas above the drawers were expanded horizontally from this and made one compartment with railing per side.





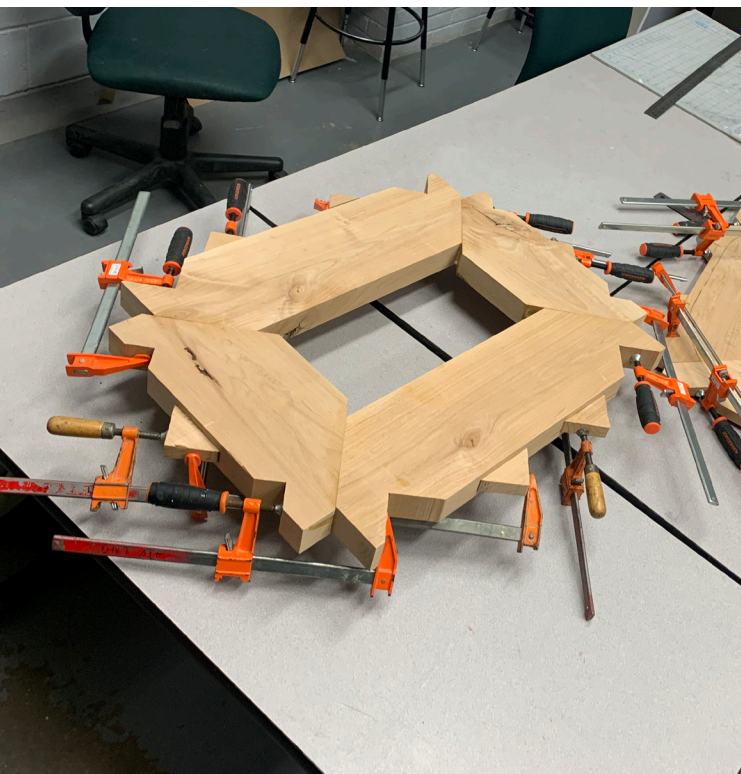
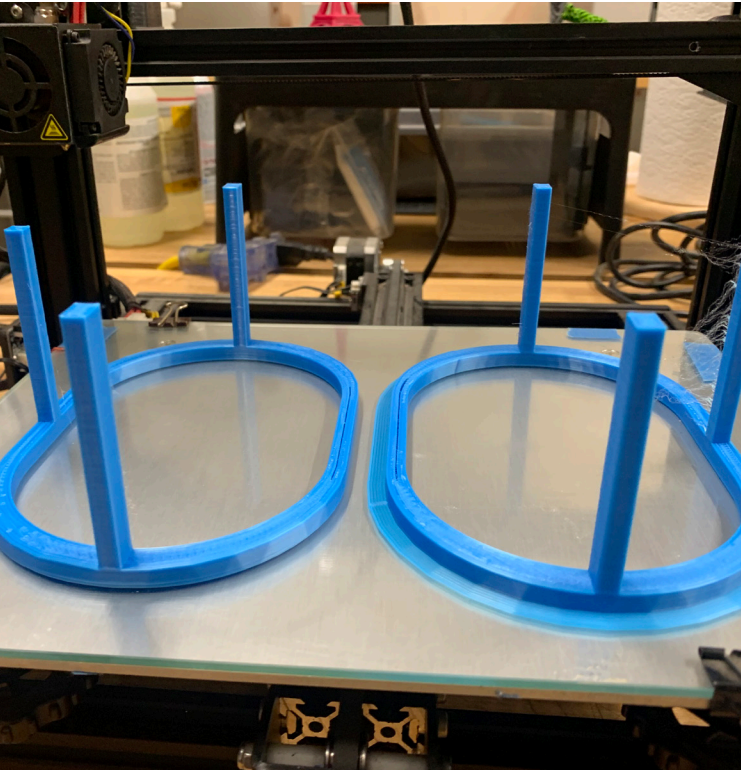
# Engineering

Height of separate  
base and top cabinet.





# Building Processes



Pictures of the steps and procedures leading to The Vice Box being a finished prototype.



Vice Box

Final Prototype















# Acknowledgment

The Vice Box was recognized as the student occasional storage **best of category** in the Fall 2022 ISFD Innovation+Design Competition.

