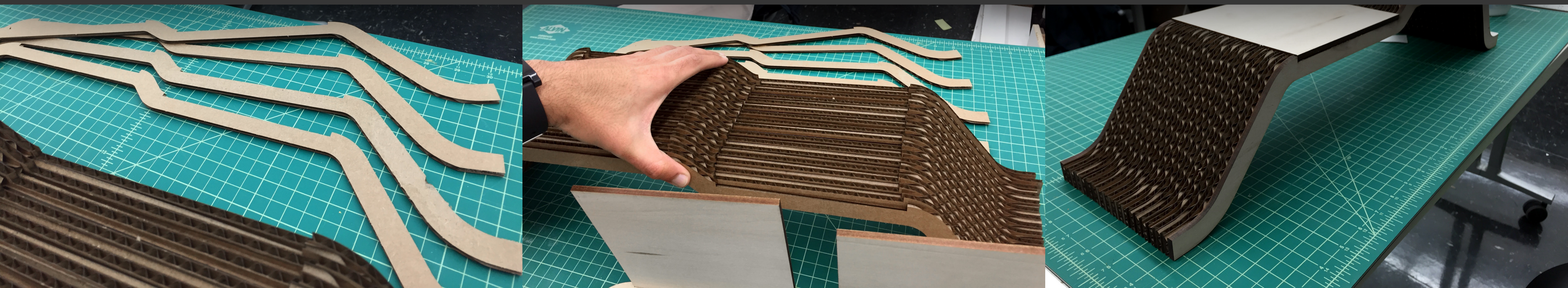
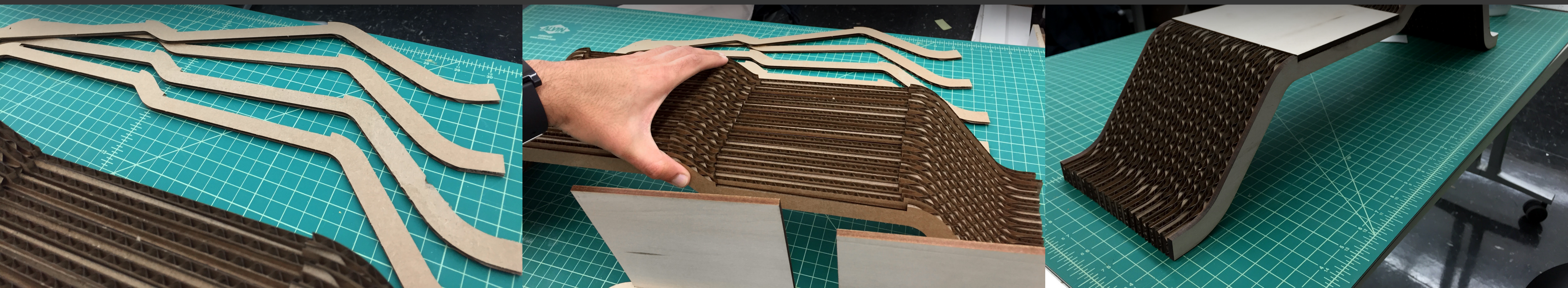


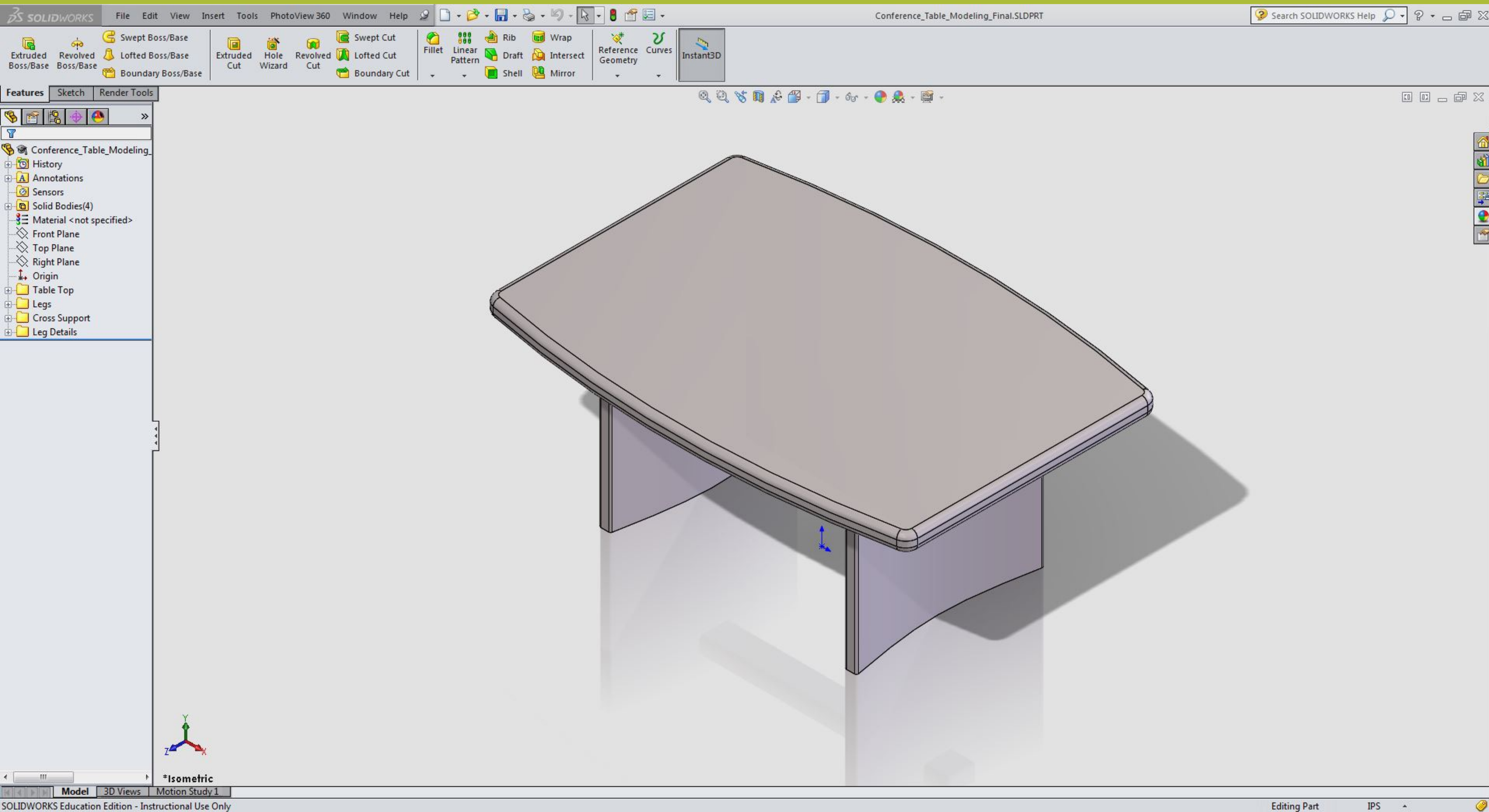
File Setup for Laser Cutter from SolidWorks



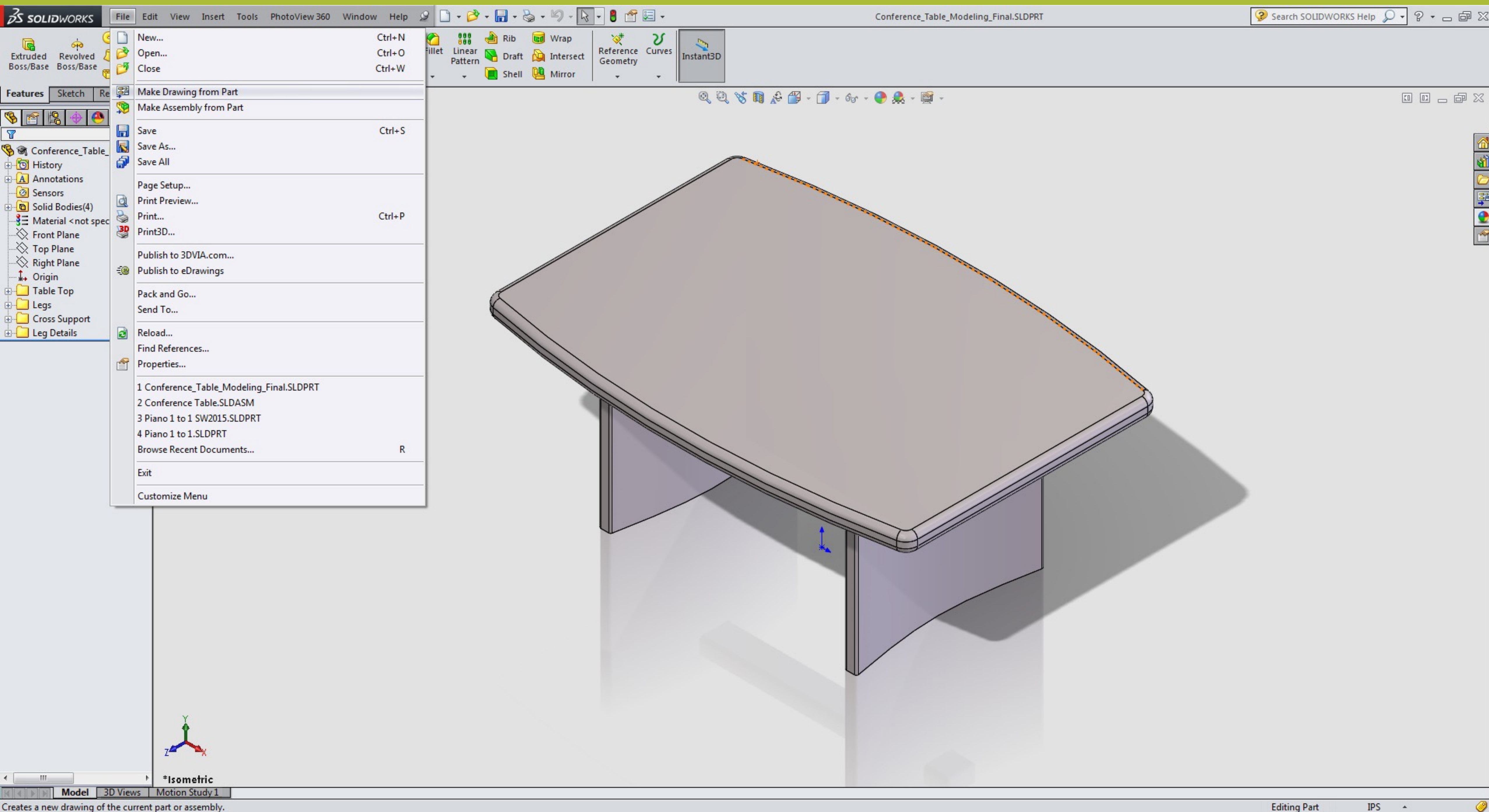
Topics Covered:

- Generating drawing files in SolidWorks
- Importing files to Adobe Illustrator
- Setting up the PDF files for the laser cutter

