**Fabrication Plans**

Interdisciplinary Studio Pavilion [ISP] 2019

Team 3A: “Succulent Pavilion”



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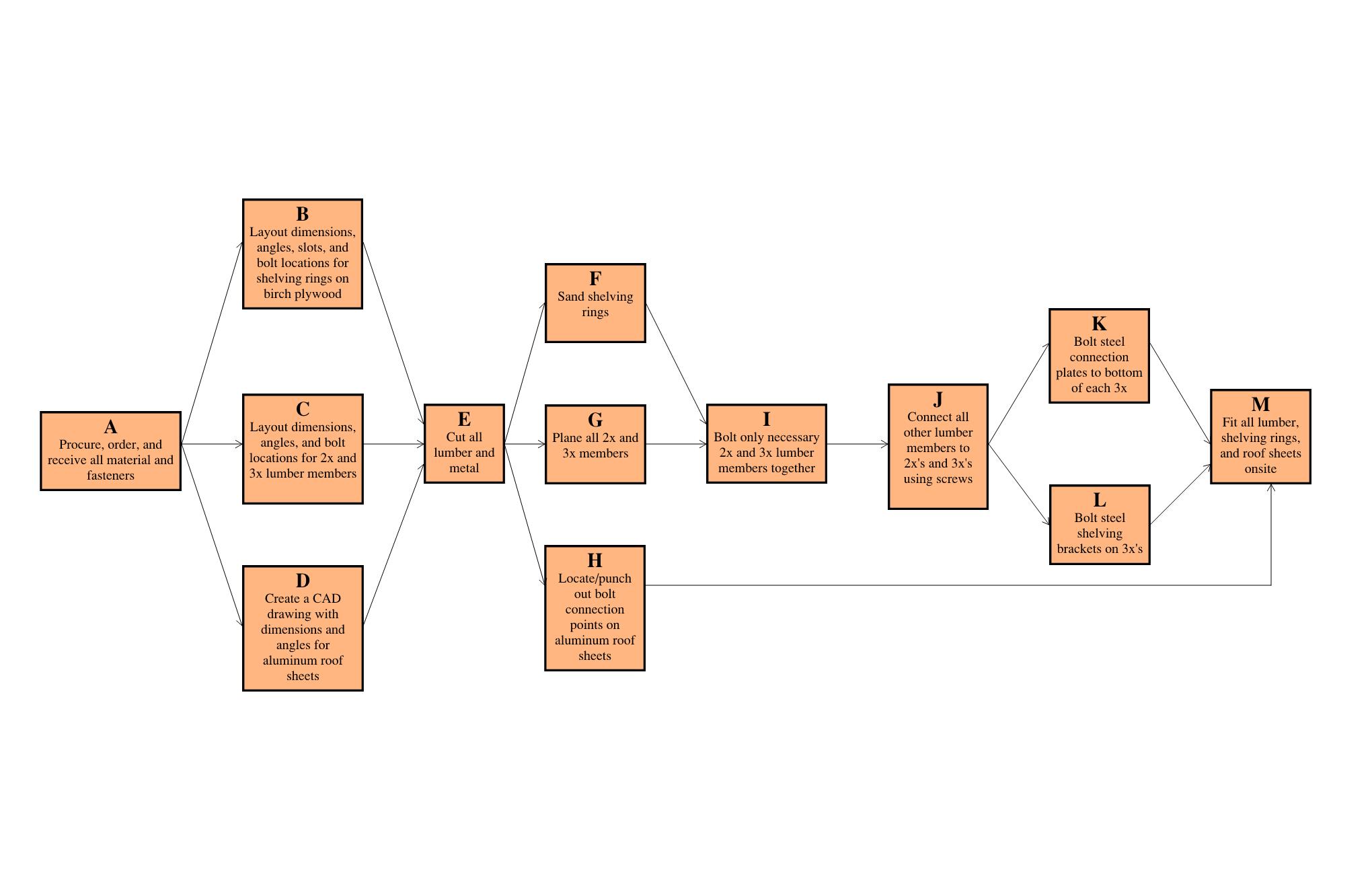
# Materials

Materials associated with this structure are listed below:

* **Softwoods**
  + 3x12 Douglas Fur – Pressure Treated
  + 2x6 Douglas Fur – Pressure Treated
  + 3x3 Douglas Fur – Pressure Treated
* **Hardwoods**
  + ¾” 4x8 Baltic Birch
* **Stainless Steel**
  + Hex bolts, Stainless Steel 18-8, 1/2"-13 x 6-1/2"
  + Hex bolts, Stainless Steel 18-8, 1/4"-20 x 1"
  + Hex bolts, Stainless steel 18-8, 1/4"-20 x 3"
  + Hex Nuts, Stainless Steel 18-8, 1/2"-13
  + Hex Nuts, Stainless Steel 18-8, 1/4"-20
  + Flat Washers, Stainless Steel 18-8, 1/2"
  + Flat Washers, Stainless Steel 18-8, 1/4"
  + Screws, #8 x 1” Phillips Pan Head Stainless Steel
  + Screws, #10 x 3” 6-Lobe Flat Head Deck-Drive DWP Wood Stainless Steel
  + 4” Shelving Brackets
  + Foundation Connection Plate
* **Aluminum**
  + 1/8” Roof Sheets

