

# Plan and Profile Sheets with Sheet Sets in Civil 3D 2008

With the new automatic generation of Plan & Profile (P&P) sheets in Civil 3D 2008 has come the automatic organization of these sheets into a *sheet set*. However, up to this point many firms do not utilize the sheet set functionality.

This paper is written with the assumption that the users understand and use Layouts for printing and have a basic knowledge of how plot out of AutoCAD using the Page Setup Manager. An understanding of template files is also necessary to understand this document.

## ***Start with Your P&P Template***

There are several things the user can do to help facilitate the use of sheet sets.

- Create a layout with appropriate plot setup options for P&P sheets.
- Create a layout with appropriate plot setup for a coversheet.

First, start with the template.

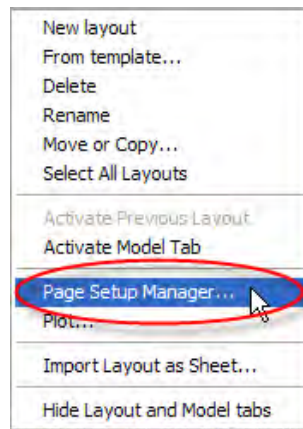
Civil 3D 2008 uses a special template for creating P&P sheets. By default, this is located in

*C:\Documents and Settings\%username%\Local Settings\Application Data\Autodesk\C3D 2008\enu\Template\Plan Production*

1. Open up your template file (as a DWT, *not* as a new DWG).

To save time down the road, your template's layouts should contain the print settings you intend to use frequently.

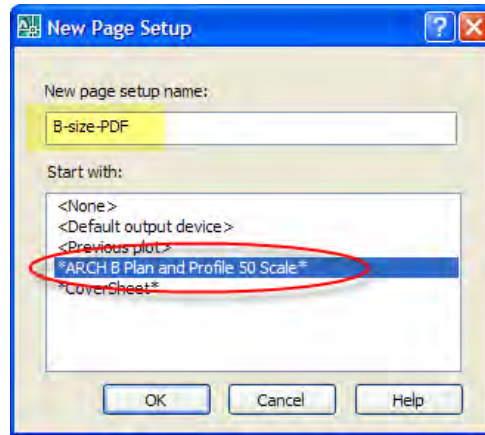
2. Right click on one of your layouts and select **Page Setup Manager**.
3. In the Page Setup Manager Dialog Box, click **New...**



4. Give the new page setup a name that reflects what size and what kind of plot this will be used for.

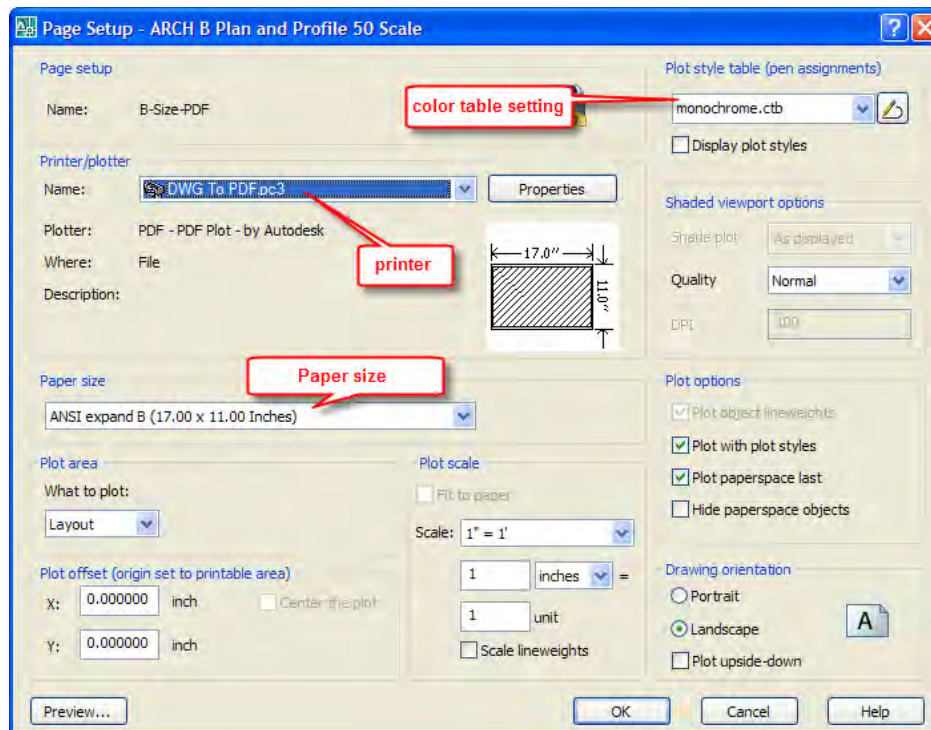
In this case, **B-Size-PDF**

In the **Start With** area, I chose my layout name.



5. Set your color table, printer and paper size to the correct settings.

In this case, I am printing in black and white, to a PDF file using a B-size sheet of paper.



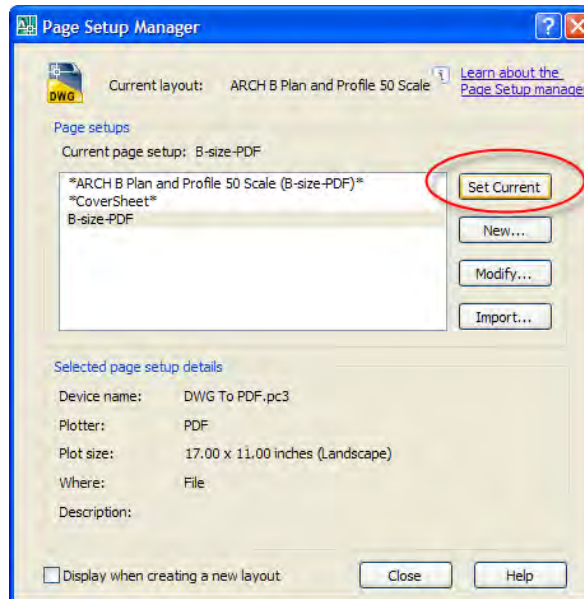
6. Once all the settings are correct, click **OK**.