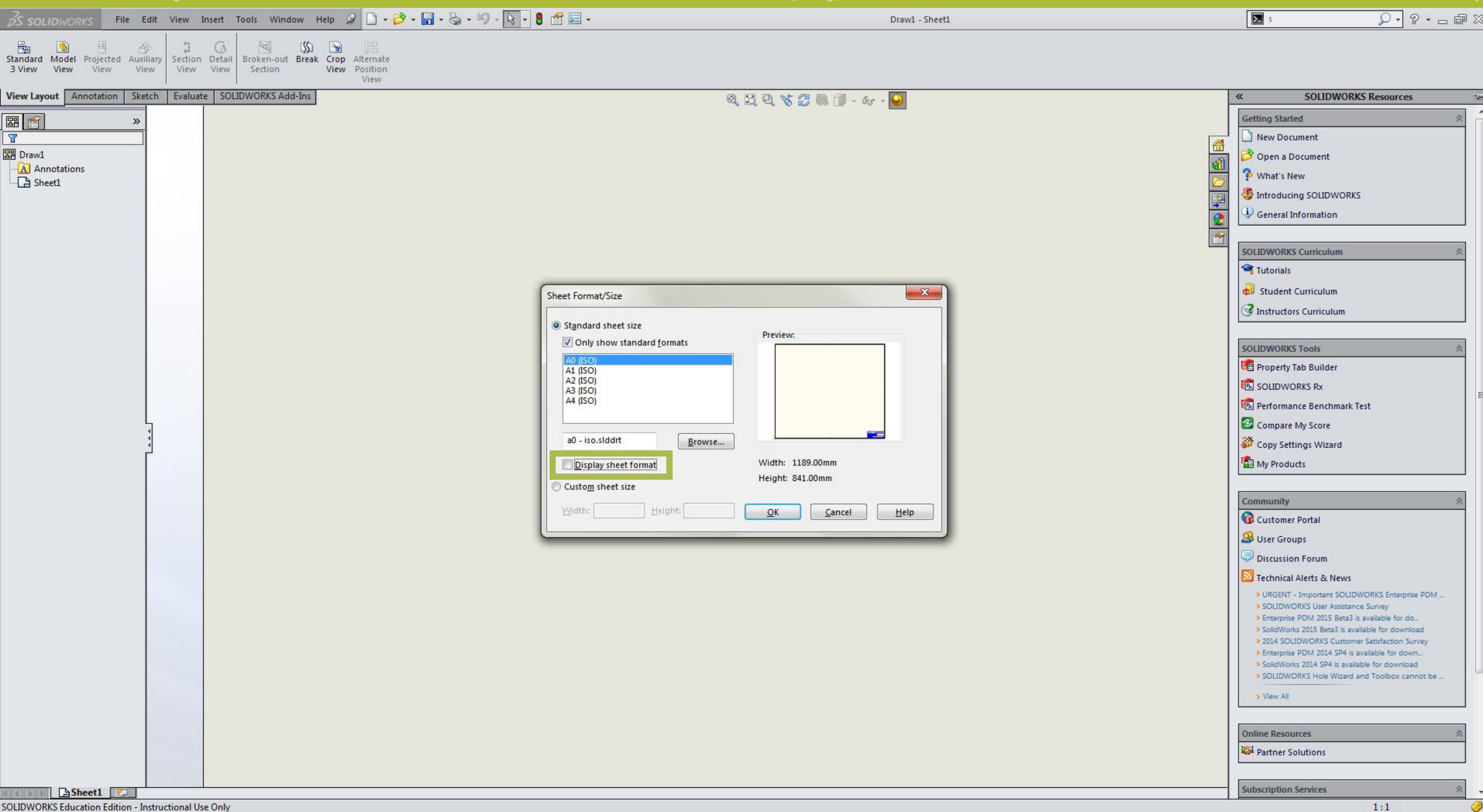




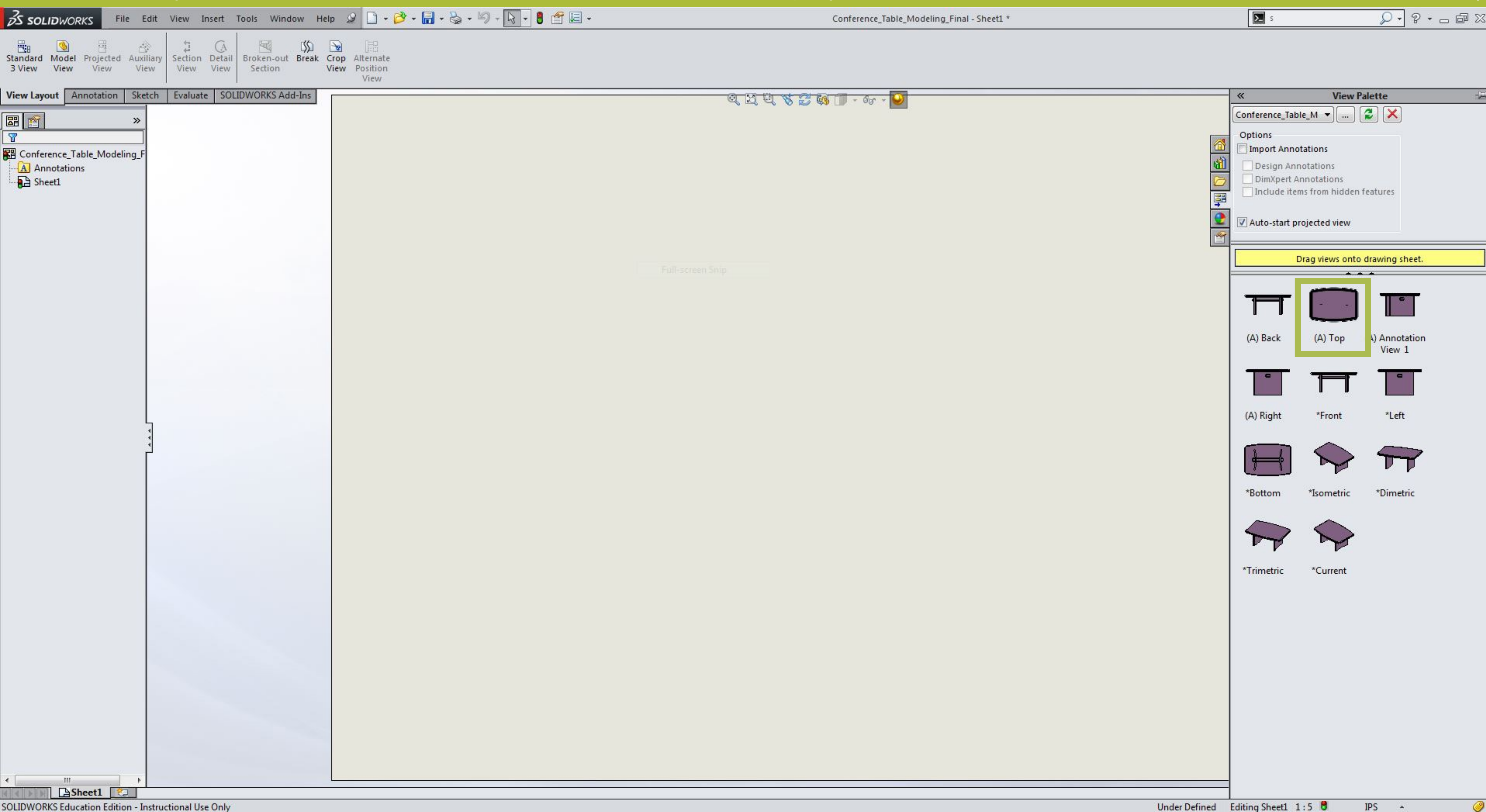
Open the table model in SolidWorks.



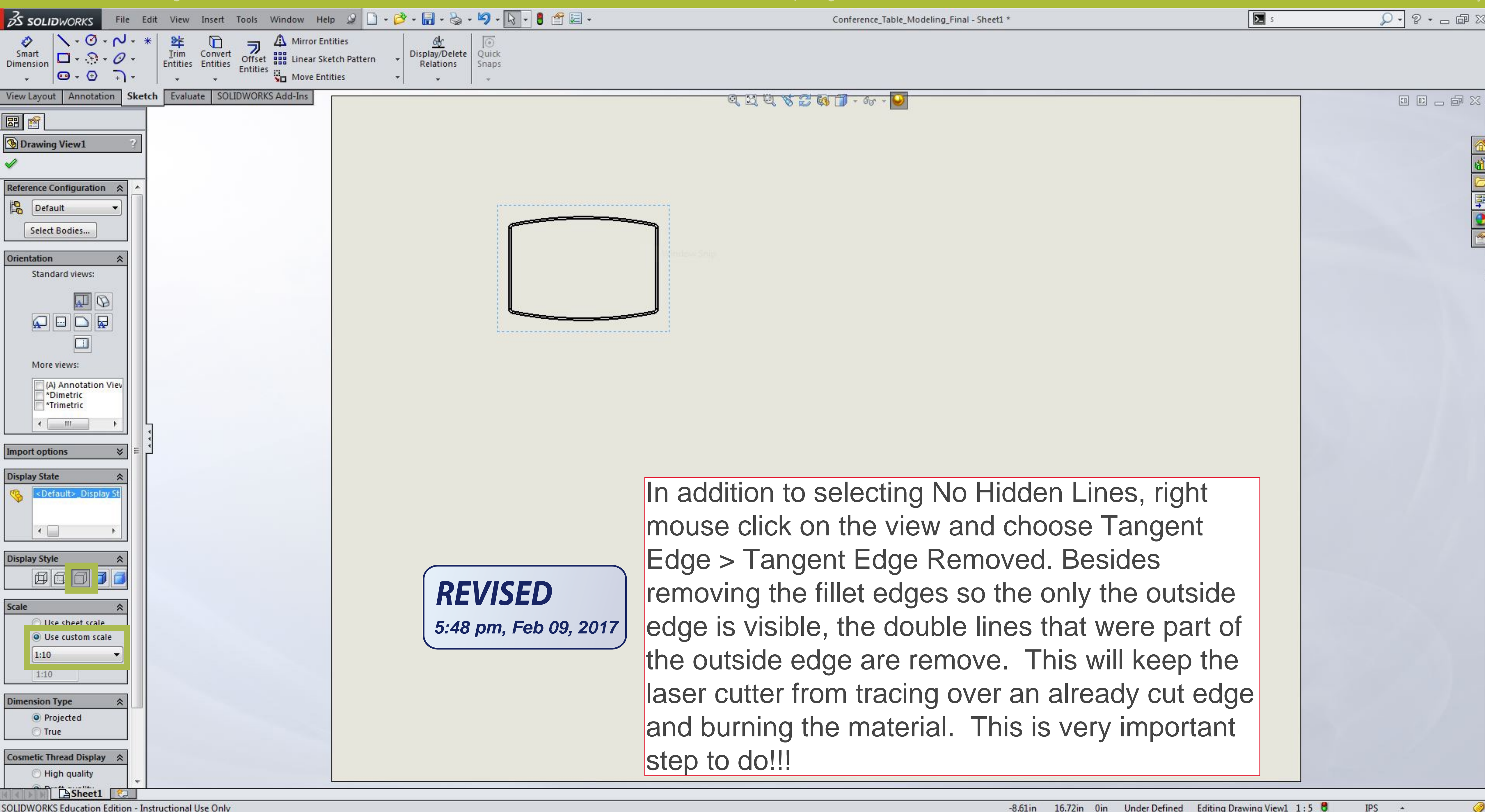
From the file menu, choose 'Make Drawing from Part'



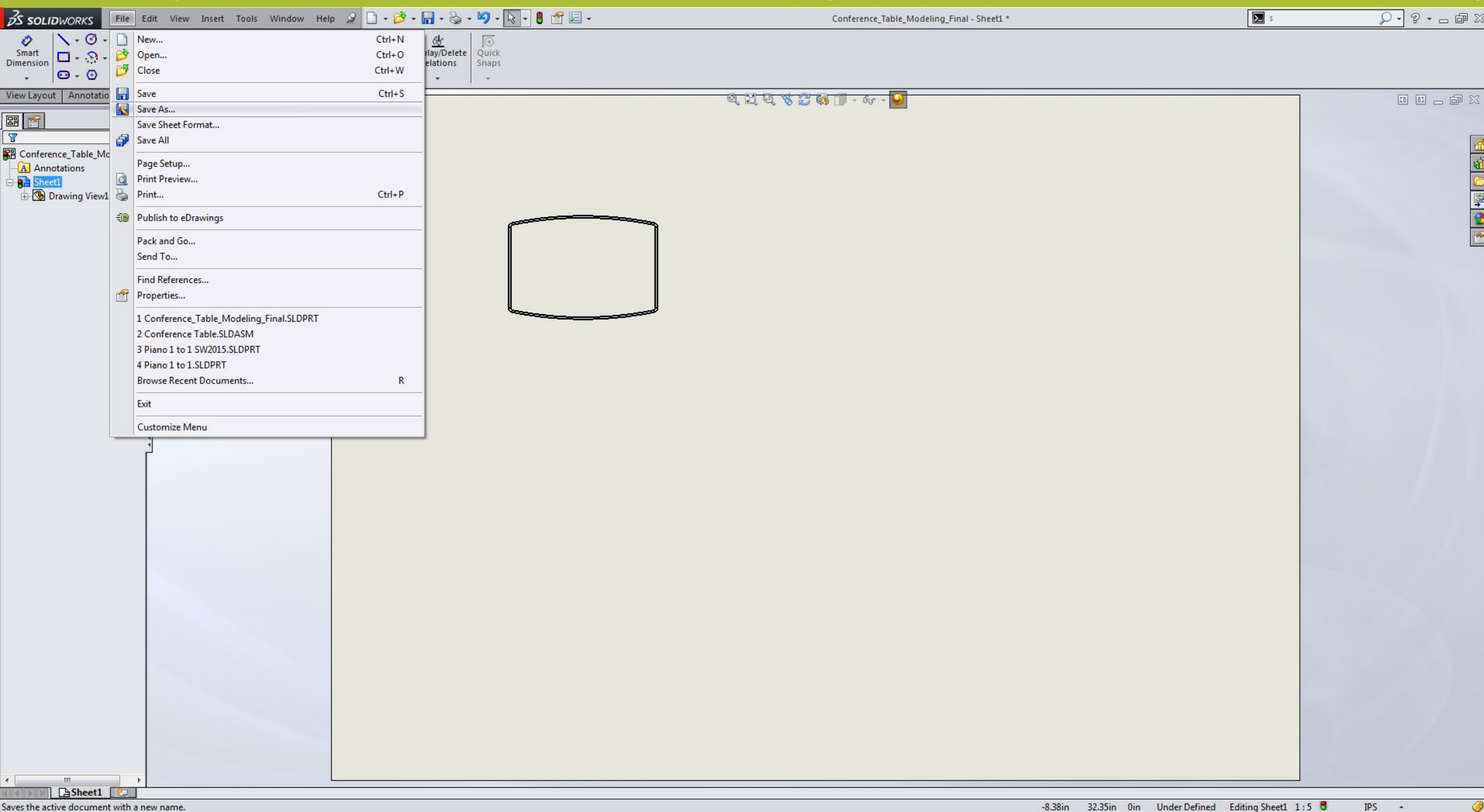
In the Sheet Format/Size dialog, uncheck the Display Sheet format box. The sheet size doesn't not matter since we are going house only the drawing.



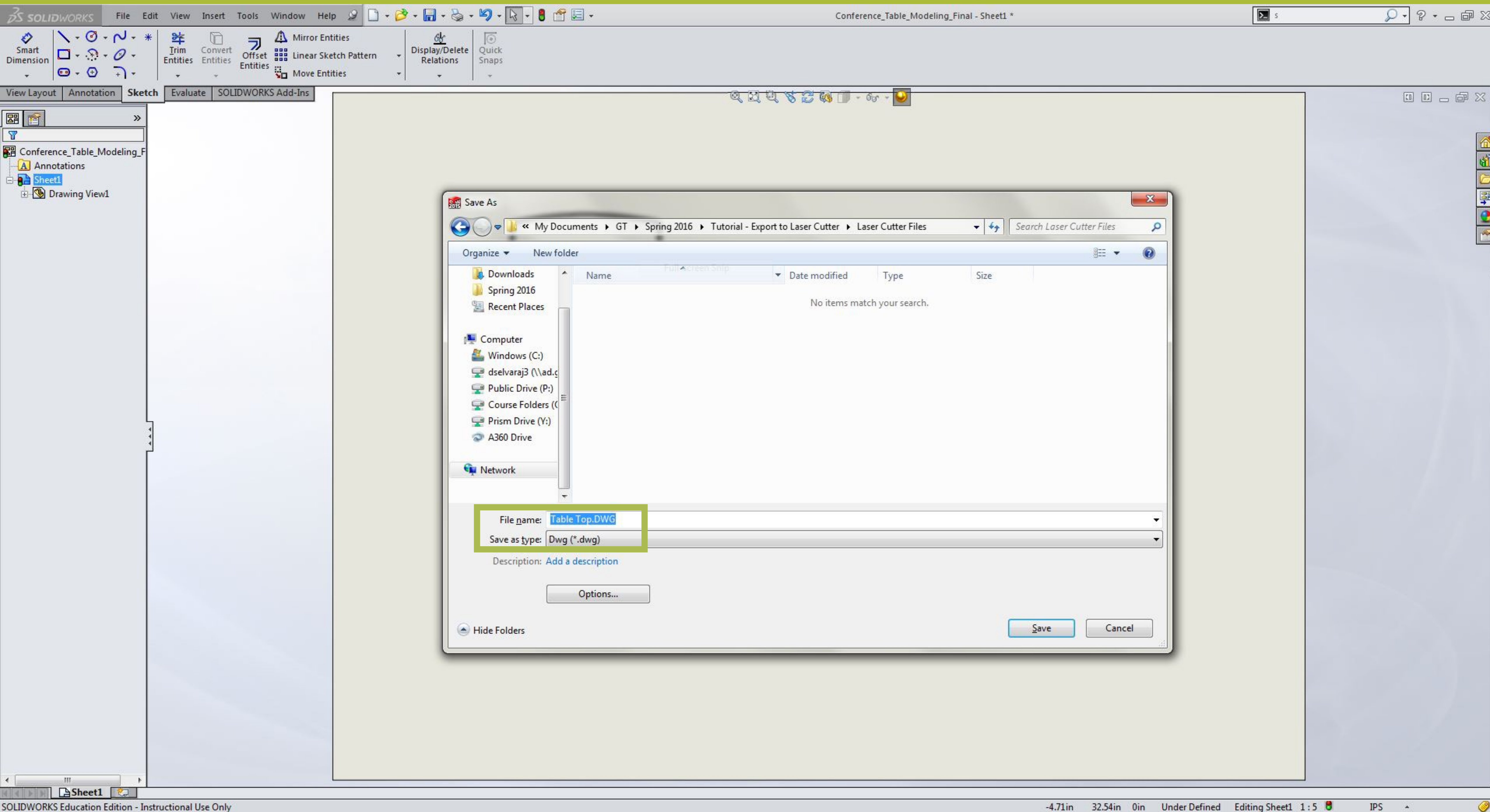
From the View Palette, drag and drop the Top view of the table.



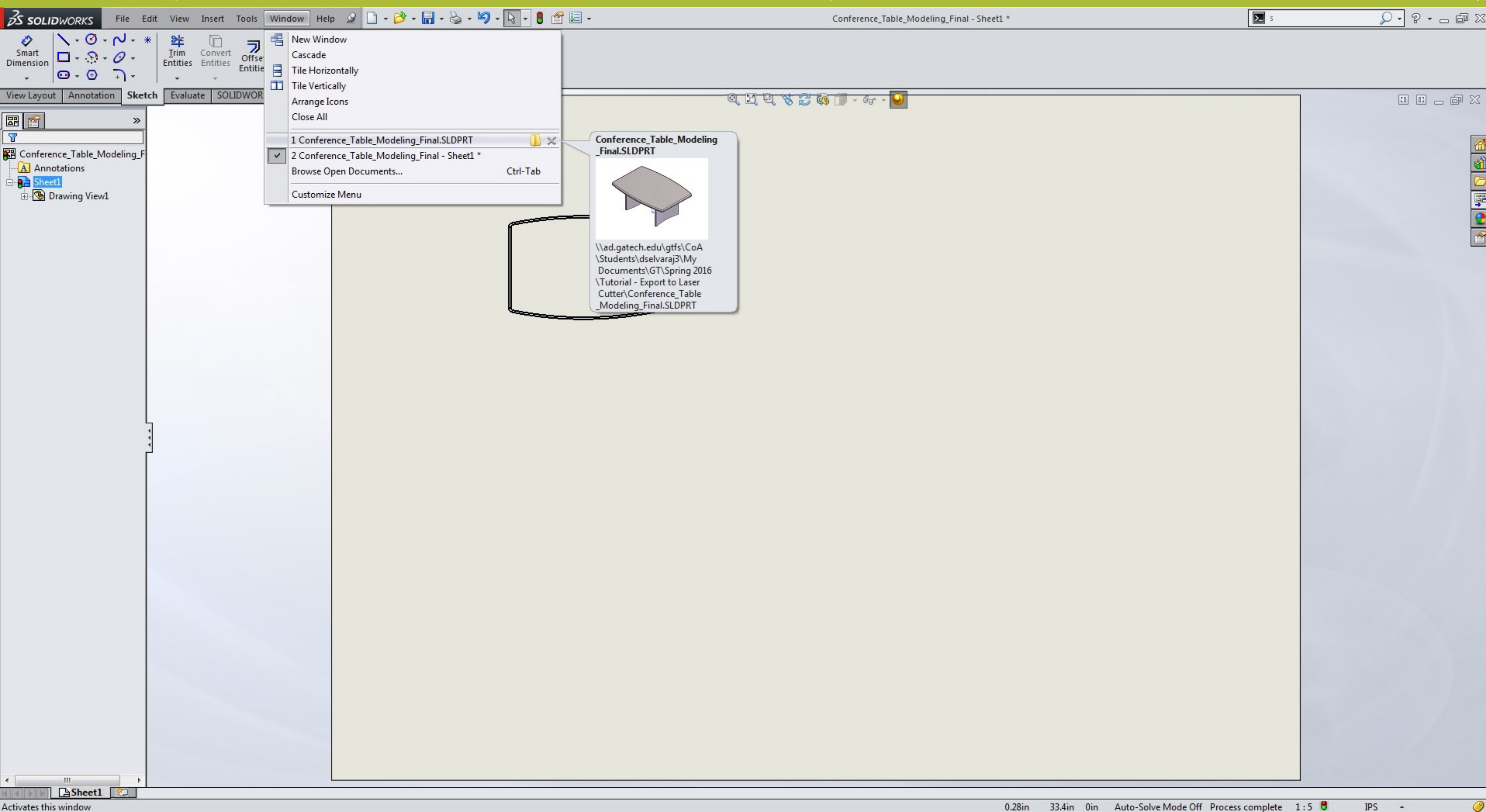
Press Esc to cancel the insert command and click on the drawing to select it and bring up the options in the sidebar. Ensure that the Display Style is set to No Hidden Lines (third option). Choosing any other option creates overlapping lines which may cause issues when cutting the file in the laser cutter. Set the scale to 1:10 from the list.



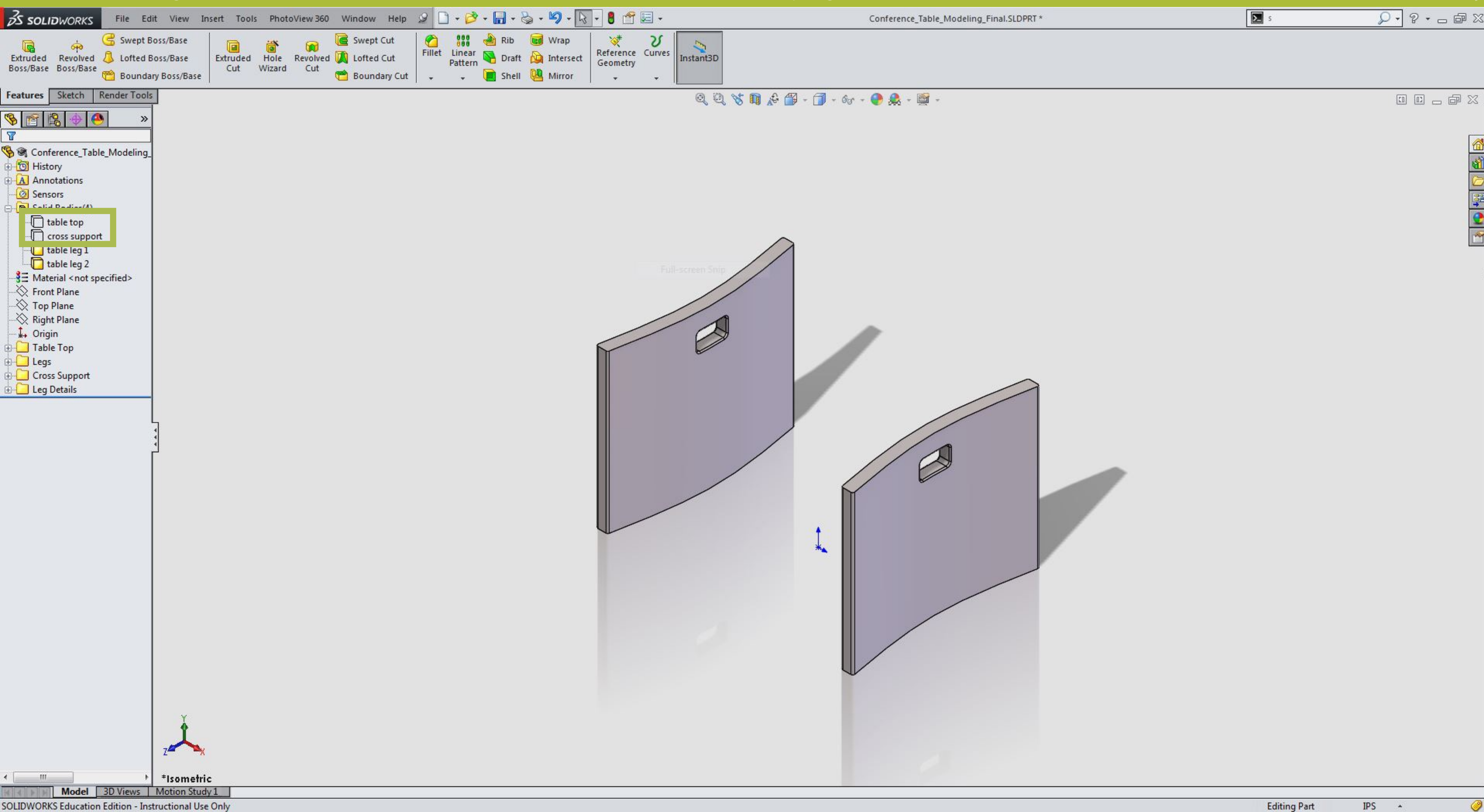
Choose File > Save As



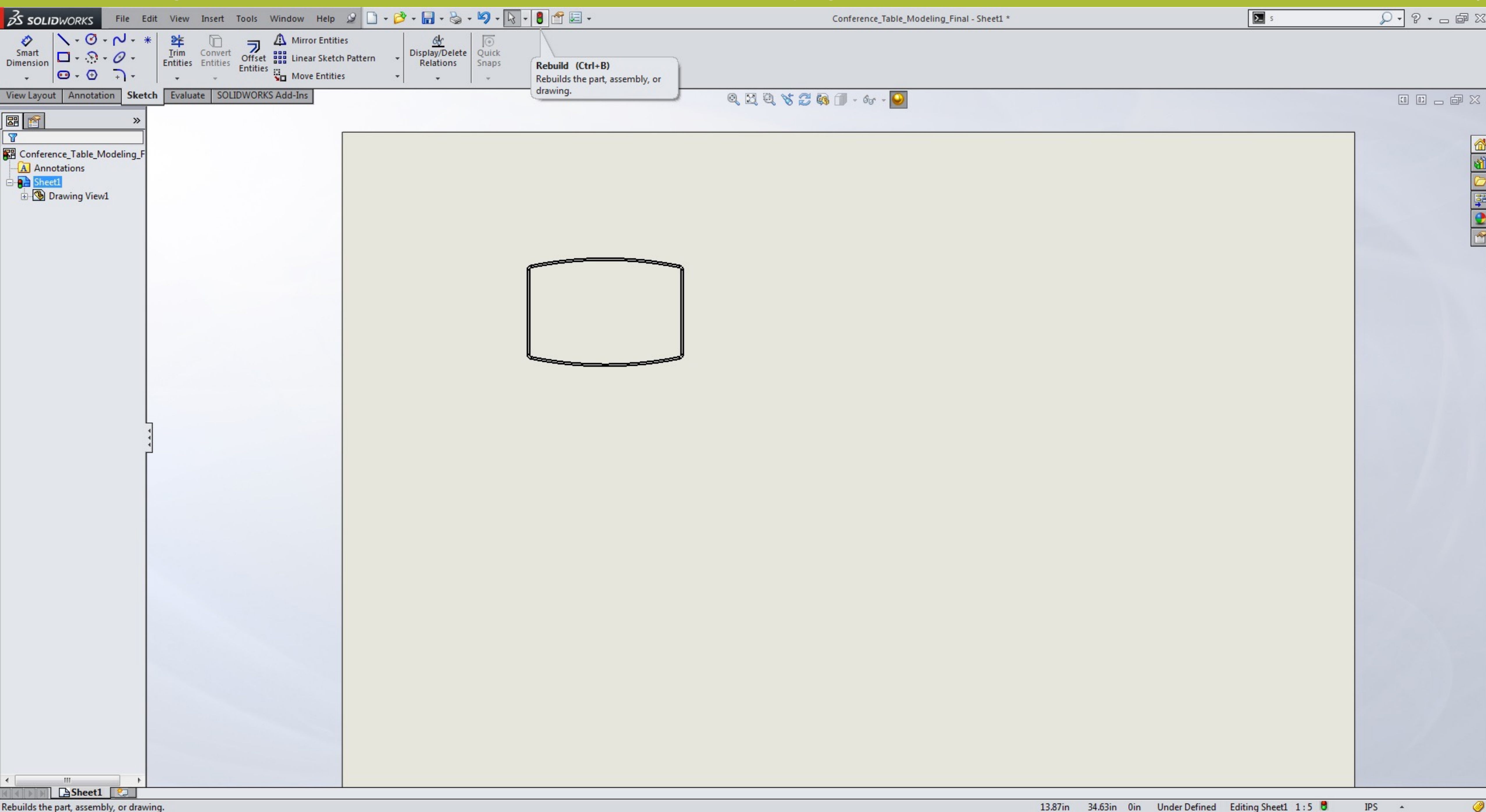
Save the file as a DWG format.



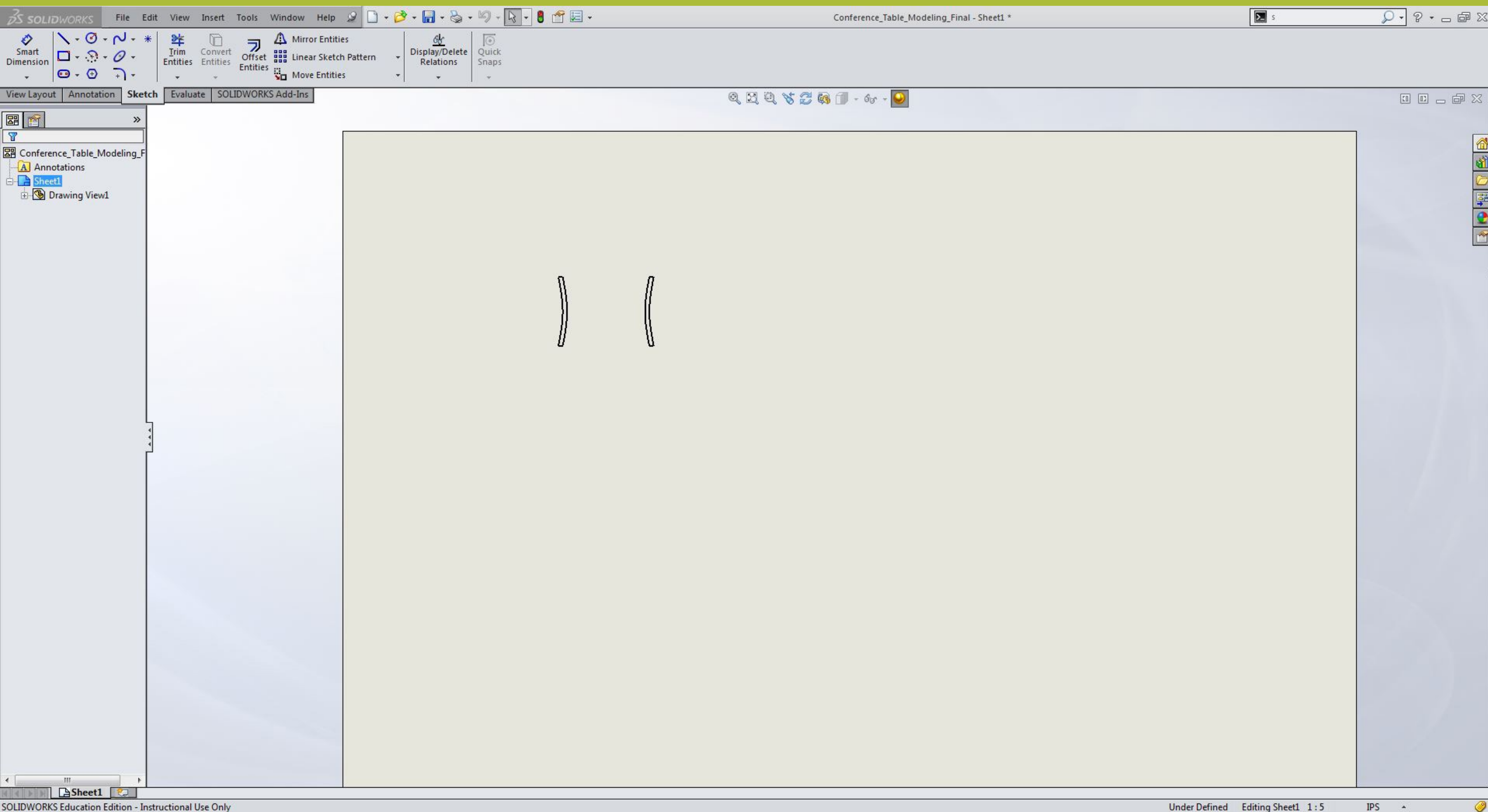
Switch back to the model window by selecting it from the Window menu in SolidWorks.



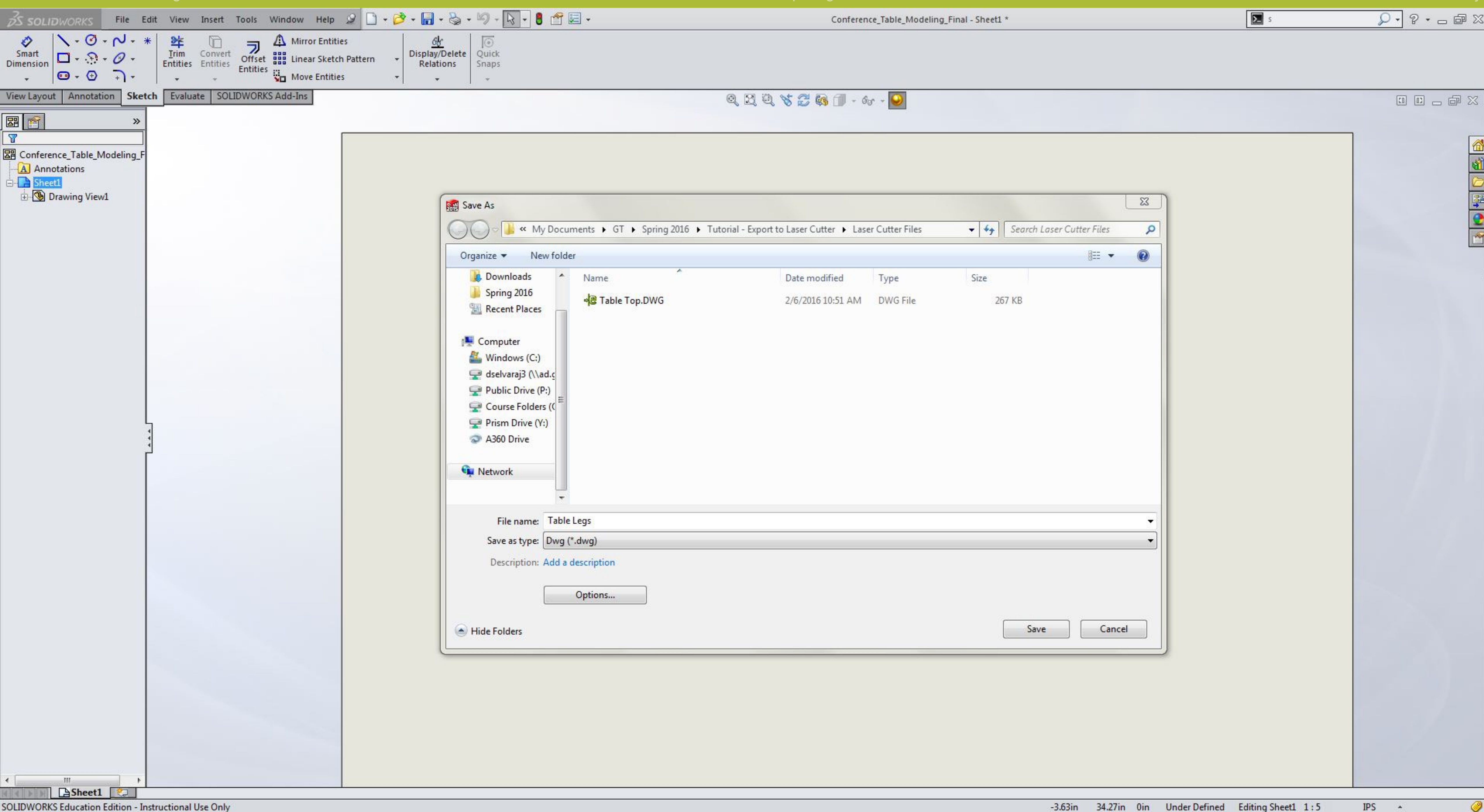
In the Feature Tree, hide the table top and cross support bodies by right-clicking and choosing the Hide command.



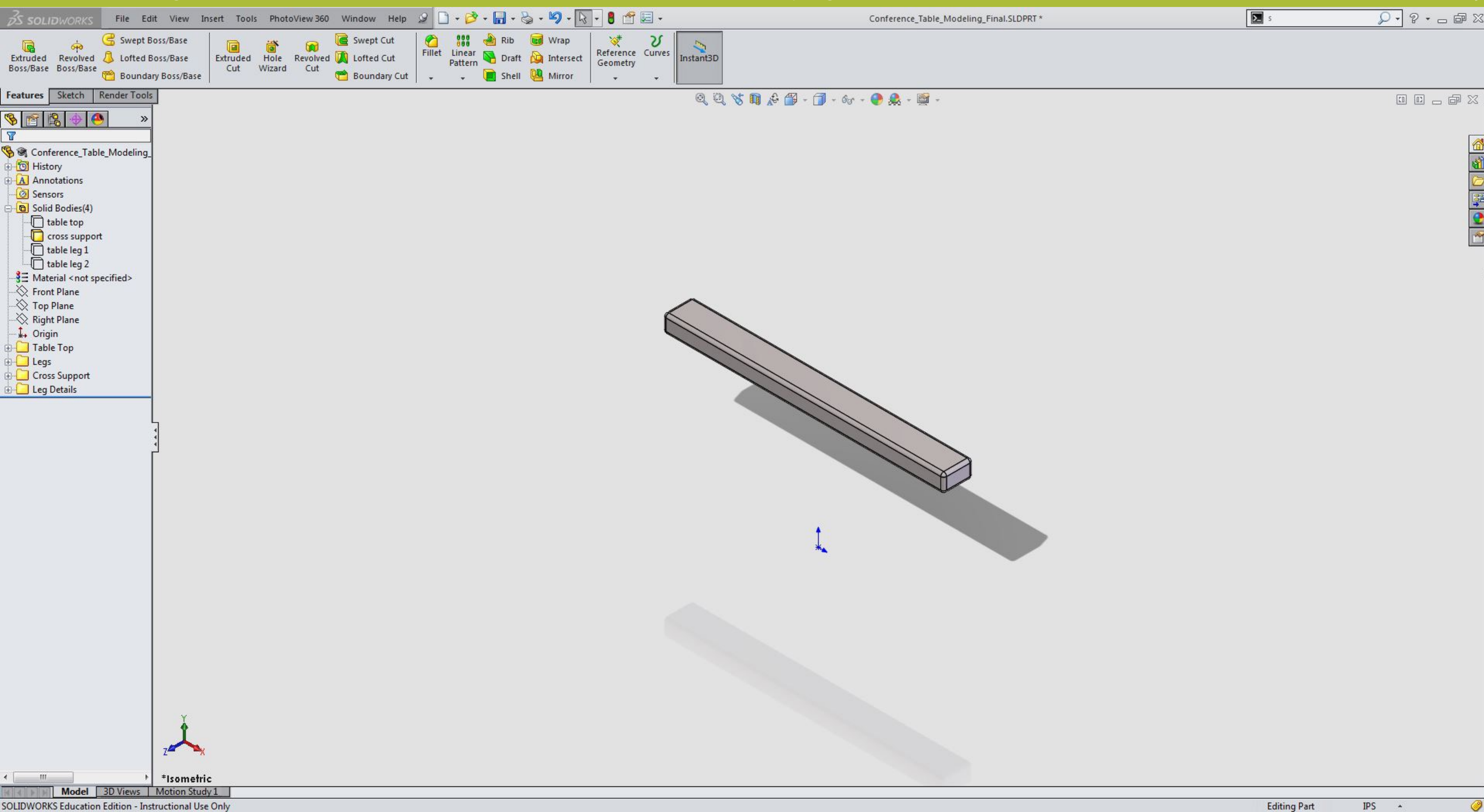
Use the Window menu to switch back to the Drawing window. Click the Rebuild icon in the Menu Bar to refresh the drawing file.



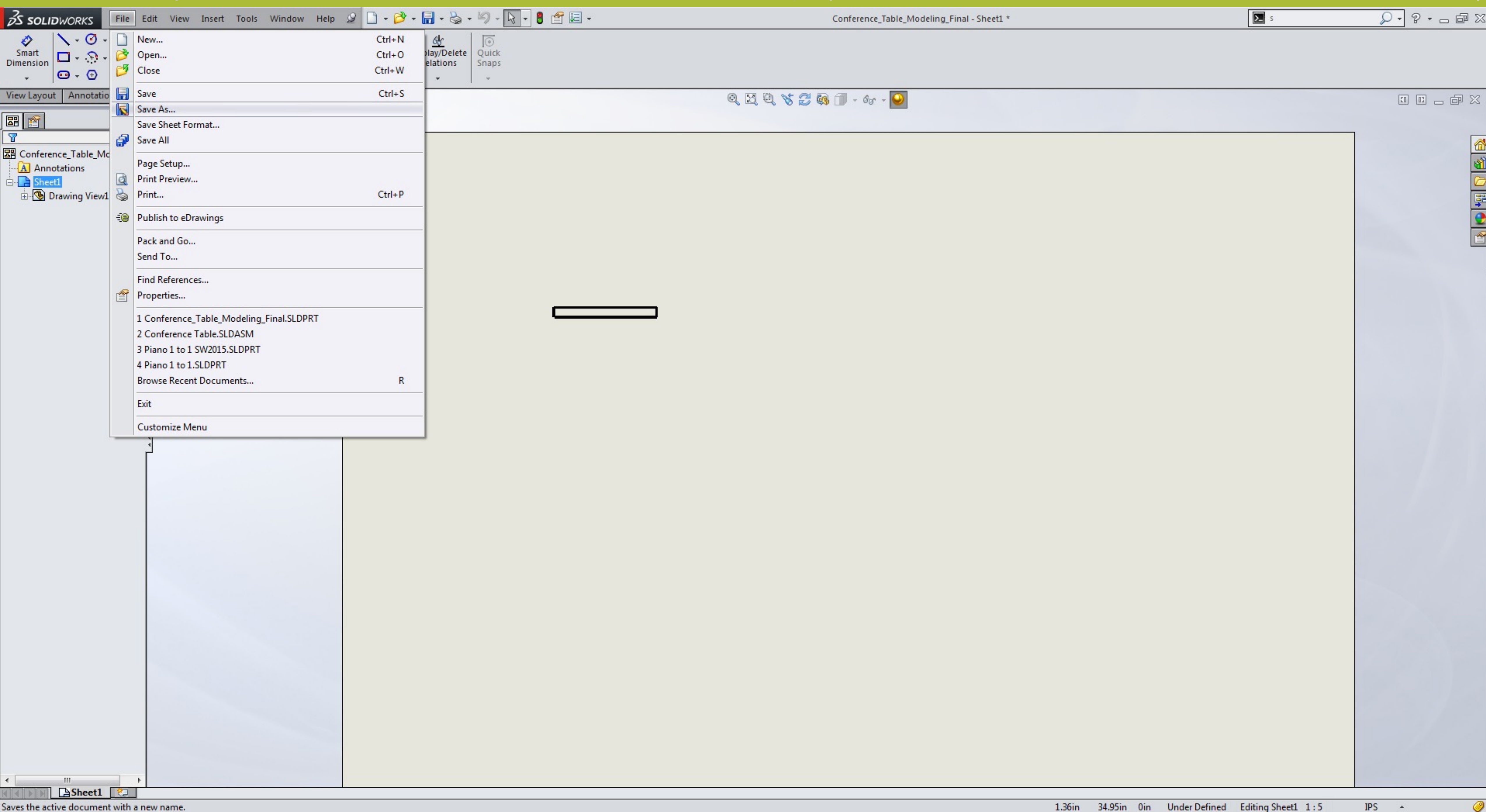
The file should reflect the changes made in the model and only show the legs.



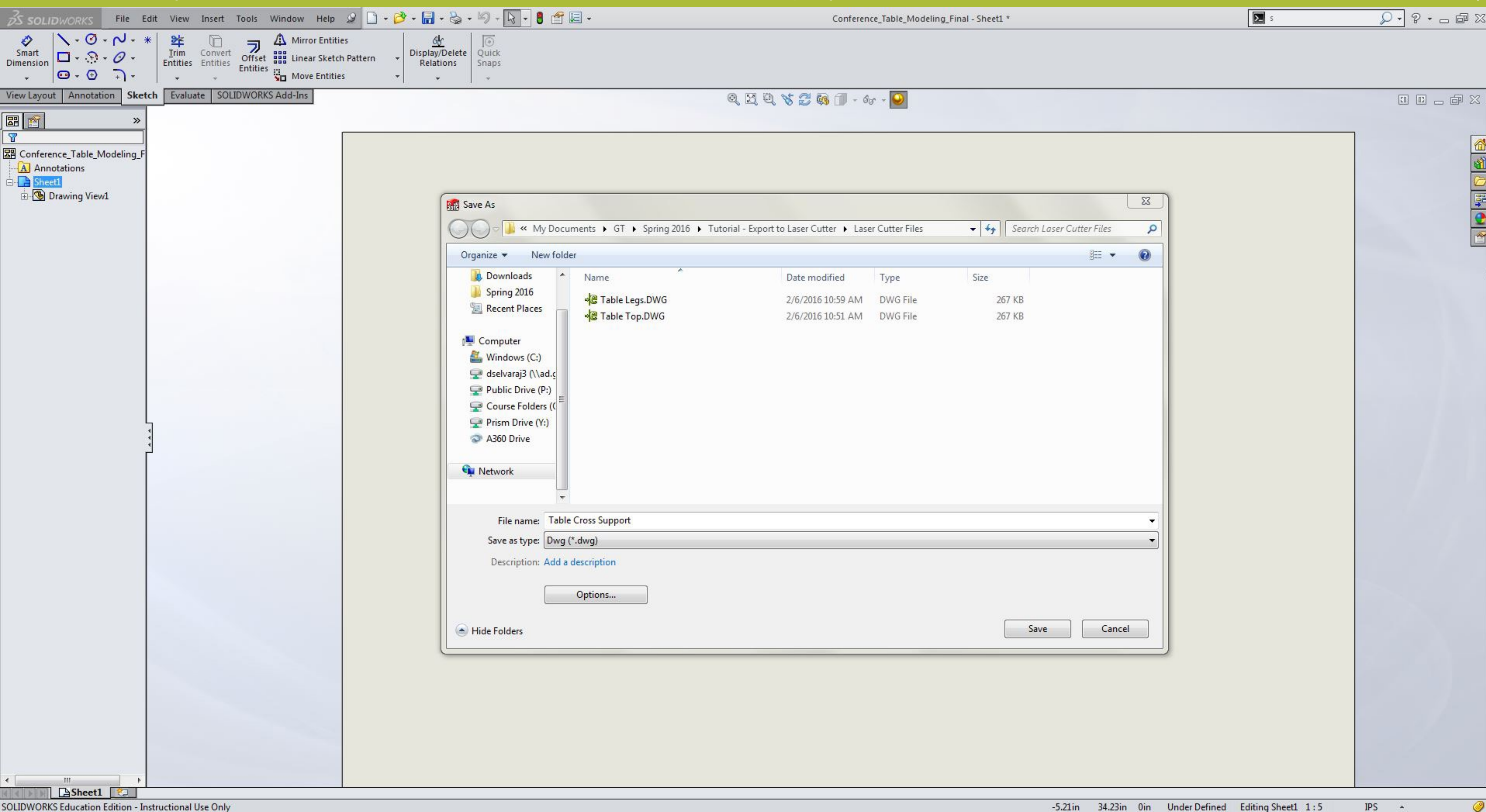
Save the file with the legs using the Save As command as a DWG file.



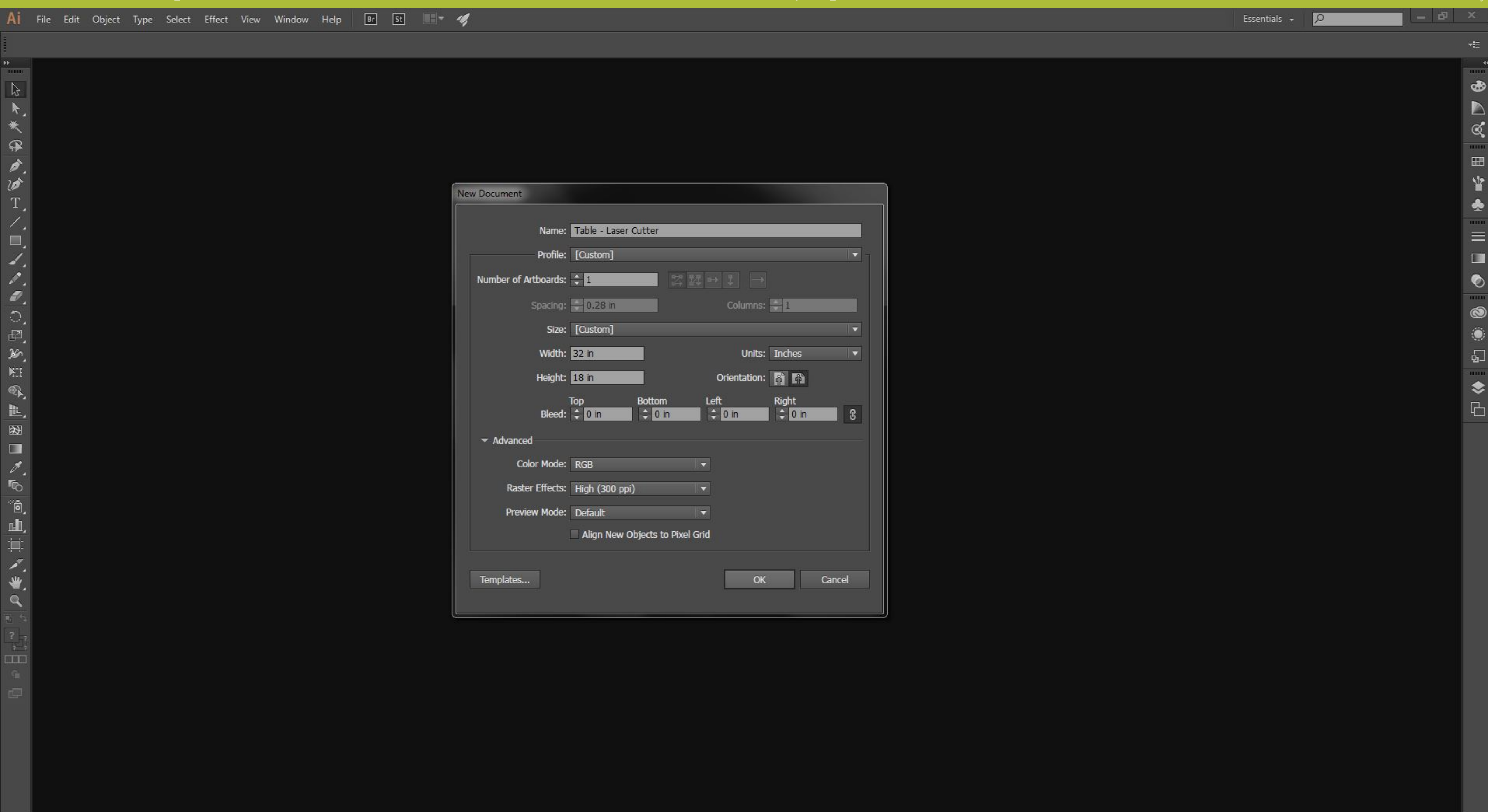
Repeat the steps again to show only the cross support in the model by hiding the other bodies.



Rebuild the drawing to update it and save it using the Save As command.

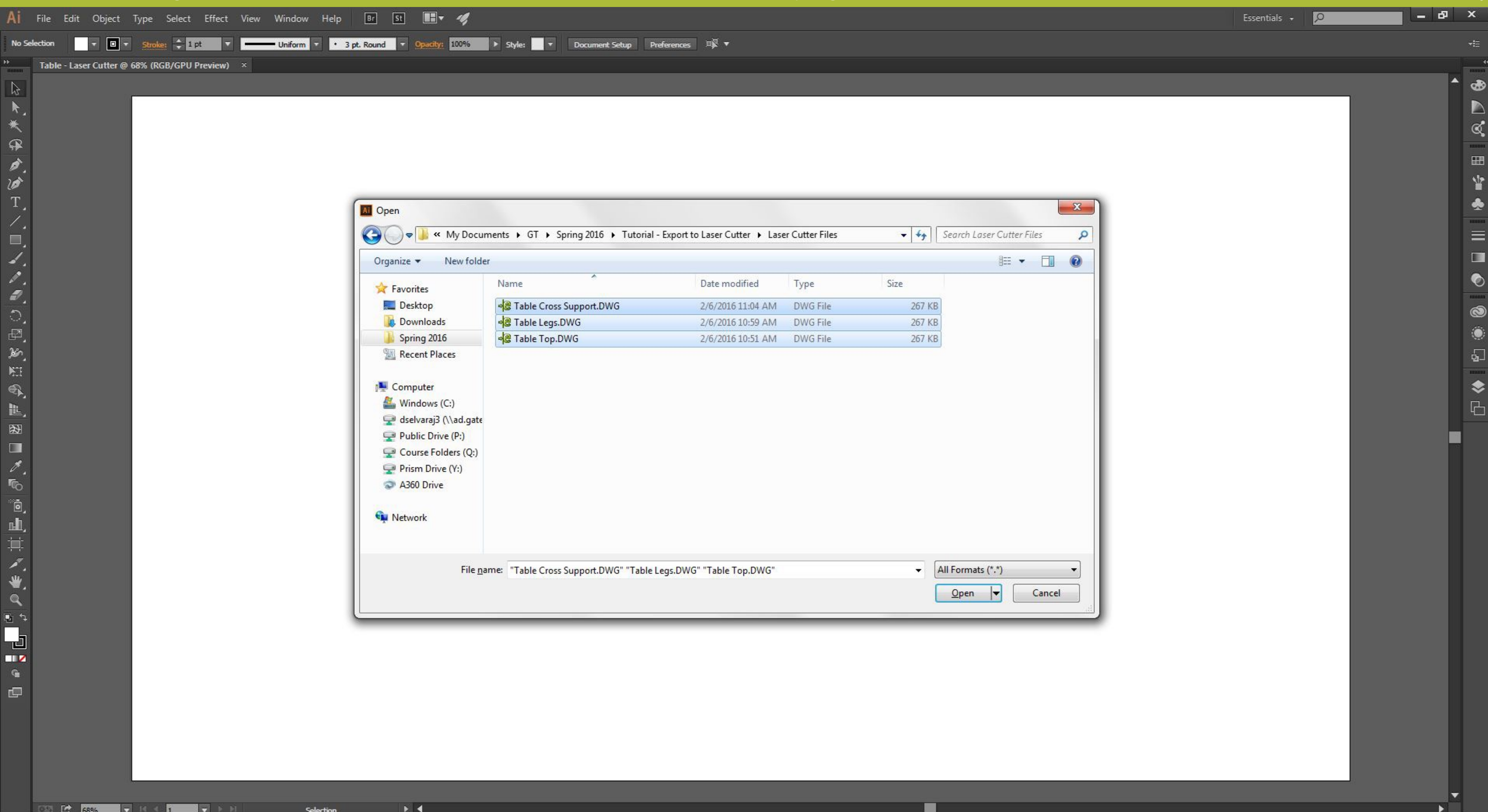


Ensure that it is saved as a DWG format in a separate file.

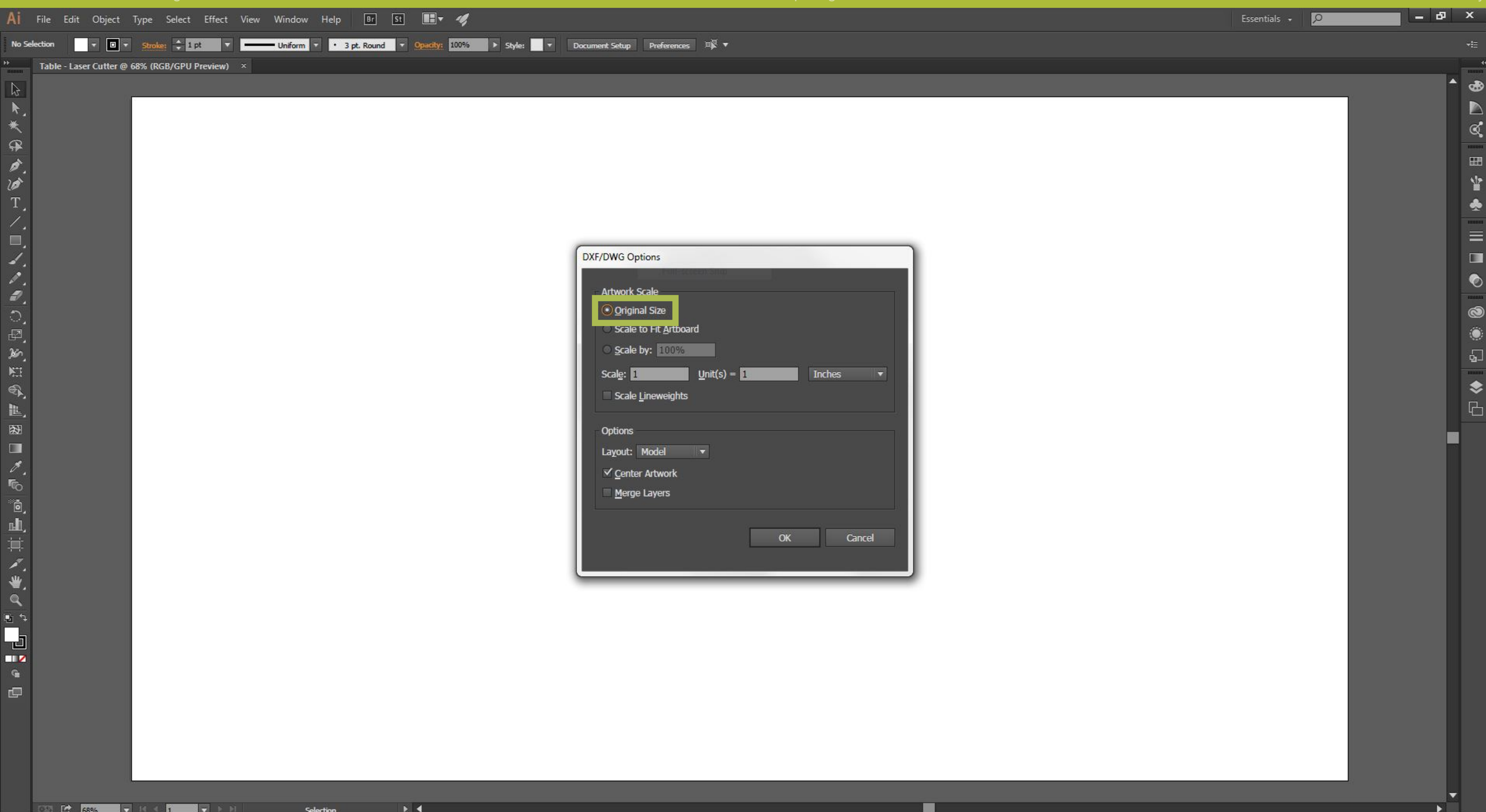


Open Adobe Illustrator and create a new document with the following settings:
32" x 18" - Landscape - RGB - 300 dpi

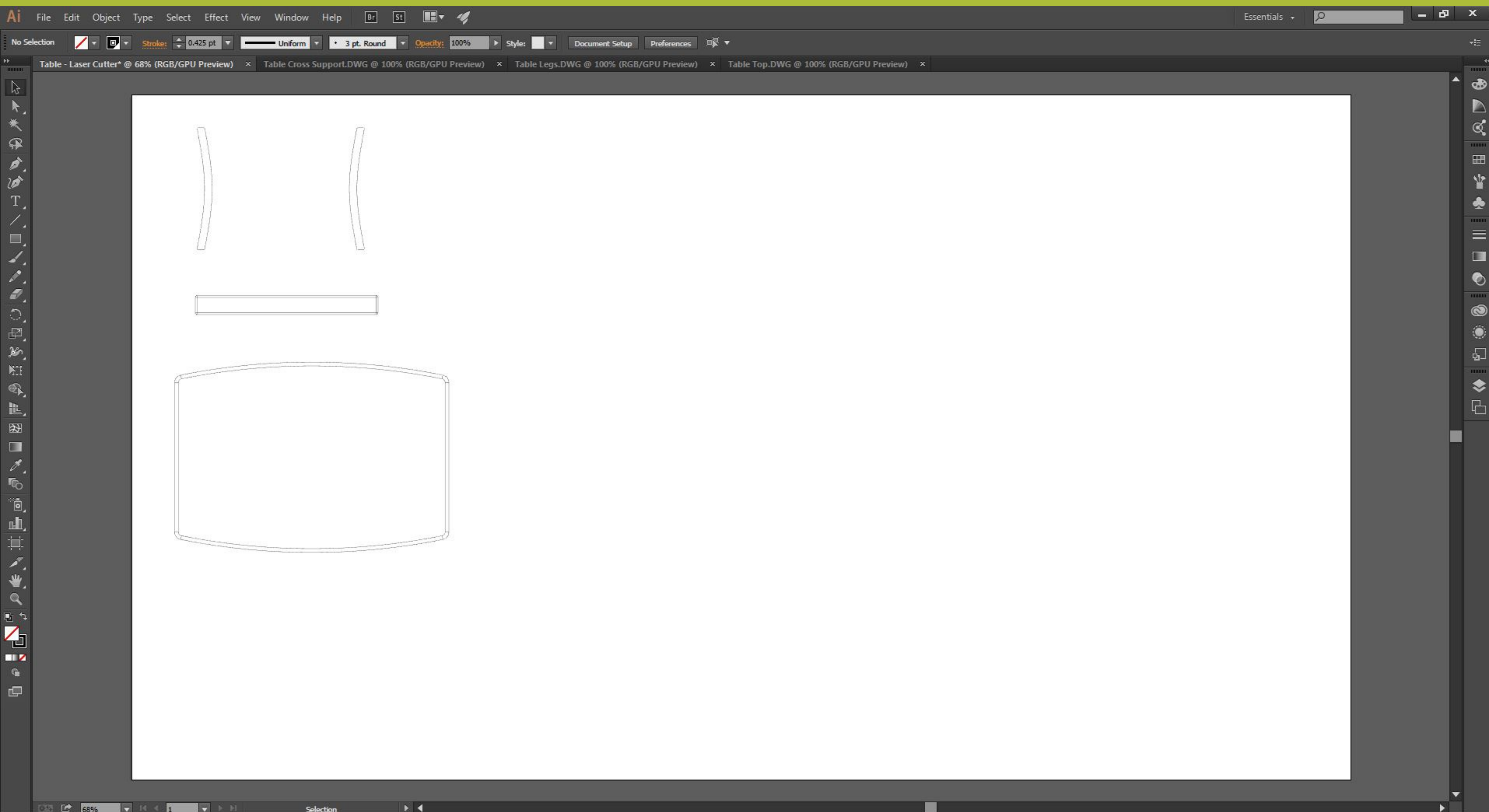
The 32" x 18" size matches the bed size of the laser cutter.



