





# Children's TherAplay

The Children's TherAplay Foundation, Inc.

## Overview:

This project was created for The Children's TherAplay Foundation located in Carmel, IN. The client hired the Ball State College Design Center to create custom furniture and equipment for their therapy gym and sensory room. After visiting TherAplay, the client made a comment about their existing climbing wall. It was not helpful or challenging for the older children that they work with. The foundation helps children ranging from the ages of 18 months to 13 years old with special needs using horse therapy. They spend an hour with the children on/around the horses, then they work with the child for another hour in the sensory room or gym based off of their needs.

This tree climbing wall was designed to be challenging, yet safe for the children to use up to the age of 13 years old. The design allows for the therapist to customize the wall's climbing difficulty level according to the child using it. It is a 4'x8' wall that is braced and attached to the corner of their gym. The holes to change the grip "rock" locations are staggered 8" apart along the face of the board. The grips are easily removed and reattached using a square allen wrench and tee nuts.



## Evidence Based Design:

The tree shape was chosen based off of evidence found in 2 articles; *Health Care Environments and Patient Outcomes* by Ann Sloan Devlin and Allison B. Arneill and *Effects of Healthcare Environmental Design on Medical Outcomes* by Roger S. Ulrich.

"The role of the environment in the healing process is a growing concern among health care providers, environmental psychologists, consultants, and architects (Devlin, 1992, 1995; Martin, Hunt, & Conrad, 1990; Ruga, 1989; Ulrich, 1992, 1995)." (Delvin & Arneill 665)

"Researchers have found that people much prefer scenes of nature to cityscapes and urban environments (Kaplan, Kaplan, & Wendt, 1972), that scenes of nature have more positive effects on physiological states." (Delvin & Arneill 681)

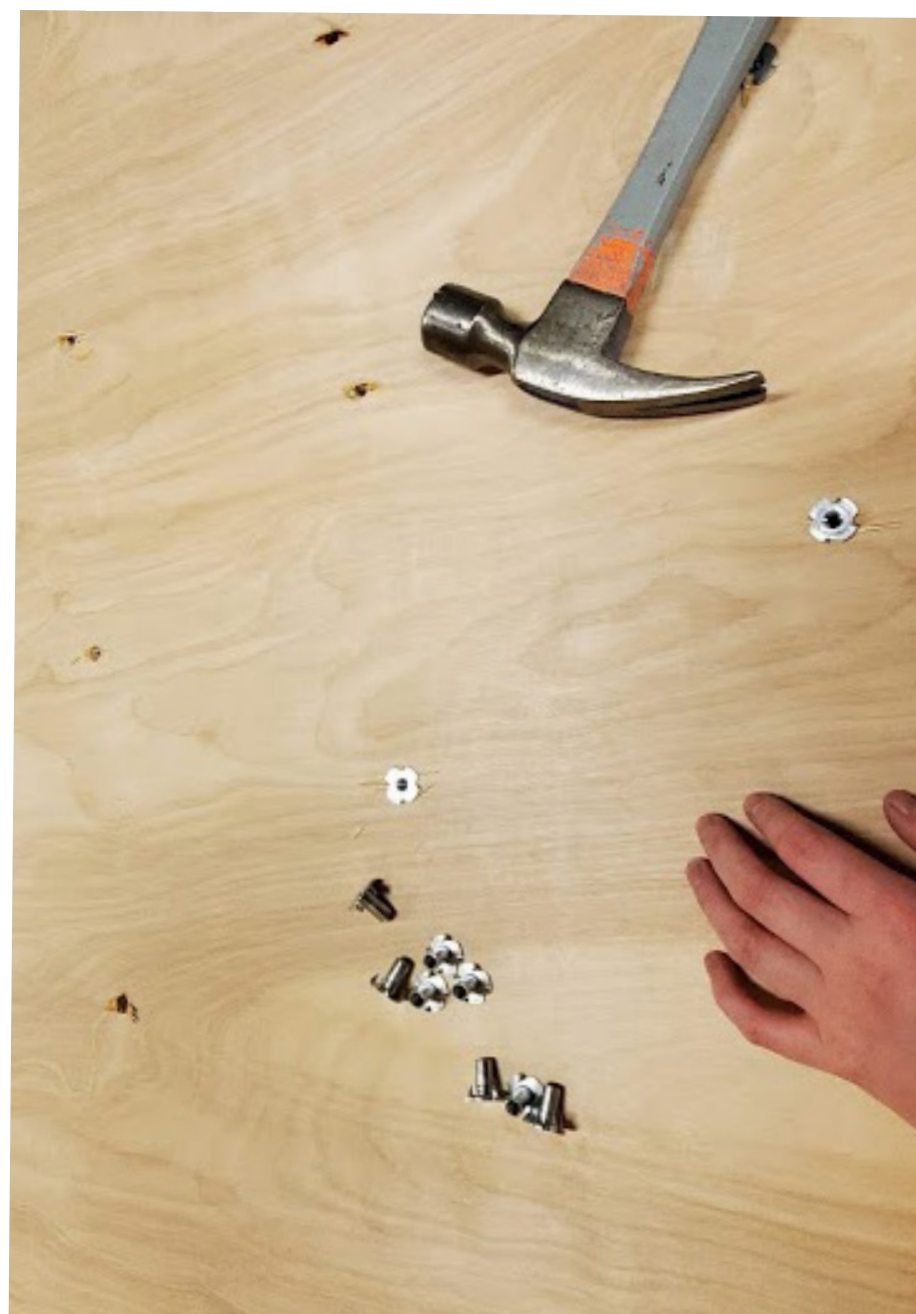
"While short-term exposures to nature can foster impressive stress recover, it seems possible that wellness benefits may tend to be greatest in certain situations involving long duration exposures to nature." (Ulrich 103)