7. Back at the Page Setup Manager, Click **Set Current**.

You may make several page setups to other plotters or file types if you wish. Later in this example, we will use these to override the page setup for all the sheets.

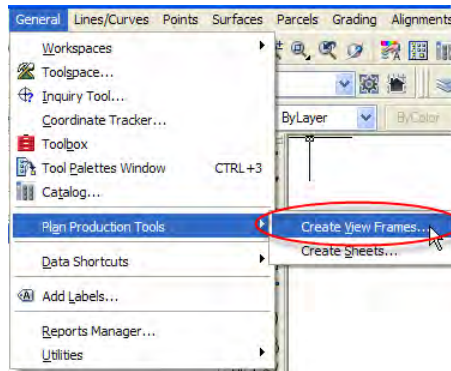
8. Then click **Close**.

9. Save and close your DWT.

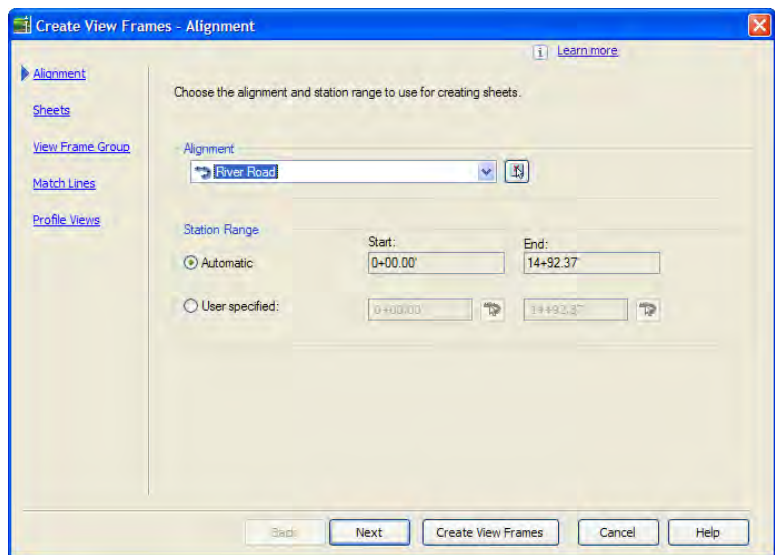


## Creating P&P Sheets in Civil 3D

1. When creating sheets, the first step is to create *view frames*.

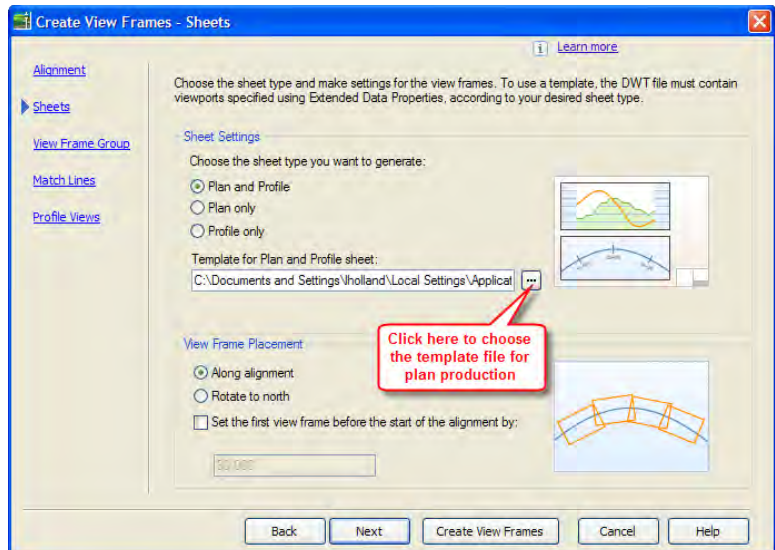


2. First, select the Alignment *River Road*
3. Click **Next**



In the view frame Wizard, select the template file we worked with earlier.

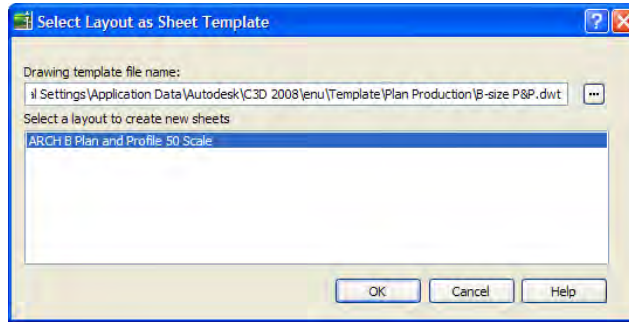
4. Click the ellipsis to browse out and verify the template file used for plan production.



5. You will then be able to choose any layout to apply to every new P&P sheet created.

6. Click **OK**

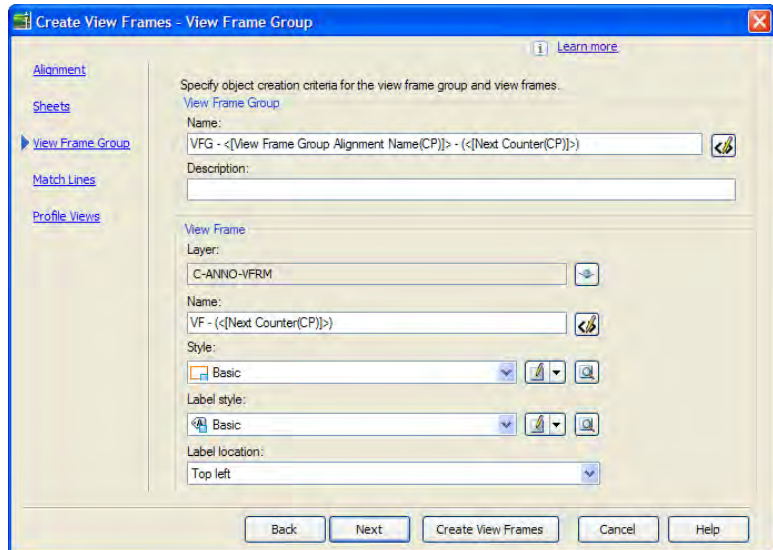
7. Click **Next**



8. The next Window indicated the name and style of the view frame group. The name will be generated automatically.

Since the default layer of the viewframes does not plot, all the defaults are sufficient in this section of the Wizard.