\*Foundation plates and base plates excluded from this list

# Processing Activities & Sequencing

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# Connectors, Fasteners and Fabricating Equipment

**Connectors/Fasteners List**

* Screws
* Bolts
* Foundation Plates
* Shelving Brackets

**Fabrication Equipment List**

All necessary fabrication equipment needed to build this structure can be found in Cal Poly’s CAED Support Shop.

They are listed as follows:

* Skill/Table Saw
* Jig Saw
* Drill/Bits
* Sander
* Planer
* Adjustable Wrench
* Drafting Tools (speed square, protractor, ruler, etc.)
* Measuring Tape
* Level
* Plasma Cutter

# Material Handling and Storage

**Material Handling**

* Handle all material with reasonable care
* Use gloves (Recommended)
* Use only stainless steel or hot-dipped galvanized nails, screws, bolts, anchors, and connectors when working with pressure-treated wood
* Avoid lifting members over 50lbs
* Avoid pitch points and sharp edges
* Use of ramp and dollies are encouraged when loading and unloading material

**Storage**

* Store in dry areas (Recommended)
* If stacked vertically, make sure its sufficiently supported
* Store on an elevated surface (Recommended)
* Organize materials by size and type for ease of reassembly

# Safety and Security

**Safety**

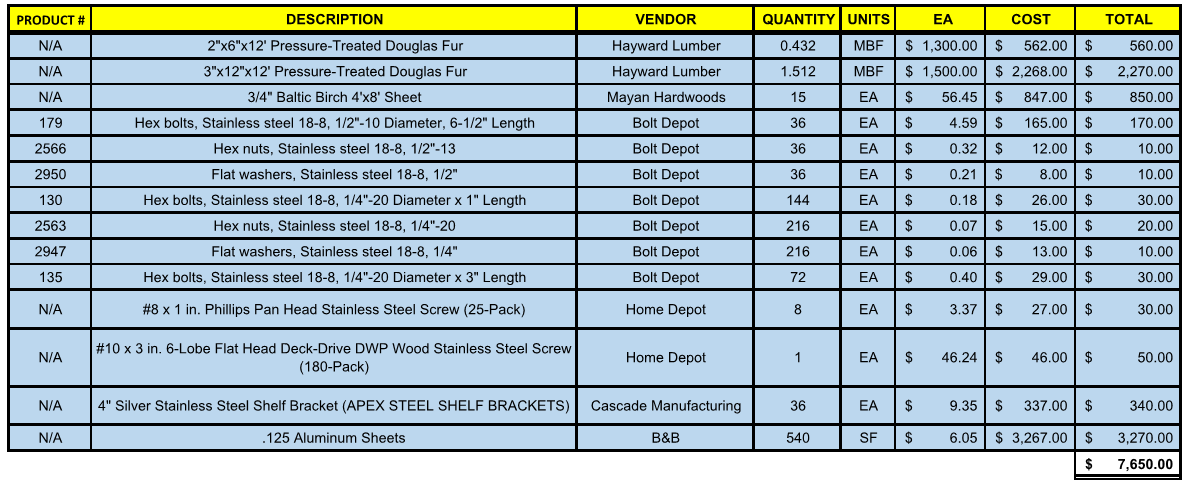
Since this pavilion will be unpermitted, it does not necessarily need specific safety requirements. However, reasonable safety measures should be implemented when building, assembling, and erecting the structure. Review any fabrication safety equipment guidelines and CEAD Support Shop safety rules. Be aware of surroundings when assembling and erecting the structure. Inspect all equipment prior to use.

**Security**

This pavilion will be an open structure. It is up to the user/client to secure and store the structure as well as any artifacts or personal items displayed upon it.

# Material Costs/Quantities and Fabrication Hours

**Material Estimate**



\*\*Does not account for waste

\*\*Foundation plates and base plates not included

**Fabrication Hours**

Fabrication hours are based on Cal Poly’s most recently updated CAED Support Shop hours of operation.

CAED Support Shop Hours

Monday: 9:00 am - 5:00 pm (no power tools 12pm - 1pm)

Tuesday - Thursday: 9:00 am - 5:30 pm

Friday: 9:00 am - 5:00 pm

Saturday: 10:00 am - 2:00pm

Sunday: Closed

# Construction Drawings and Details

\*See attached 11x17 sheets