"Heart rate measurements also indicated that individuals were less stressed or tense when the nature mural was visible." (Ulrich 103)

For this reason, a tree design and outline was chosen to be created on the facade of the rock climbing structure. By adding this element, we have added a calming background for other activities, visual interest, and the ability for the children to set height goals.



## Process:

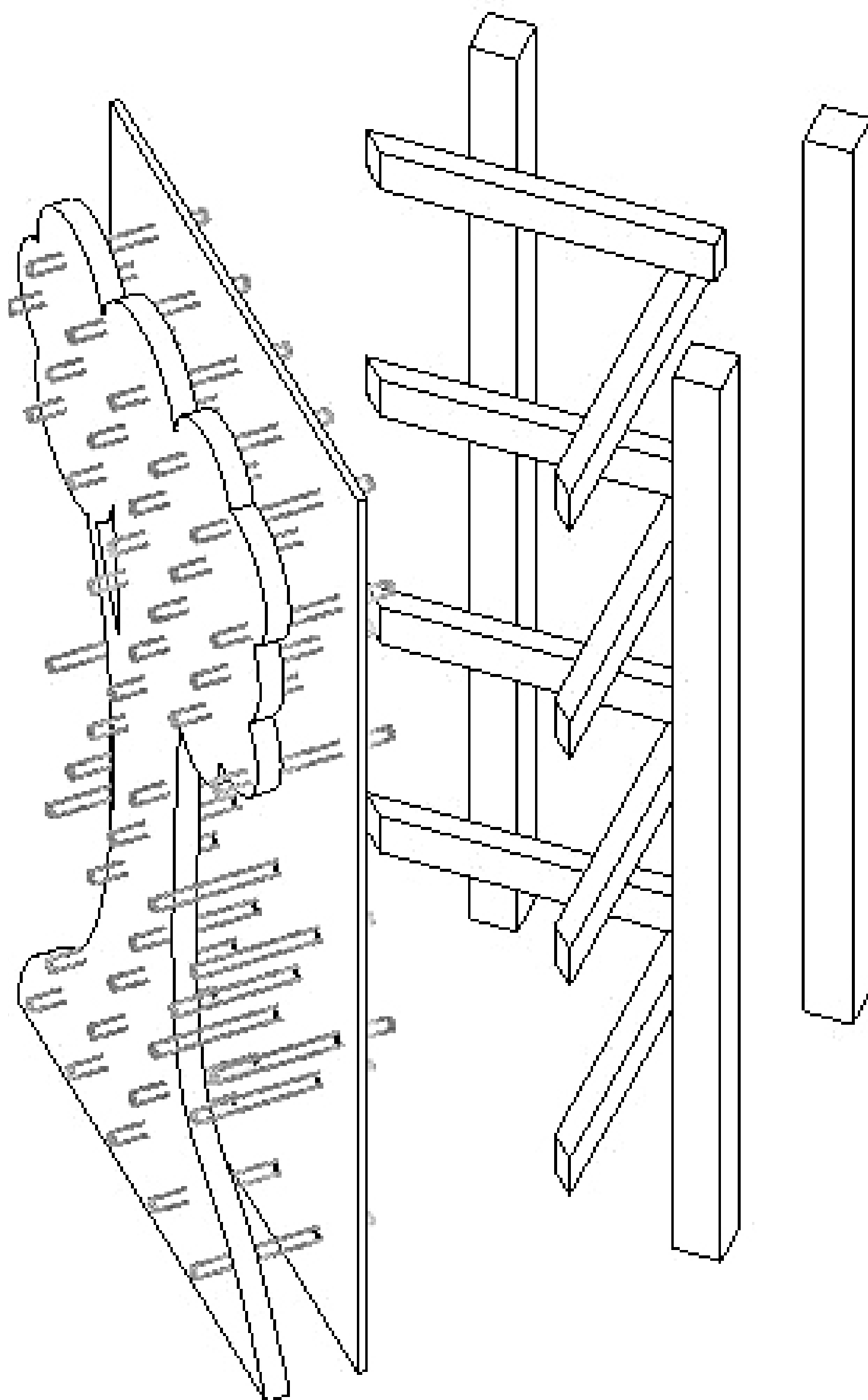


Materials List:	Quantity:
4"x4"x12' Wood	3
2"x4"x12' Wood	2
4'x8'x3/4" Plywood Sheet	1
4'x8'x1/2" Plywood Sheet	1
#9 x 3" Screws	44
1/4-20 Tee Nut Screws	50
1/4-20 Bolt Screws	50
1/4" Washers	50
Rock Climbing Holds	20
Finish Paint - Green	Pint
Finish Paint - Blue	Pint
Finish Stain - American Chestnut	Pint
Finish Polyurethane - Semi-Gloss	Pint

