# **HR 2 BREAKDOWN**

### **TEAM:** 19F05-Aneuvas Tech. Portable Bench

Due Date: Friday, March 6, 2020 at 11:59pm

#### **Current State of Design:**

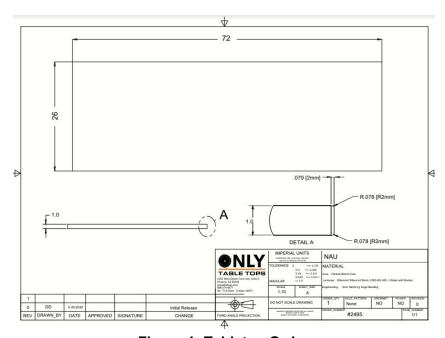


Figure 1: Tabletop Order

Figure 1 displays the drawing of the tabletop done by *Only Table Tops*. The team has chosen to rely on this company to complete the manufacturing for this component of the project. Once complete, the team will pick the tabletop up in Phoenix. The tabletop is currently estimated to be completed by April 8th. Testing will commence once the team receives the tabletop.



Figure 2: Storage

As seen in Figure 2, the storage component of the bench is complete. The storage was made of a 4'x8' sheet of plywood and manufactured in-house. Testing the storage will begin within the next week.



Figure 3: Wheels

Figure 3 displays the wheels have been ordered and received by the team. Moving forward, the team needs to purchase nuts, bolts, and washers and attach the wheels to the frame. Once the wheels are attached, the team will begin testing.

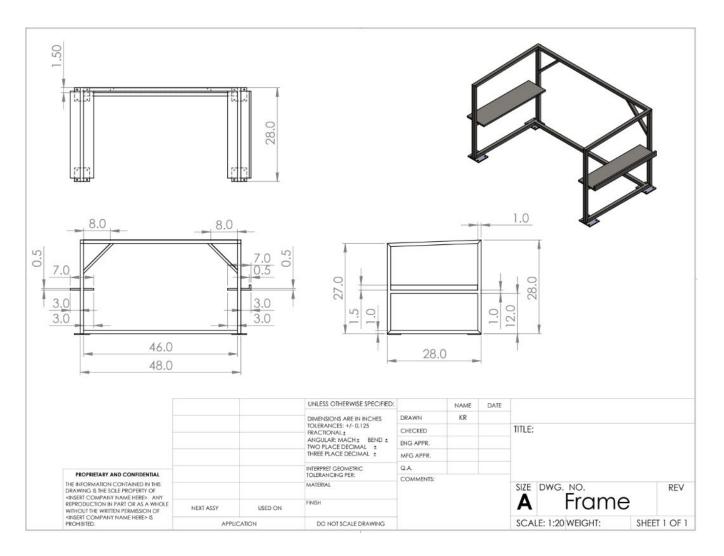


Figure 4: Frame Design

Figure 4 shows the frame design for constructing the bench. The mild steel has been ordered and construction will take place this coming week. Wheels and storage will then be attached. Testing and further assembly of the portable medical bench relies on the completion and receiving of the tabletop component, so the current timeframe is on track.

The following are the Action Items each person completed between Hardware Review 1 and Hardware Review 2:

### **Team Member: Hunter Daniel**

Action Item	Date Completed	Result/Proof of Completion
Get in touch with companies about manufacturing tabletop.	2/13/20	Hallo Hunter,  Thank you for taking your time to speak with me earlier!  Please see the attached quotes for you. As discussed, we quoted the Formics and Wilsonart HPL in 1". In addition, I quoted Black TPL in 1st since this is more cost-effective. Our standard lead time to ship is 6 weeks Horever, we can expedite the Black TPL in needed. There is an additional fee for expediting lead times.  Please let me know if you have any questions.  Kind Regards.
Meet with Karine to get purchasing information.	2/19/20	Hi Hunter, I'll be here M, W 8-2 and F 8-3. Let me know if you'd like to come place the order here, or I can call with payment if that works.  Best,  Karine Story Program Coordinator College of Engineering, Informatics, and Applied Sciences
Order tabletop.	2/26/20	Drawing of tabletop order shown above.

### **Team Member: Katherine Riffle**

Action Item	Date Completed	Result/Proof of Completion	
Create New Design for Frame	2/15/20	Bench Frame design shown above	
Maintain/Update Website for website check	2/23/20	https://www.ceias.nau.edu/capstone/projects/ME/2019/1 9F5_AneuvasPortableBench/	
Purchasing Mild Steel for frame construction	3/6/20	Karine Kiel Story to me   Yes this is approved. I will submit a check request today, the turnaround is usually 1-2 weeks and we'll email you when your check is ready to be picked up at the Engineering Front Desk.	

## **Team Member: Kenyon Rowley**

Action Item	Date Completed	Result/Proof of Completion
Ordered and received wheels	2/27/20	*Picture of wheels shown above
Ordered material for frame with Katherine	3/6/20	*Picture of proof of purchase shown in Katherine's table
Finished storage	3/5/20	*Picture of storage shown above

The following are the Action Items for each team member between HR 2 and the Final Product presentation:

Team Member	Action Items	Date Due
Hunter Daniel	<ol> <li>Check on progress of tabletop</li> <li>Assemble wheels to frame</li> <li>Assemble bench</li> </ol>	1. 3/11/20 2. 3/16/20 3. 3/27/20
Katherine Riffle	<ol> <li>Create Gutter Tray and attach with Hunter</li> <li>Same for a Handle</li> <li>Same for Spill Guards</li> </ol>	1. 3/27/20 2. 3/27/20 3. 3/27/20
Kenyon Rowley	Order wedges     Weld together frame     Assemble wheels to frame	1. 3/9/20 2. 3/16/20 3. 3/16/20