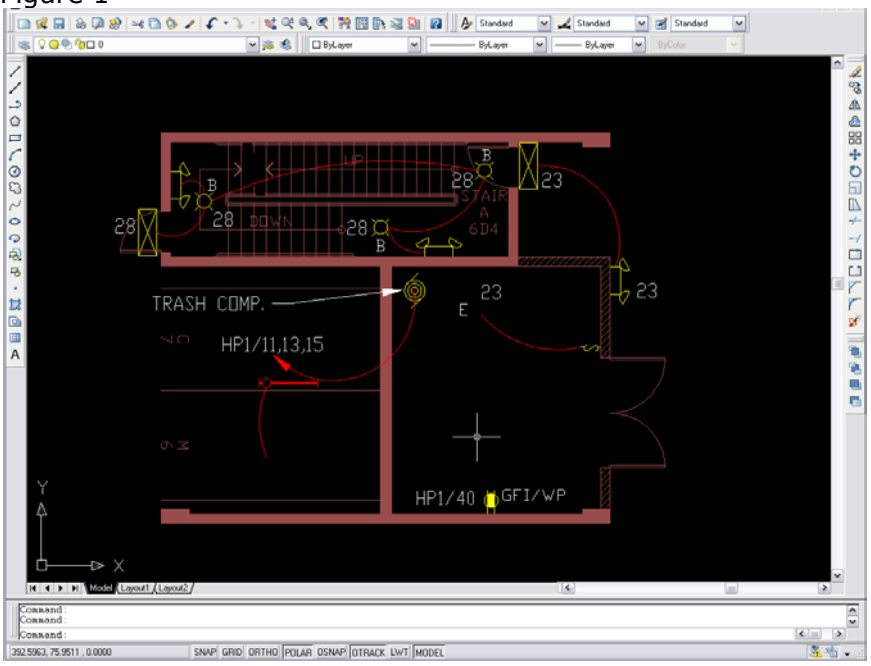
Procedure for creating a print-ready CALS file thru AutoCad 2005
v1.0 1-26-2006

1) Open your DWG in AutoCad

For these instructions we will be using a drawing called 'sample.dwg' (see fig. 1). The sample file represent many of the elements you might have in a typical AutoCad file: multiple colors, multiple layers, multiple lineweights needed, etc.