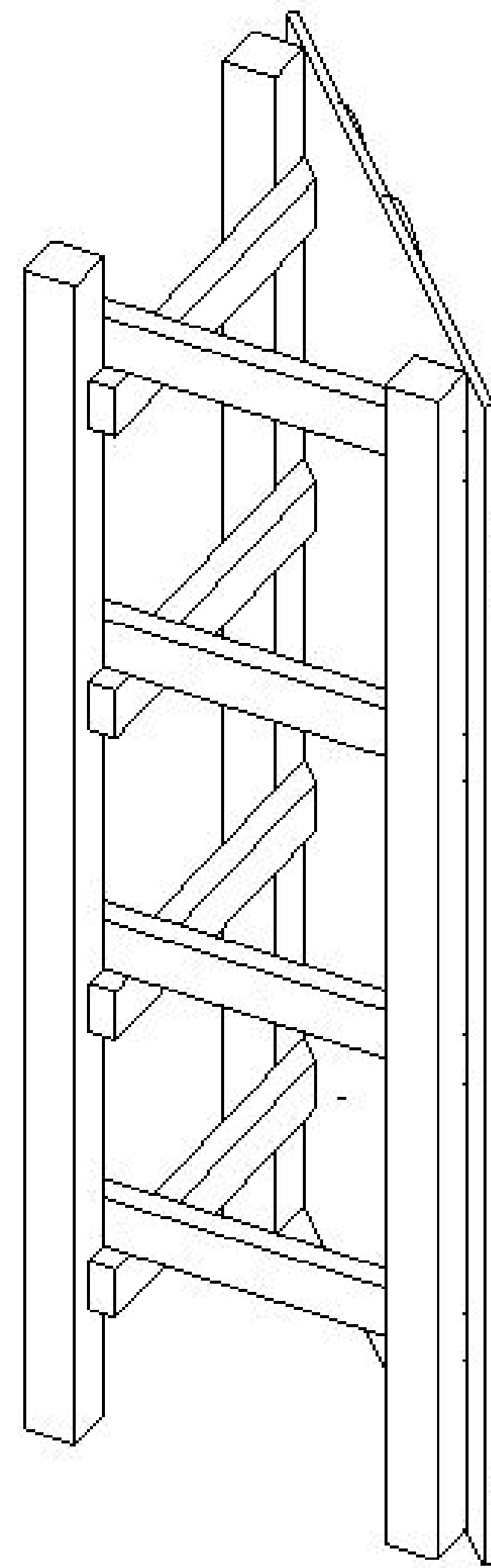


**BALL STATE**  
UNIVERSITY

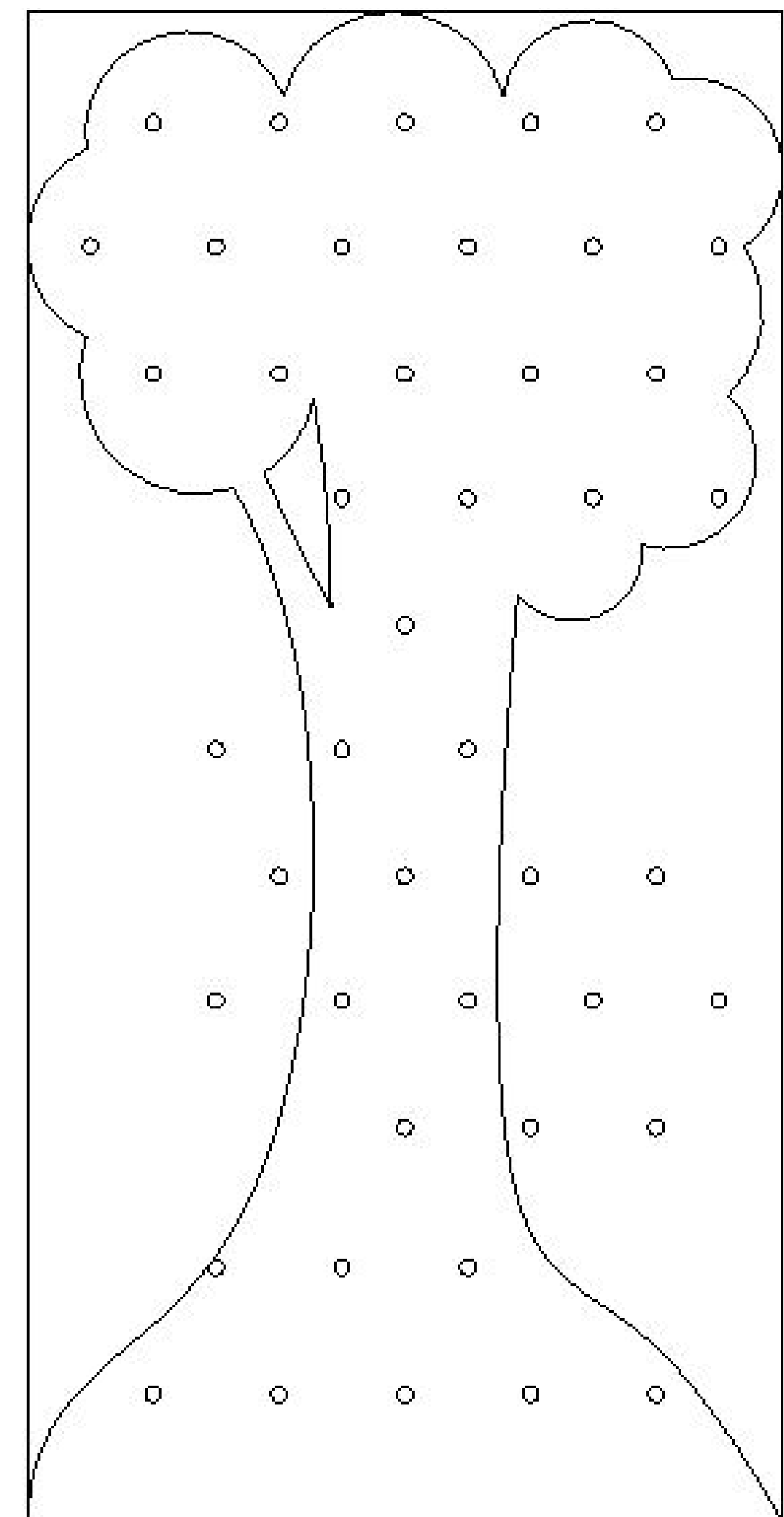
### Revit File Views:



Axonometric Breakdown



Back Support



Facade View

### Final Product Images:

