This was the model we were going to build.

A picture containing drawing

Description automatically generated

**Base: Planning on it being a 30” x 36” base.**

* Home Depot sells a 0.451 in x 23.75 in x 47.75 in sanded plywood base [here](https://www.homedepot.com/p/Sanded-Plywood-Common-1-2-in-x-2-ft-x-4-ft-Actual-0-451-in-x-23-75-in-x-47-75-in-300896/202093833) for $10.77. This can be cut to be 36 in, then the remainder of the cut can be used to make the 23.75 in. side into the 30 in side of the base. The plan was to elevate the model so all of the electronics could fit on it, so the two boards can be combined like the picture below:

A wooden table

Description automatically generated

**Simple 2x4s to make the base. 16 ft for $10** [**here**](https://www.homedepot.com/p/WeatherShield-2-in-x-4-in-x-16-ft-2-Prime-Ground-Contact-Pressure-Treated-Lumber-253920/206967809)**.**

**Cut to form the plywood base**

**Walls**

***Laser Cutter:***

There are a few things you can do for the walls; one is to use the laser cutters to make the walls. Here is a link to the Idea shop website and the materials you can use: <https://wiki.ideashop.iit.edu/index.php?title=Epilog_Laser>

A couple if up front consideration:

* Maximum part thickness: ¼ in
* Max part size: 18 in x 24 in

So, you would need to change the thickness of the walls and plan out how to most efficiently laser cut the walls

***CNC Router***

The ShopSabre I think is the best option:

* You can work with materials up to 4 in thick
* Maximum part Size: 48 in x 96 in x 4 in
* MDF and plywood are great for the model and work well with the machine

Here is the link to the ShopSabre: <https://wiki.ideashop.iit.edu/index.php?title=ShopSabre>

All of the Solidworks files have been uploaded to the GitHub, so they can be easily accessed.