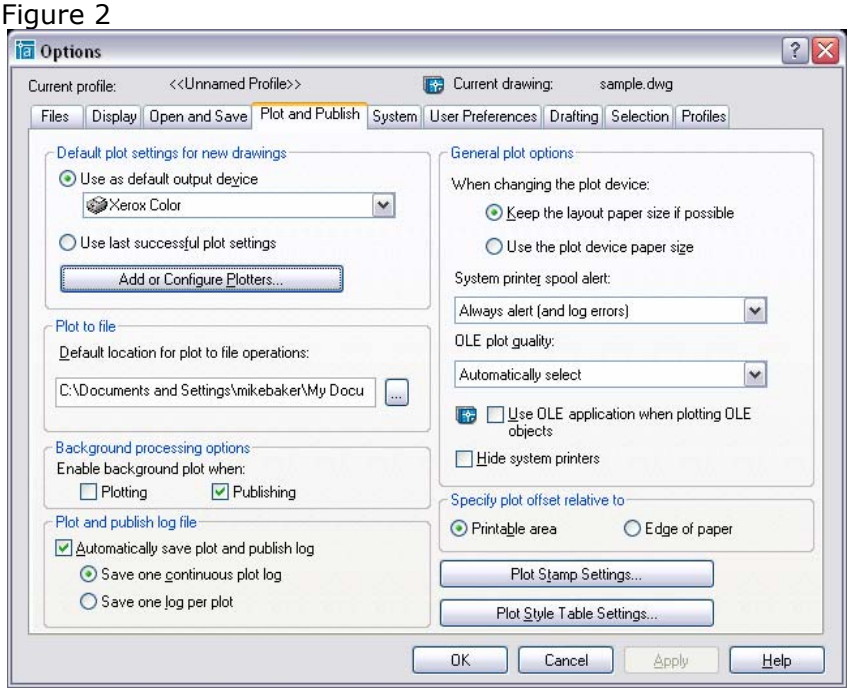
Figure 1



2) Configure the CALS driver

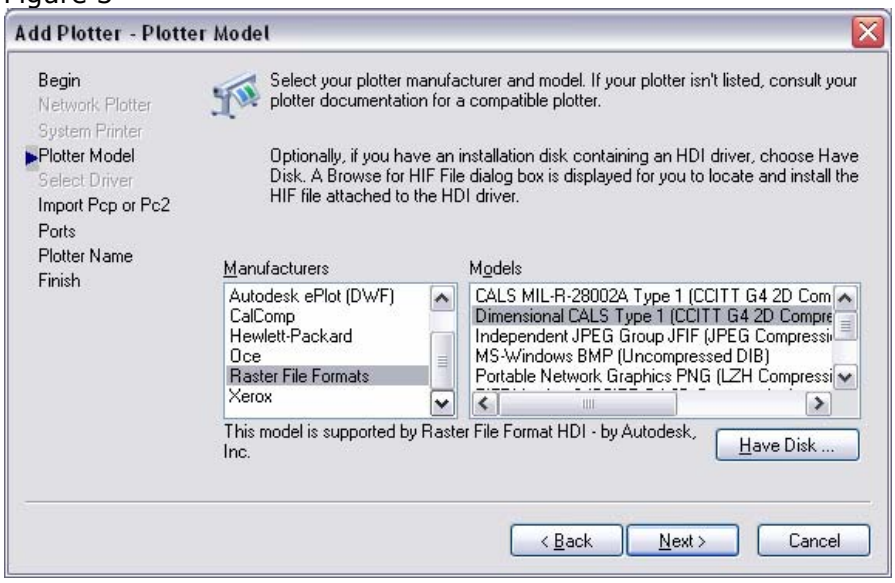
Autocad 2005 ships with the CALS driver you will need, but it will not be setup by default. It set it up, go to the Tools>Options menu, and click on the 'Plot and Publish' tab. From there, click on the 'Add or Configure Plotter' button (see fig.2).

Figure 2



Double click on the 'Add-A-Plotter Wizard' icon. That will open up the plotter dialog screen. Click 'Next' at the initial screen, and then select 'My Computer' and click 'Next' again. From the selection menu on the left, click on 'Raster File Formats'. Then, from the right side, select the driver called "*Dimensional CALS Type 1 (CCITT G4 2D Compression)*" (see fig. 3). Then click 'Next'.

Figure 3



Click 'Next' again, then select 'Plot to File' and click 'Next' again. Name this plotter whatever you wish (something identifiable, like CALS Plotter), and click 'Next' again.

Now that the driver is installed, we need to configure paper sizes. Click on the 'Edit Plotter Configuration' button. That will bring up the config editor (see fig. 4). There are several pre-defined paper sizes, but oddly 24 x 36 (the most common size) is absent from the list. You should scroll through the standard sizes listed to see is a size you regularly use is also missing. Once you know what size you need to add, click on 'Custom Paper Sizes', and click the 'Add' button. That brings up the 'Custom Paper Size' wizard (see fig. 5).

Select 'Start from scratch' and click 'Next'. Enter your desired sizes and units. For this example we are using 36 width, 24 height, and inches (see fig. 6). Click 'Next'. Since we are plotting to file, and not to paper, we don't need to worry about printer margins. So, just set all the margins to 0.00 and click 'Next' (see fig. 7). Name this custom paper size something appropriate (ours is named '24 x 36 inches') and click 'Next'. Again, name the new configuration something appropriate, and click 'Next' and then click 'Finish'.

Figure 4

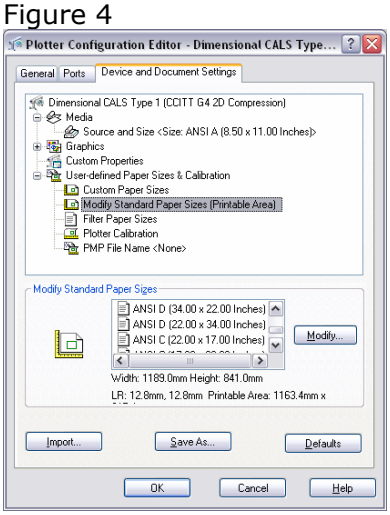


Figure 5

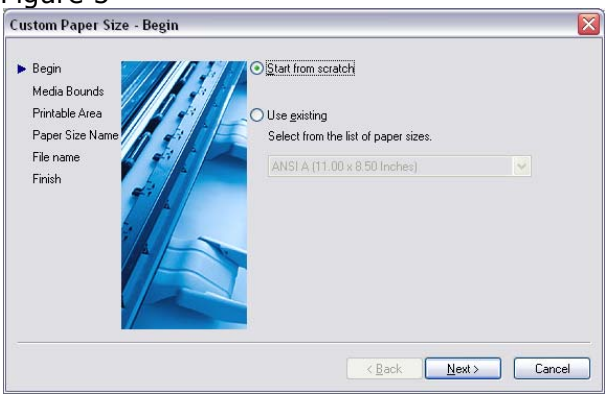


Figure 6

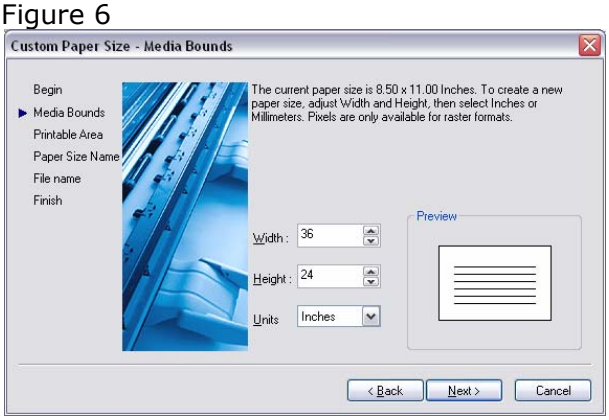
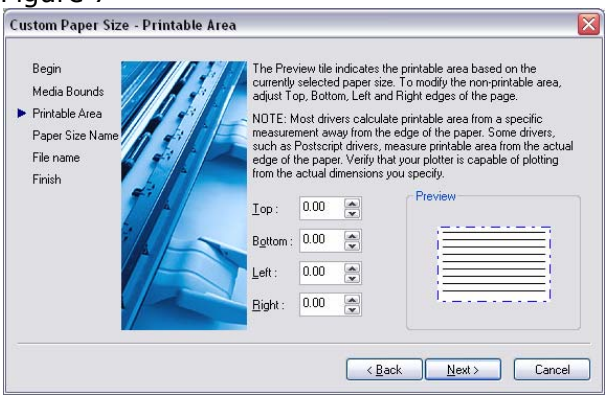


Figure 7



3) Create your CALS file

Back in the sample, go to File>Plot. From the plotter drop-down menu, select the plotter you just made (if you created custom sheets sizes, it will have a .pc3 after the name). Then select your desired sheet size (see fig. 8). Select your plot area (window, extents, etc.) check the 'center the plot' box. Enter the drawing scale. Since our sample is just a test, we have selected 'scale to fit'.

If you have a CTB or other pen weight file you need to load, do it now. Select your file from the 'Plot Style Table' menu in the upper right corner.

IMPORTANT: If you do not have a special pen table to load, select 'monochrome' from the list. Otherwise all your colors will become a greyscale, becoming very difficult to read.

A typically configures plot dialog is shown in figure 9.

Finally, click on 'Preview' to see what your CALS file will look like (fig 10). If it looks ok, then right-click and select 'plot'. If not, hit Esc and make whatever change to the plot settings are needed, then preview again.