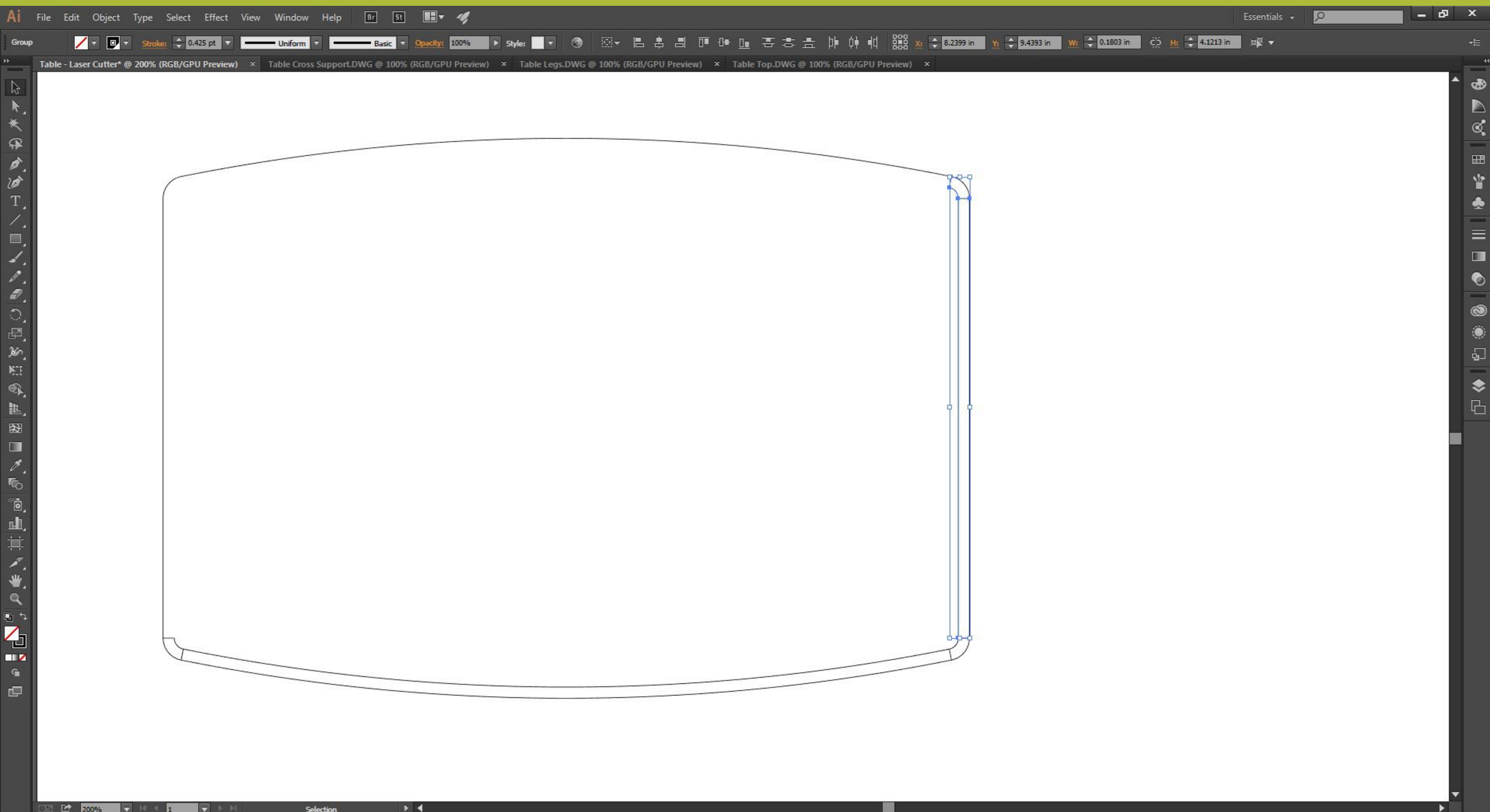
Once the new document is created. Choose File > Open command and open all the three DWG files created from the previous steps.



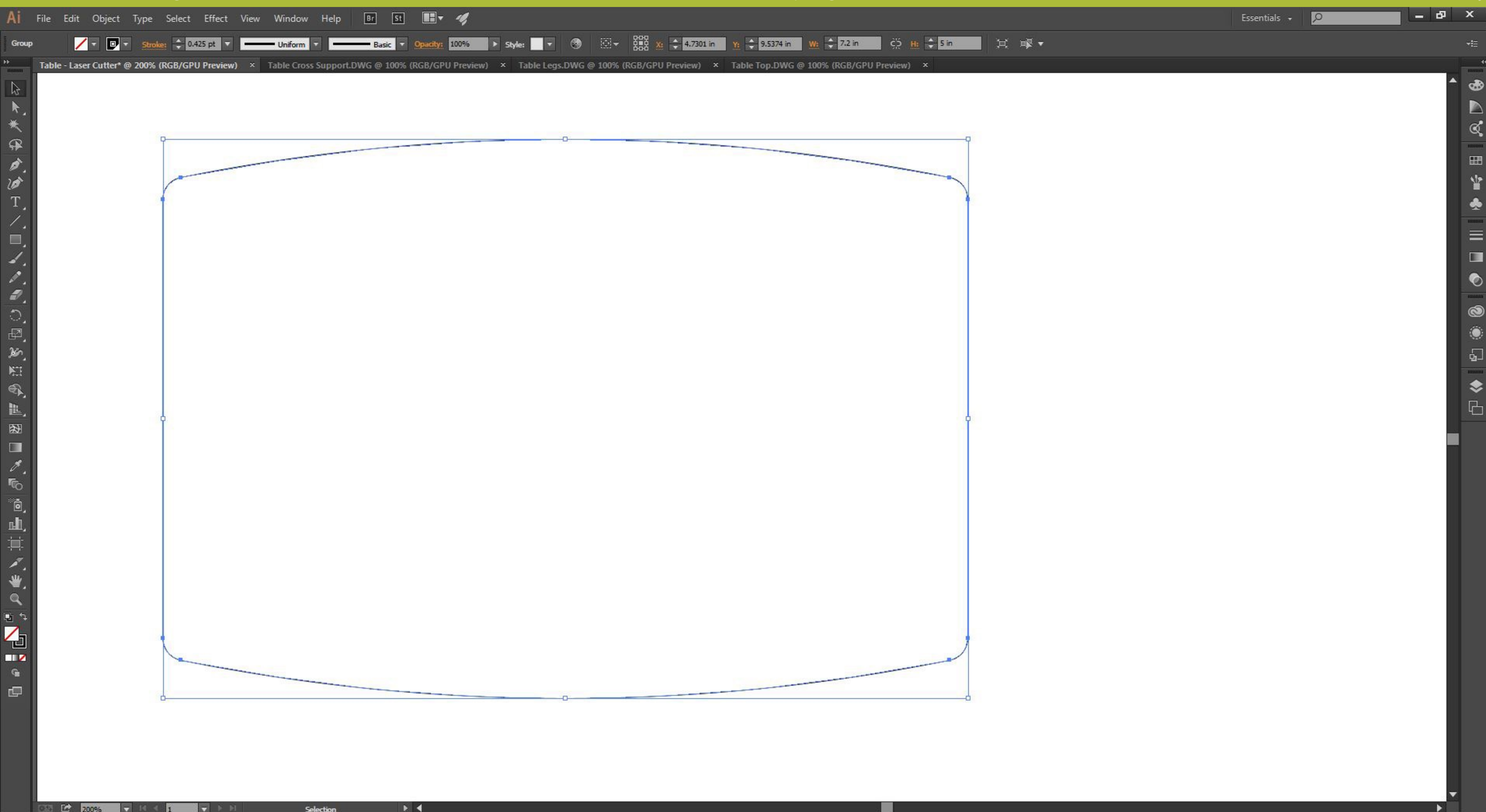
In the DXF/DWG Options box, choose the Original Size option. This avoids any scaling since the drawing is already scaled to 1:10.



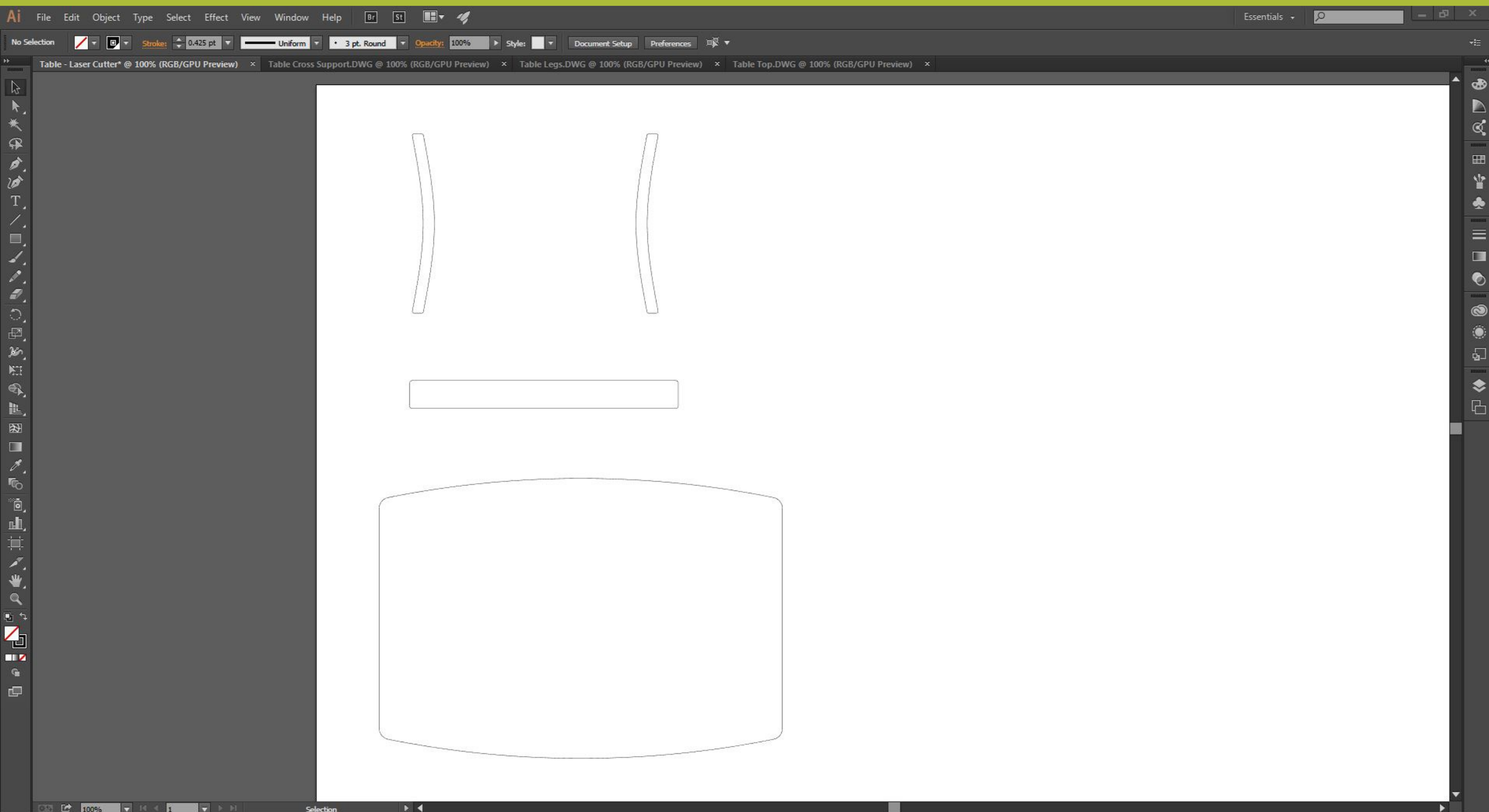
Once the files are opened, copy and paste all three drawings into the empty document created in Illustrator.



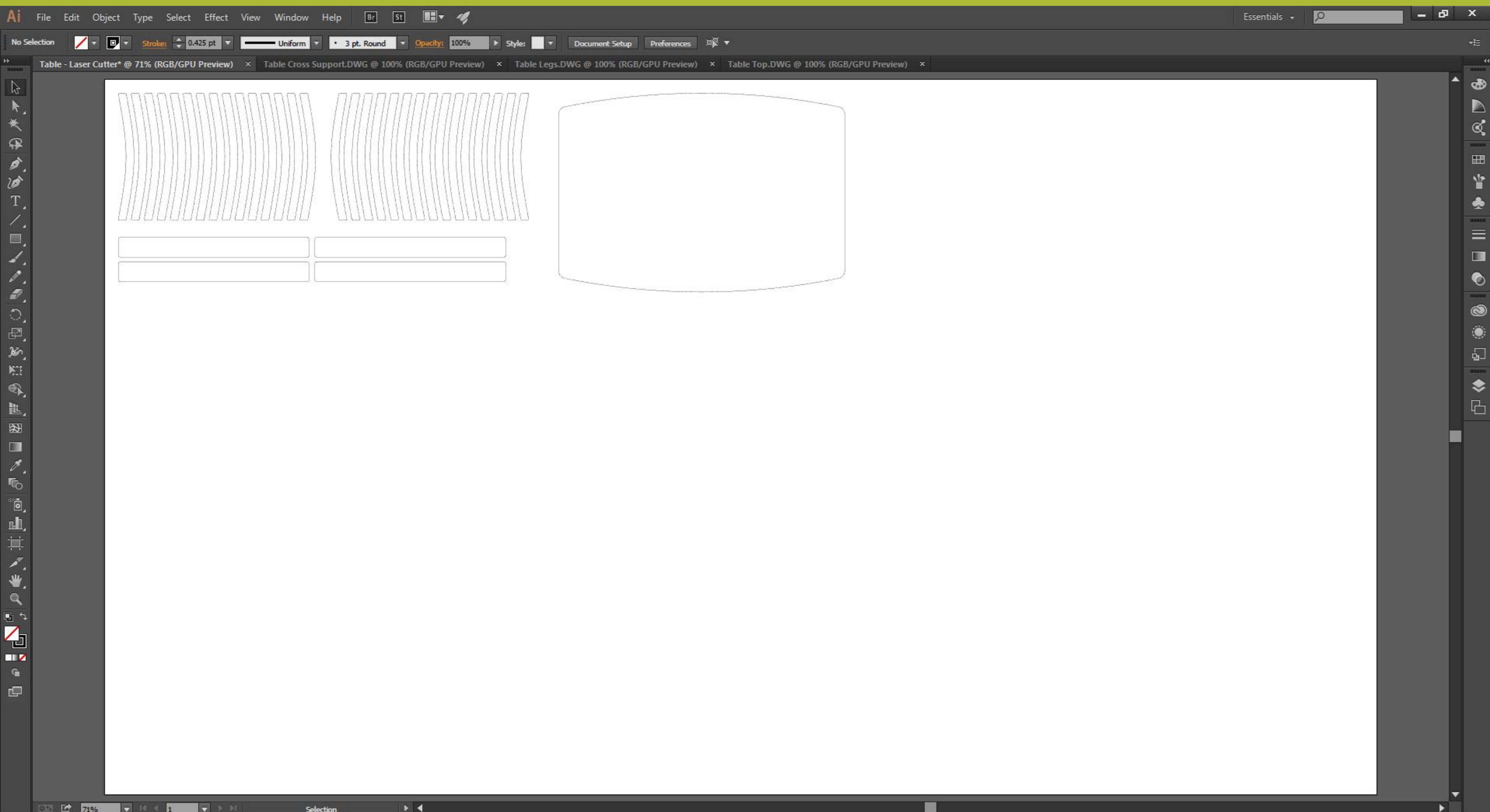
Since we need only the outline of the shapes, select and deletes all the lines inside the shape with the selection tool.