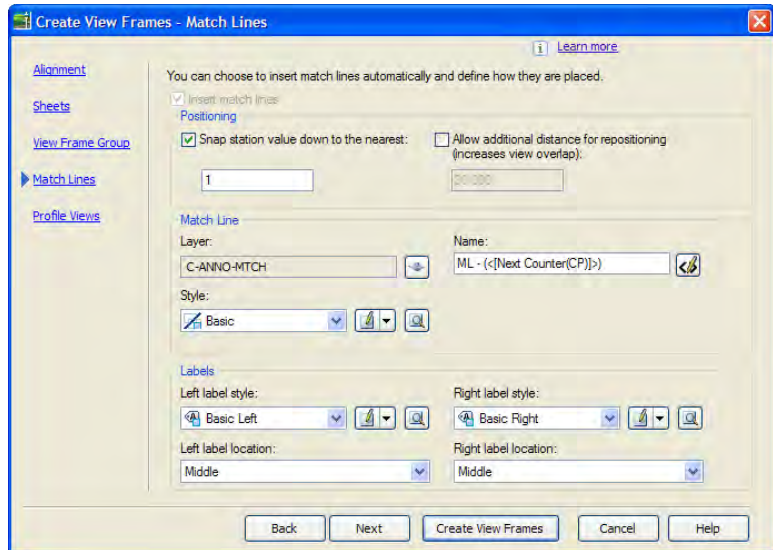
9. Click **Next**.



Now we can choose the Match Line settings.

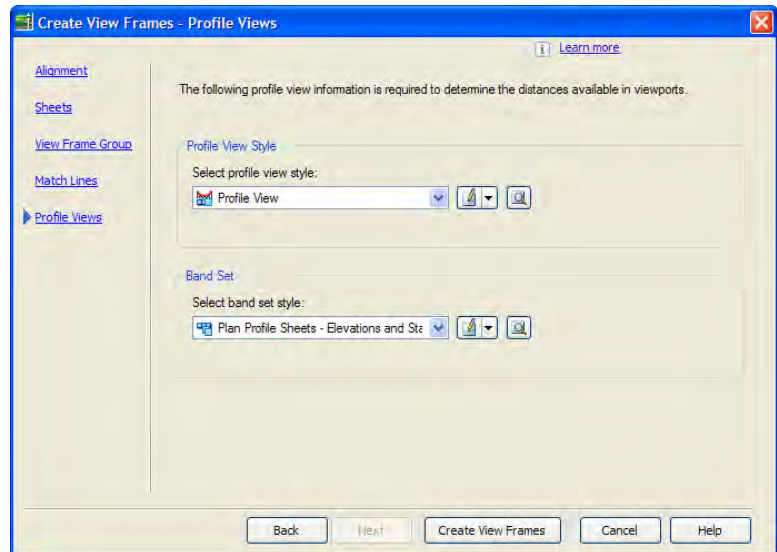
We will keep the defaults in this example.

10. Click **Next**

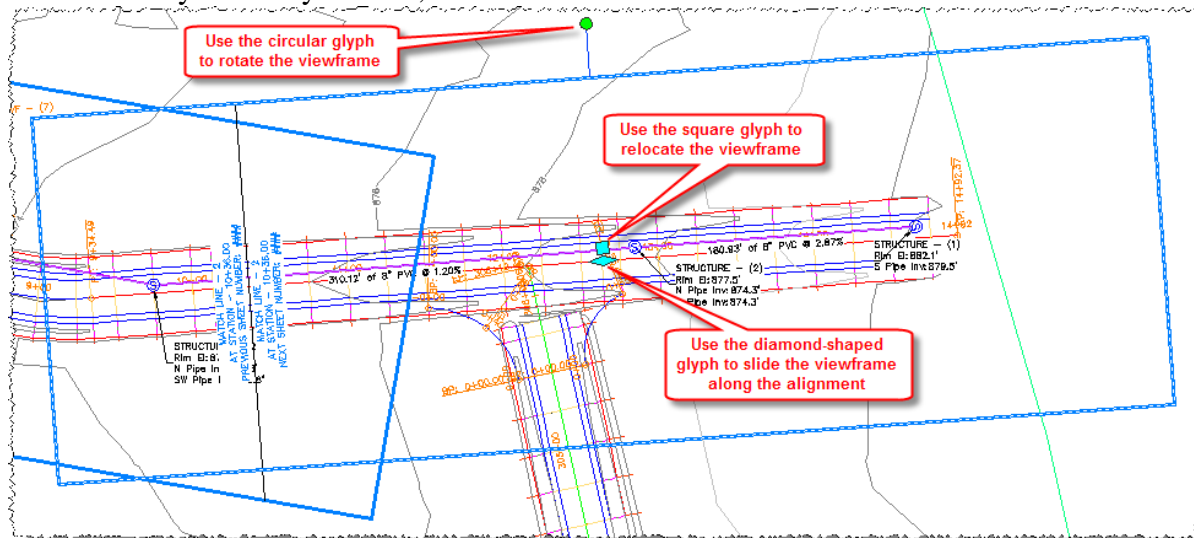


In this screen we verify the style and band set of the profiles used in the sheets.

**11. Click Create View Frames**



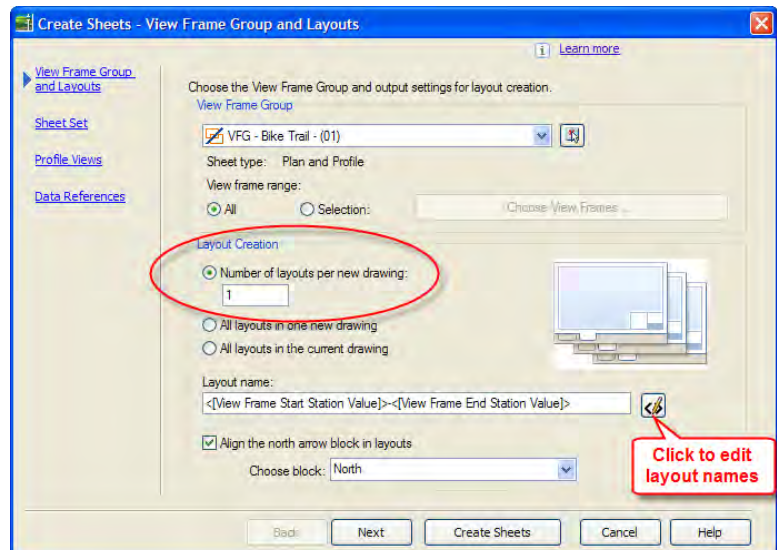
You should now have blue rectangles on your screen indicating the plan portion of the plan and profile sheet. Modify them if you wish, as shown below.



The next step is to create the sheets themselves.

**12. Go to General > Plan Production Tools > Create Sheets...**

13. When prompted in the Wizard, create *one layout per drawing*. This option will keep sheet management easy.



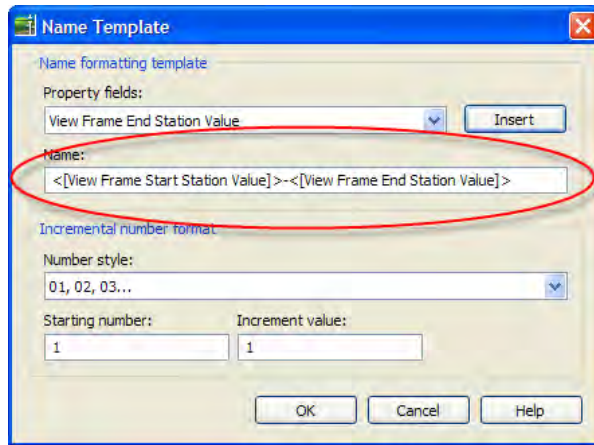
It is good practice to use the automated naming of the layouts to show station values.

14. Click on **edit feature** and use the property fields to set this automated naming.

15. Choose the property, then click **Insert** to add the property to the name.

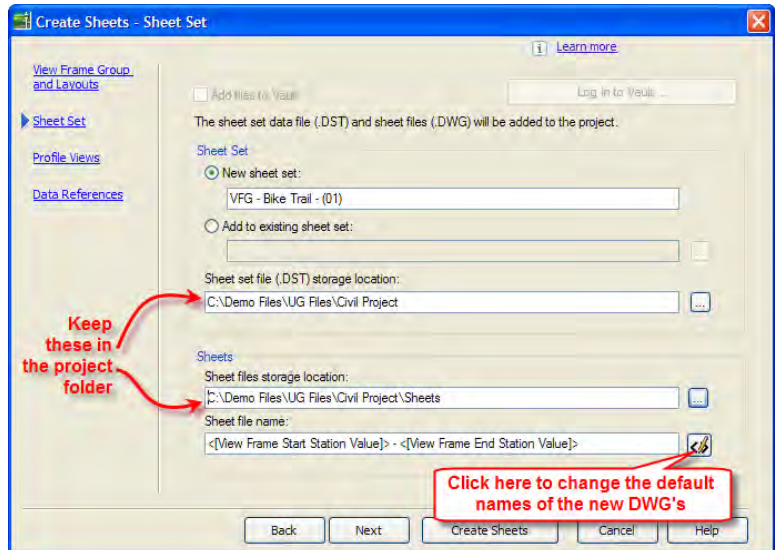
16. Click **OK**

17. Click **Next**



The location of the sheet set file (DST) and the sheets themselves are important. You will want to keep these together in a project folder.

18. Click **Next**



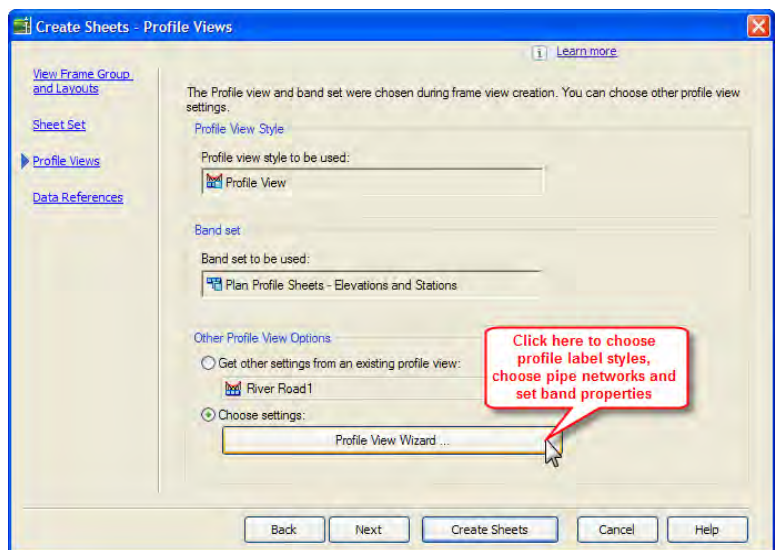
19. The Profile Views area has you verify the styles you chose in the view frame Wizard.

20. Under Other Profile View Options you will need to toggle on **Choose settings**.

21. Click on **Profile View Wizard** and step through the options that will control profile labeling, pipe network visibility and band properties.