Figure 8

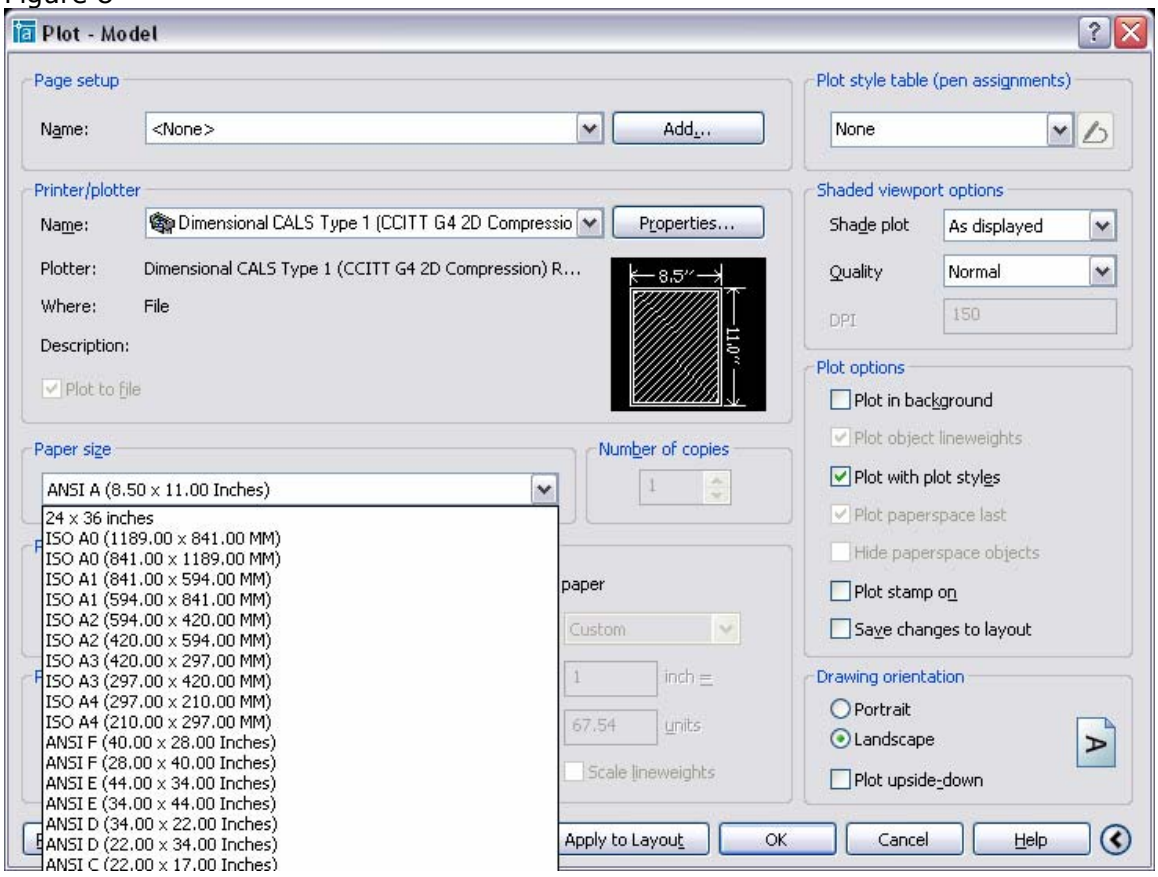


Figure 9

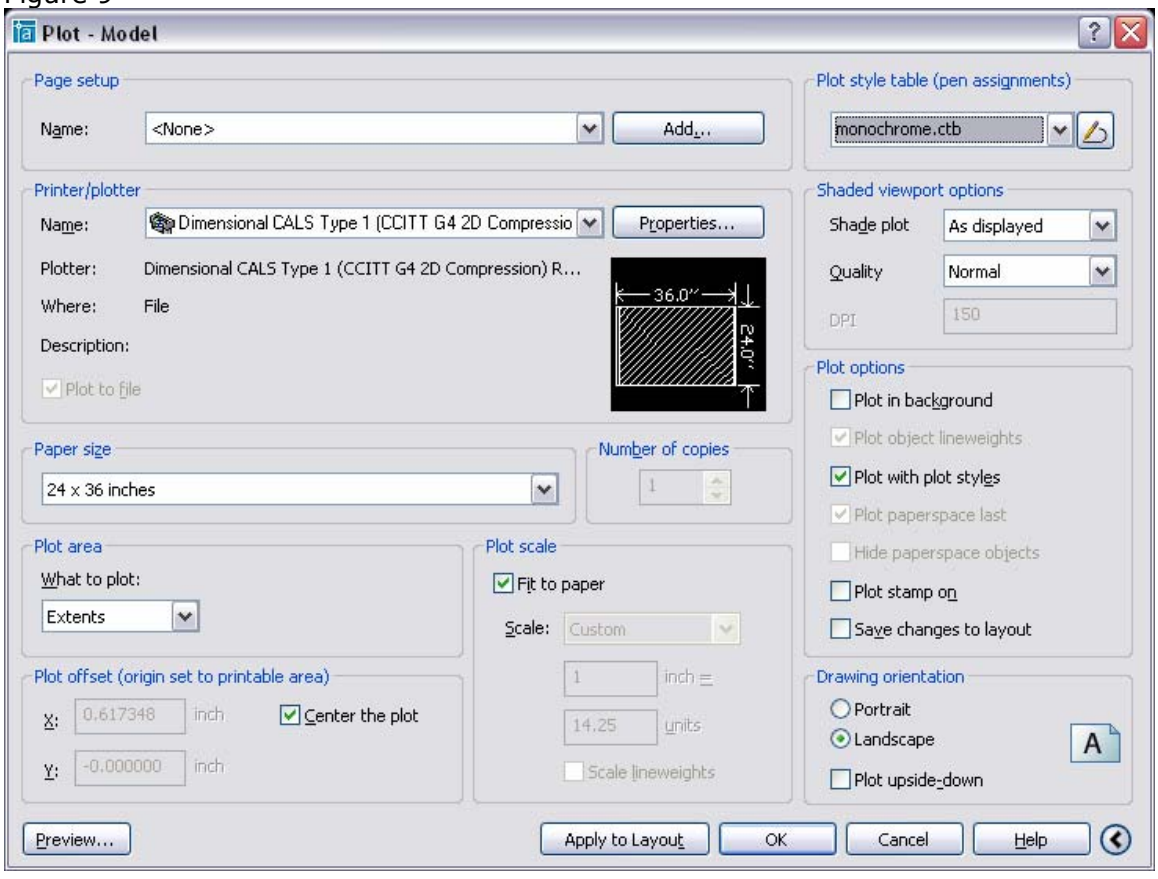
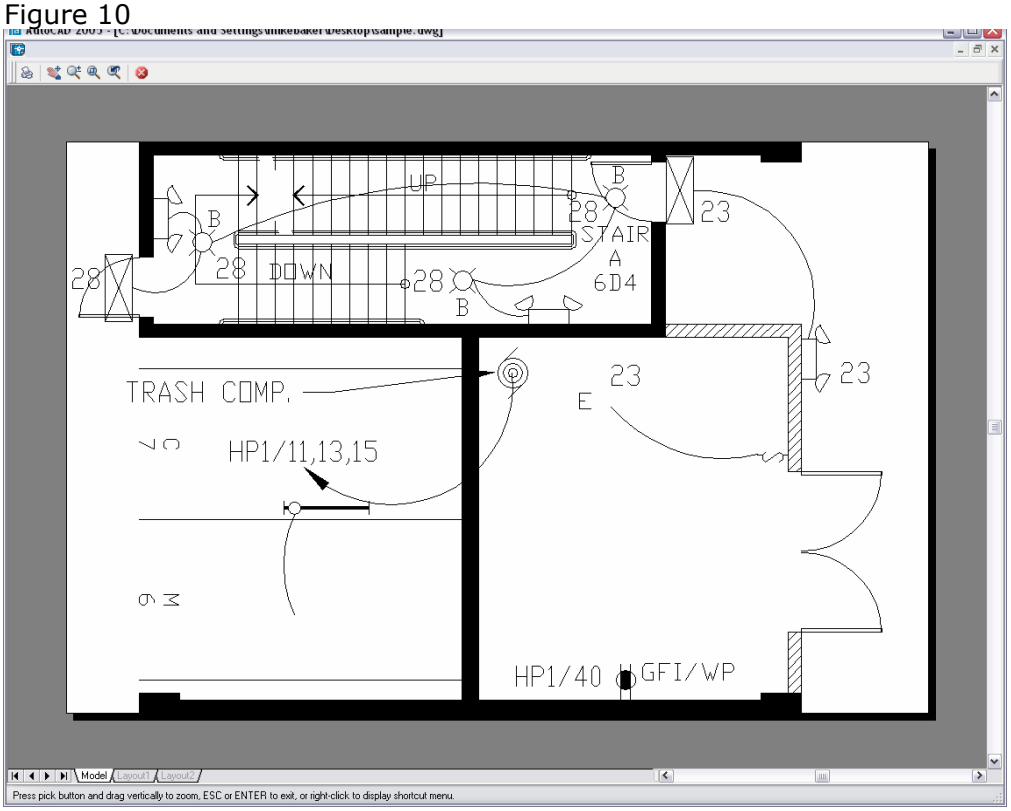


Figure 10



This particular sample contains no custom lineweights or screening. If you need certain colors screened or need special lineweights, your need to load a plot style table before plotting. For example, in our sample, the walls made with color 15. By creating a custom CTB file that makes color 15 **50% screened**, we are able to create a different look (see fig. 11). In this case, the walls are screened but the arrows and text are still solid black.

Figure 11