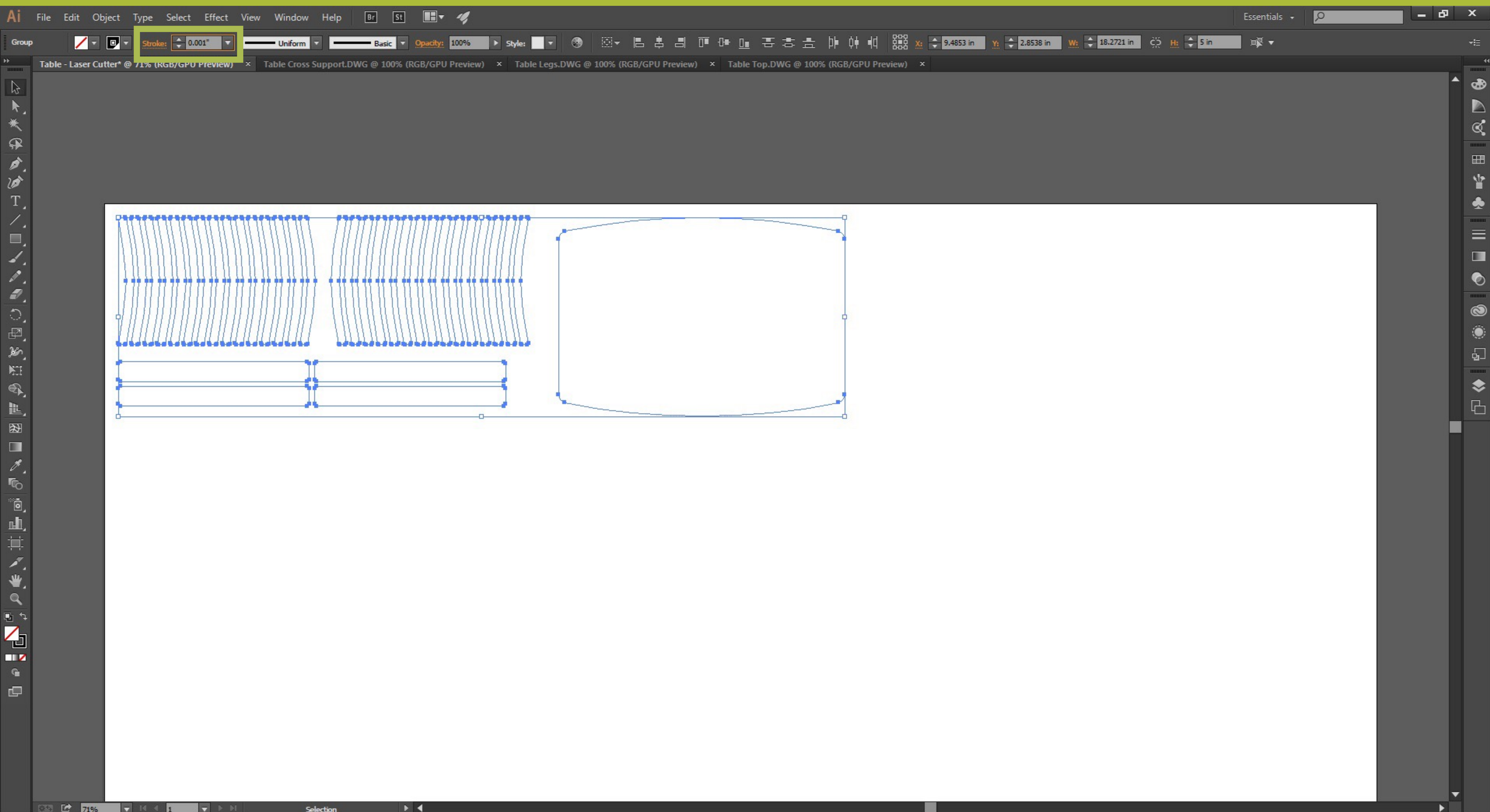
Select all the pieces of the loop and press Ctrl + J (Cmd + J on a Mac) to join all the pieces to form one complete loop.



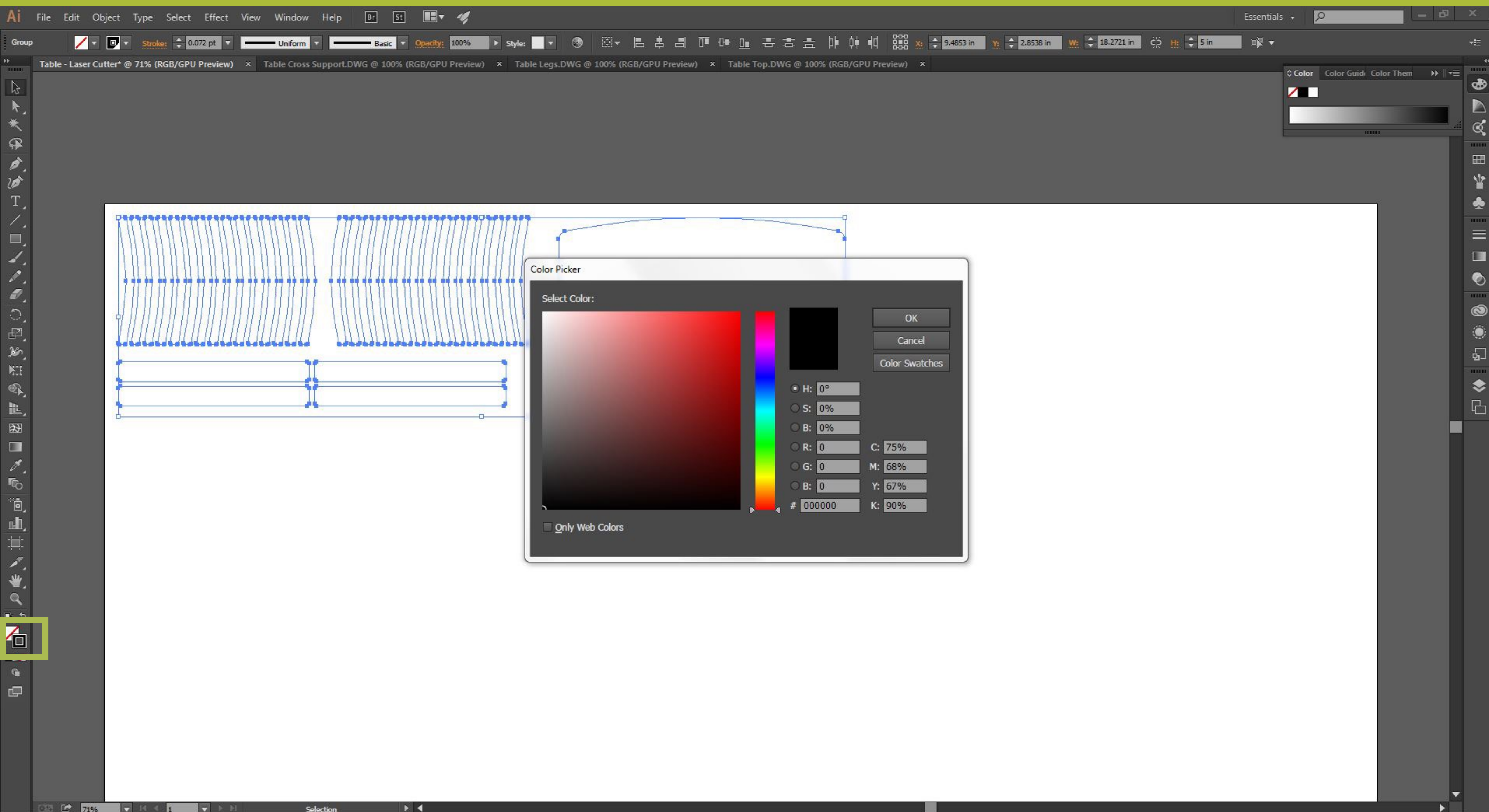
Repeat the steps to form closed loops of the other pieces.



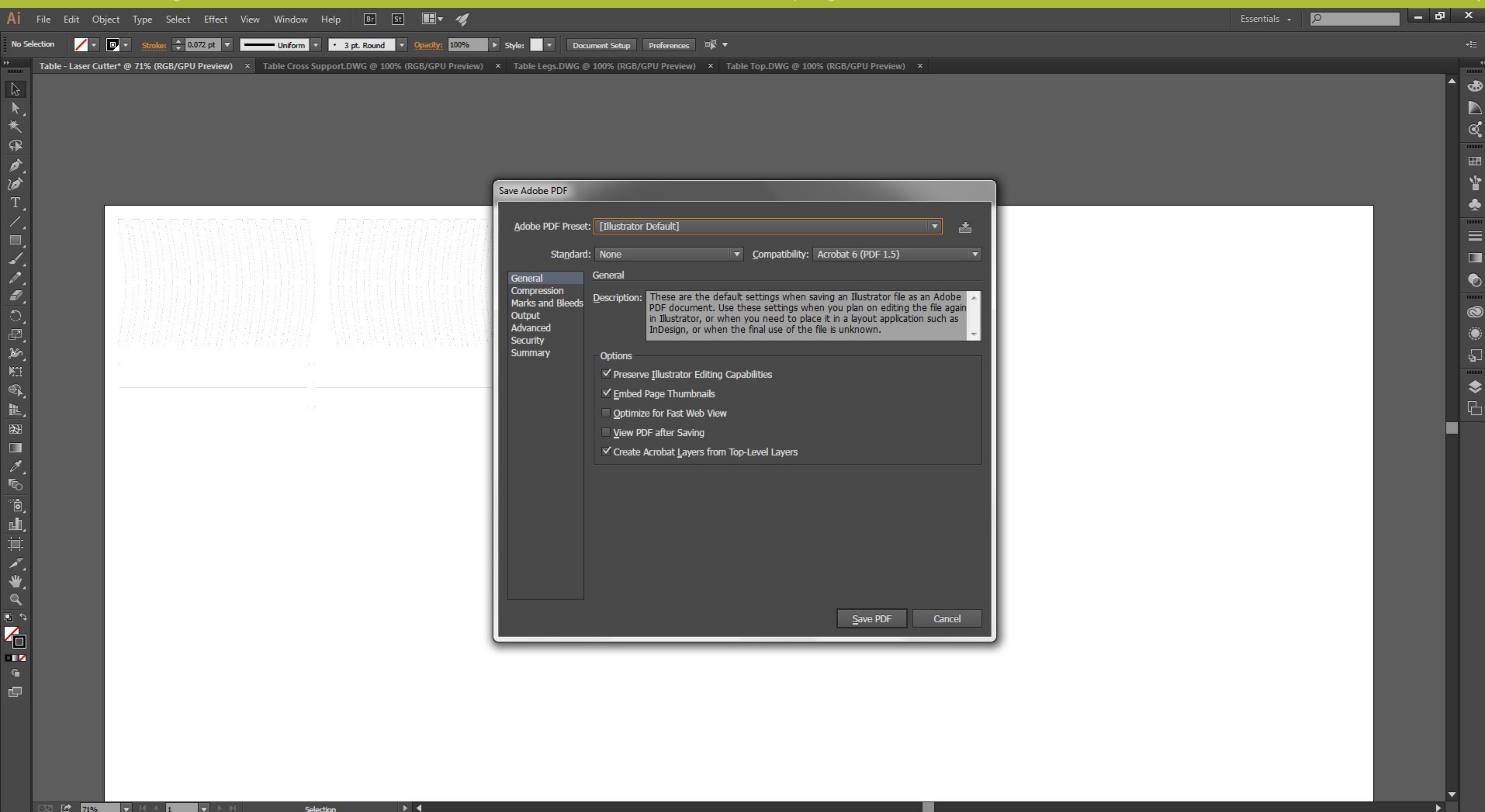
Make copies and lay it out to fit the area of the material you will be using to cut.



Select all the lines and set the stroke weight to 0.001" (0.072 pt)



Double click on the stroke color box to open the Color Picker. Set the stroke color to true black RGB 000.



Save the file as a PDF using the Illustrator Default option. Use the PDF file to print in the laser cutters.