22. Complete the Wizard

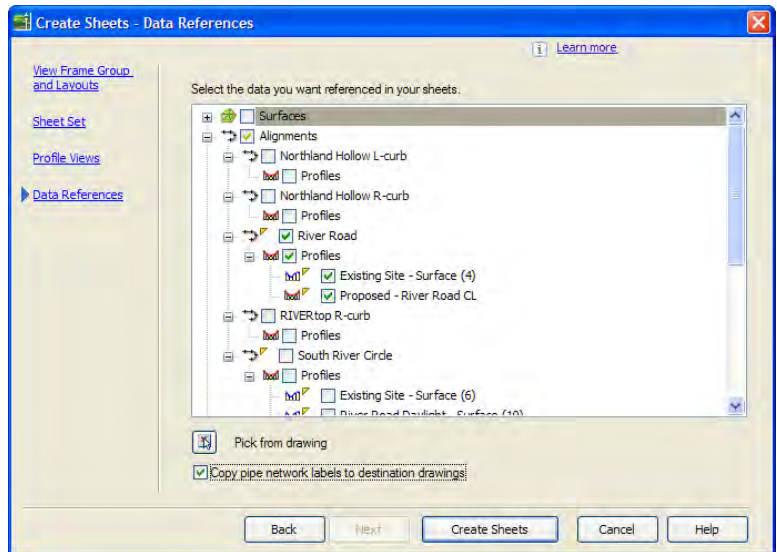
23. Click **OK**



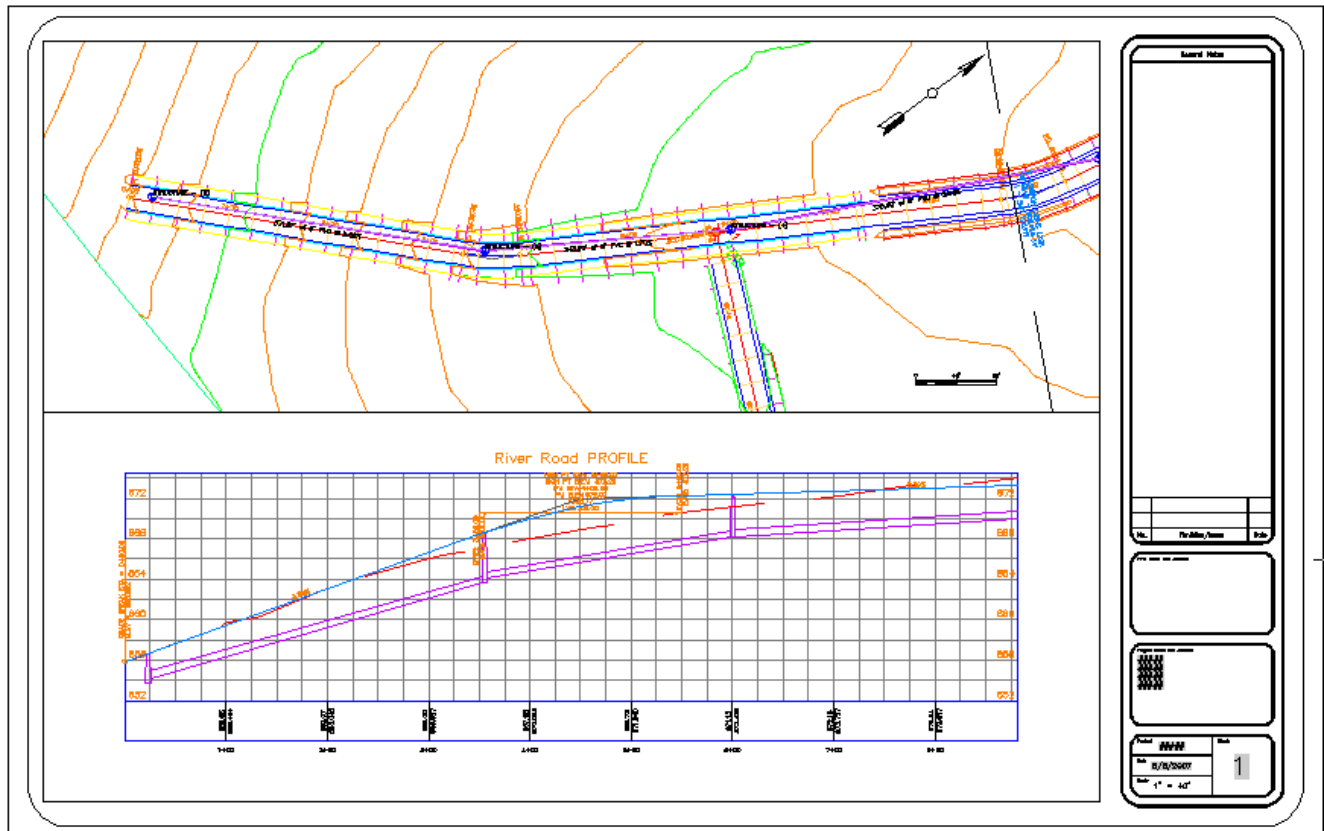
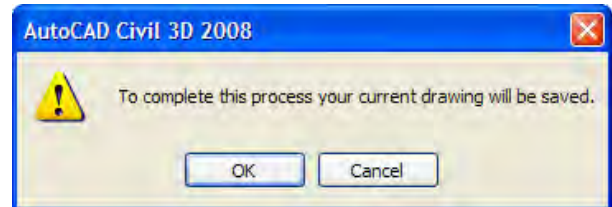
24. Click **Next**

25. Since we are sending our sheets to new drawing files, Civil 3D is automatically using Data Shortcuts to reference information from the main DWG file into the individual sheets.

26. Click **Create Sheets**



27. Click **OK** to save the drawing and continue the process.



You should now have completed Plan and Profile sheets. If you do not plan to utilize Sheet Sets, you could stop here and dismiss the sheet set Window that has popped up.

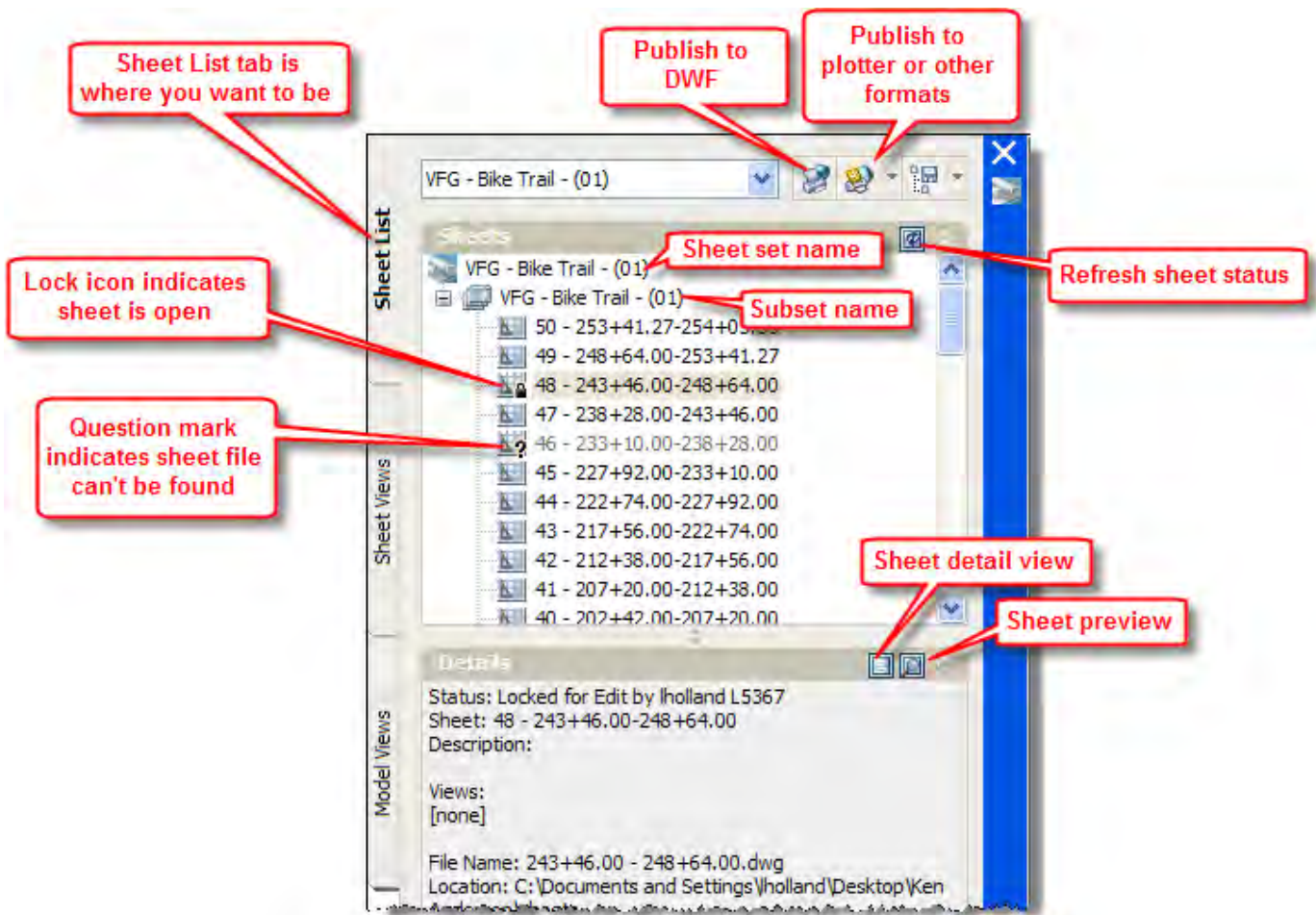
## The Sheetset

Why are Sheetsets Useful?

- If a layout is part of a sheet set, fields can be used to automatically number your pages.
- You can make a Sheet List Table on your cover sheet.
- You can batch plot a sheet set to any printer you want, regardless of what is set in the Page Setup Manager.
- You can quickly renumber or rename sheets as your project requires.

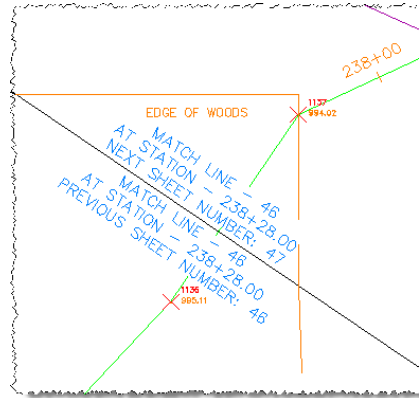
Important Things to Know about Sheet Sets:

- A Layout can't be part of more than one sheet set.
- Sheet Set Manager will not renumber or rename your sheets automatically.
- A sheetset file can't be deleted if AutoCAD Civil 3D is running.
- Moving drawing files associated with a Sheet Set will make the sheets unavailable for publishing or viewing using Sheet Set Manager.
- Moving the project *may* break the connection between the design drawing and the sheets – also causing sheet numbering to show up incorrectly.
- Find Sheetset Manager Annoying? Turn it off by changing SSMAUTOOPEN and SSLOCATE system variables to zero.

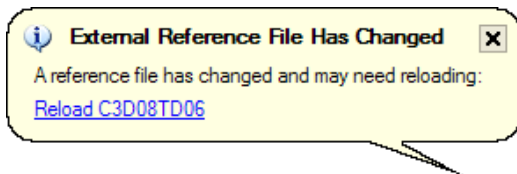


Once you finish working through the Wizard and create sheets, take a look at your matchlines on the main design drawing.

The placement of the sheets in a sheet set is how civil 3D “knows” to number the next and previous sheets.

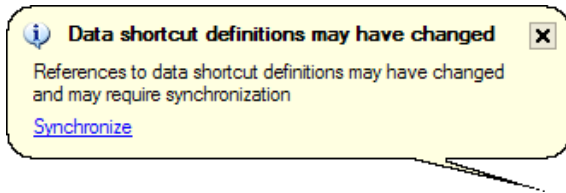


To open up and view one of the Layouts you’ve created through Civil 3D, simply double-click the sheet in the Sheet Set Manager. You will then see a lock icon next to the sheet, indicating that no others users may open the drawing for editing.



In this example we sent our P&P sheets to separate files. The original file is an XREF in the sheet drawing. You may see this bubble notification if a change has been made to any aspect of the main CAD drawing.

If you receive this message, click **Reload**.

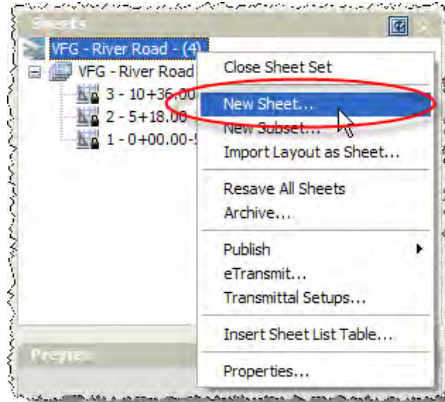


Additionally, those automatic data shortcuts may need to be updated. The notification to the left will appear if any aspect of the Civil 3D data has changed.

If you receive this message, click **Synchronize**.

## Creating a Cover Sheet

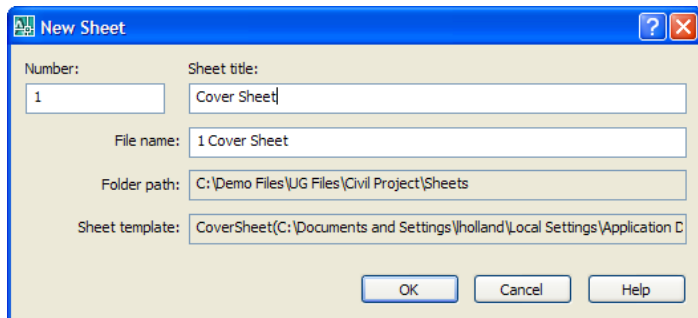
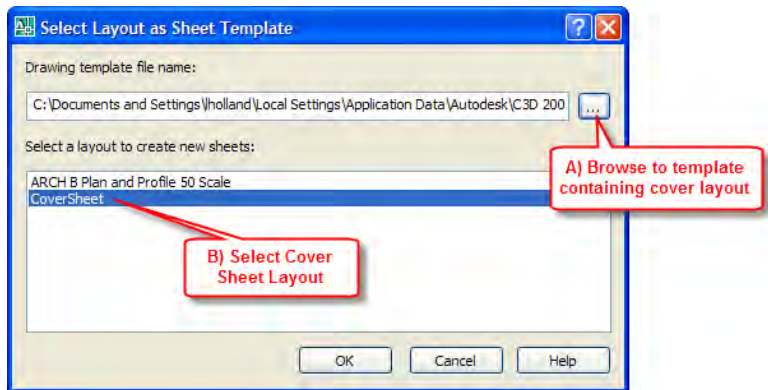
1. Create a new sheet within the Sheet Set manager by Right-Clicking on the name of the sheetset and selecting **New sheet...**



In this example the layout for our cover sheet is inside the P&P sheet template.

(You don't need to do it this way – as long as there is a template out there containing the layout you want.)

2. We click the ellipsis button to browse to the template file.
3. Choose the layout we will use.
4. Next we number and name the new sheet.
5. Since this is a cover sheet I am giving it a number 1.
6. Click **OK**



Notice that the new sheet is not part of the same sub-set as the automatically generated sheets.

7. Simply drag and drop the sheet to the top of the list as shown right.



Uh oh! Now we have two sheets that are numbered as “1”

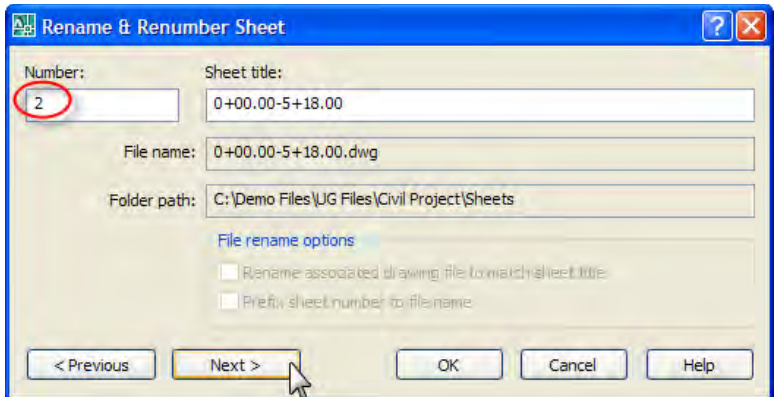


Keep in mind that what you see in the sheetset manager will be how the sheets appear when we create a sheet table in the next step.

- Let’s right-click on our sheet and use the **Rename and Renumber** tool to fix the duplicate number.



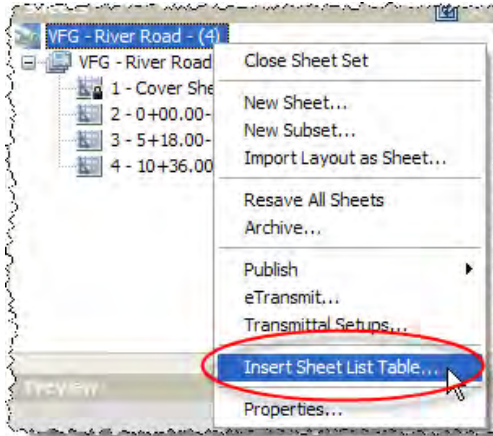
- Cycle through all the sheets and verify they have the correct numbering.



- Change the numbering and click next for all the sheets. You will know you are at the last sheet in the set when the Next button becomes grayed out.

Now that our sheetset is perfect, lets add a table of contents to our title page.

- Right-click on the name of the sheetset and select **Insert Sheet Set Table...**



- Click **OK** to the Insert Sheet List Table dialog box.

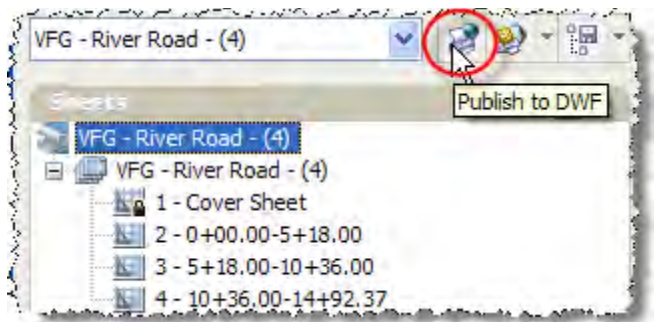
- Click anywhere in the drawing to locate your new table.

You should now have a sheet list on the cover page.

Sheet List Table	
Sheet Number	Sheet Title
1	Cover Sheet
2	0+00.00–5+18.00
3	5+18.00–10+36.00
4	10+36.00–14+92.37

## Plotting/Publishing from Sheetset Manager

1. Before you plot, publish or eTransmit, save your drawings! A handy tool for saving all sheets in a sheet set is to right-click on the name of the sheet set and select **Resave All Sheets**.
2. To publish to a DWF is rather simple. Click the **Publish to DWF** option in the Sheet Set Manager.
3. Make sure you have the subset or the name of the sheet set highlighted at the time you click or you will not get a multi-page DWF.
4. This method will use the page setup from your template – with the exception of the plotter. Save the resulting DWF file.
5. It may take a few minutes to complete the publish process.
6. Similarly, publishing to a plotter is just as easy.
7. This option will use the plotter and page setup you specified in the template.

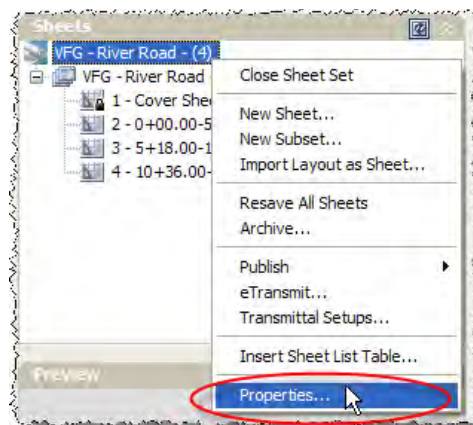


What if you don't want to use the plot setup you specified in the original template?

Let's say there is another template or another page setup you would like to use. In other words, you don't want to plot to PDF in monochrome to an 11x17 page as we set up earlier.

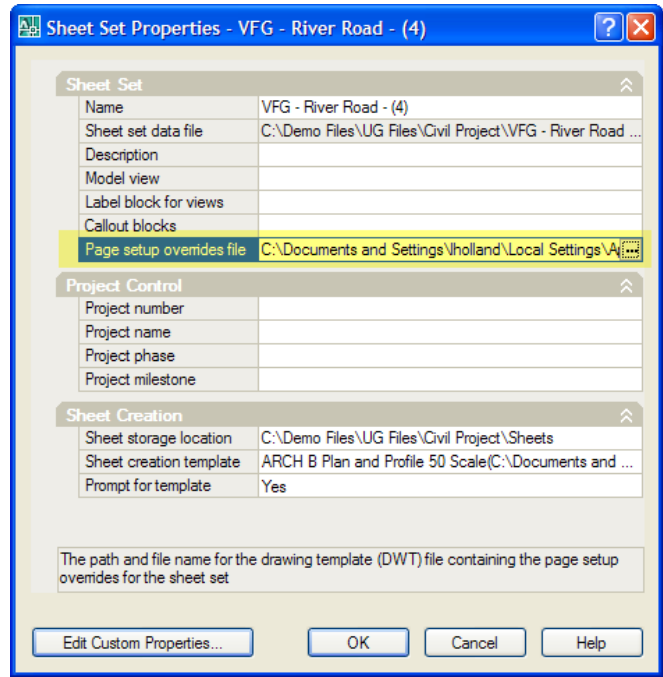
Use the Properties to specify a Page Setup override File.

8. Right-click the name of the sheet set and select **Properties**.



We can specify a page setup overrides file.

9. Click in the field next to **Page setup overrides file** and click the ellipsis to browse to the template file you want to use.
10. This file contains several alternative page setups we can use.

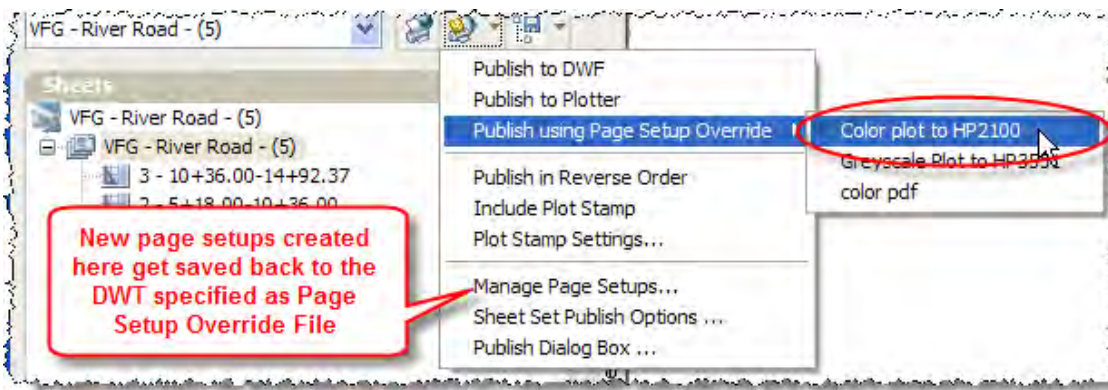


Now we have a new option when publishing.

11. We can click the Publish button and select **Publish Using Page Setup Override**.

12. All page setups available will show up in our list of options.

We can even add to this list if we want using the Manage Page Setup option.



Once you select the Page Setup override, your publish job starts. You can continue using Civil 3D but you can't send another plot or publish job until the first one is complete.

### ***In Closing...***

Hopefully this paper has helped you gain a deeper understanding of Plan and Profile Sheets as well as given you an introductory understanding of the sheet set manager.