Plan and Profile Sheets

Overview

Mn/DOT has developed a standard Plan Sheet Layout settings file that is used to generate plan and/or profile sheets. The standard file **ENGLISH04.PSL** is located at S:\MndotV8stds\DOT_GEOPAK\preference\.

There are eight standard sheet types set up in english04.psl:

SHEET NAME	DESCRIPTION		
PARSK	Parcel Sketch plan sheet		
Plan	Single plan sheet		
Plan_Plan	Double plan sheet (Consecutive stationing)		
Plan_Plan_2	Double plan sheet (Same stationing)		
Plan_Plan_Profile	Double plan sheet with profile (Same stationing)		
Plan_Profile	Plan and profile sheet		
Profile	Profile sheet		
Profile_Profile	Double profile sheet (Consecutive stationing)		

Contents

- Plan / Profile Sheet Layout Clip Settings
- Plan / Profile Sheet Procedure

Plan / Profile Sheet Layout

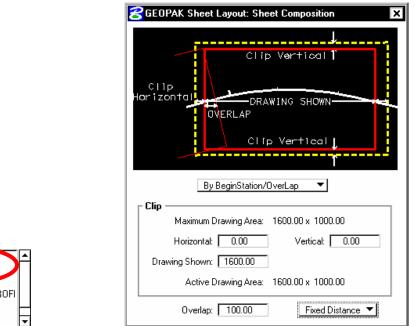
In the process of creating plan/profile sheets, the **Sheet Composition Dialog** needs to be filled in correctly to get the correct size sheets, the right amount of overlap, and to get the multiple ported sheets to align properly. In order to aid in this process, the following instructions have been created for 100 scale English sheets. These instructions are only for the MN/DOT specific values to enter into the **Sheet Composition Dialog**, use the context sensitive Geopak help (press F1 when the dialog is active) for instructions on any other part of the plan/profile sheet clip

1. From the main **Plan/Profile sheet dialog** seen below, click on the first tool from the left to access the **Sheet Composition Dialog**.



2.

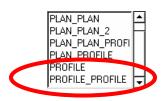
a. If you will be creating **Plan** or **Double Plan (Consecutive Stationing)** sheets, set and fill in the dialog as shown below:



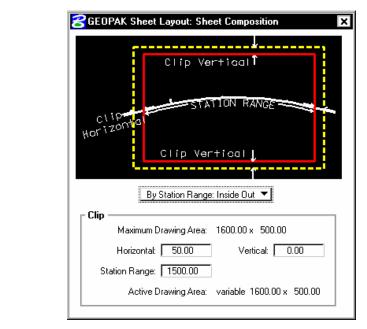


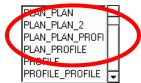
b. If you will be creating **Profile** or **Double Profile (Consecutive Stationing)** sheets, set and fill in the dialog as shown below:

🚰 GEOPAK Sheet	Layout: Sheet Composition
	Clip Vertical DRAWING SHOWN VERLAP Clip Vertical BeginStation/OverLap
Clip Maximum [Drawing Area: 1500.00 x 1000.00
Horizontal:	<u> </u>
Drawing Shown:	
	Drawing Area: 1500.00 x 1000.00
Overlap:	0.00 Fixed Distance 🔻



c. If you are creating **Double Plan (Same Stationing)**, **Plan/Plan/Profile**, or **Plan/Profile** sheets, set and fill in the dialog as shown below:





Procedure

Step 1. From the Plans Preparation dialog, select the Plan/Profile Sheet Composition and Layout tool.



Step 2. In the GEOPAK Sheet Layout tool dialog, select the Sheet > Library > Attach tool to select the ENGLISH04.PSL file. This file is located in the S:\MndotV8stds\DOT_GEOPAK\preference\ directory.

🔗 Plan Sheet Layout:	_ 🗆 🗙	
<u>File View S</u> ettings	<u>T</u> ools	
<u>S</u> heet Library →	<u>N</u> ew PLAN	- ↓ 100.0000 ft/in
Exit	Attach	
<u> </u>	Edit 🗟	

Attach Sheet Library		
Files: [english04.ps]	Directories: \dot_geopak\preference\	
english04.psl	S:\ MndotV8stds dot_geopak preference superelevation	
List Files of <u>Lype:</u> *.psl	Dri <u>v</u> es: S:\\Caew2ks004\DATA\	<u>D</u> K Cancel <u>H</u> elp

Step 3. In the GEOPAK Sheet Layout tool dialog, set the scale to the desired value; generally 100.

<mark>8</mark> Plan Sheet Layout: english04.psl	_ 🗆 🗙
<u>F</u> ile <u>V</u> iew <u>S</u> ettings <u>T</u> ools	
💽 🗞 🎊 🚍 ៀ id (Plan	100.0000 ft/in

Step 4.Select the Sheet Composition tool and verify that the Clip Option is set to By
BeginStation/Overlap. Set the overlap to the desired value.

名 Plan Sheet Layout: english04.psl	_ 🗆 ×
<u>File View S</u> ettings <u>T</u> ools	
💽 🎭 🦹 🚍 🛄 id 🛛 Plan	▼ 100.0000 ft/in

😤 Plan Sheet Layout: Sheet Composition 📃 🗖 🗙
CLIP VERTICAL
By BeginStation/OverLap
Clip Maximum Drawing Area: 1600.00 x 1000.00
Horizontal: 4.00 Vertical: 0.00
Drawing Shown: 1592.00
Active Drawing Area: 1592.00 x 1000.00
Overlap: 0.00 Fixed Distance 🔻

Step 5. Select the Layout Sheets tool. To define the alignment to be used, click in the Alignment column to access the Chain selector. In general, no Offset value will we used.

🔗 Plan Sheet Layout: english04.psl	_ 🗆 🗙
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Step 6. Set the Job Number. To define the alignment to be used, double click the line in the list box to access the Chain selector.

8 Plan Sheet La	yout: Layout Se	ttings		_ 🗆 X
Job: 814 Q	M) tiple Sheets	▼		
Port I ype	Dependency	Alignment	Officet	Motif File
1 Plan	Alignment		0.00	Current
•				
Begin Station:		Extend:	0.00 🚸	
End Station:		Extend:	0.00 ++++	Layout 0 Sheets

Select the desired chain from the pick list. In general, no Offset value will we used.

Plan Sheet Layout: Plan Port Data	
Chain 23EB	Offset: 0.00
Motif File:	् 🛍
<u>D</u> K	Cancel

Note: To better fit your sheets to a North is up format, a "dummy" chain may be developed and used in this step.

Step 7. Set the Single/Multiple Sheet selector toggle to Multiple Sheets

<mark>8</mark> Plan S	Sheet La	yout: Layout Se	ttings		_ 🗆 🗙
Job: 814	<u> </u>	Multiple Sheets			
Port	Туре	Dependency	Alignment	Offset	Motif File
1	Plan	Alignment	23EB	0.00	Current
•					
Begin St	tation: 7	961+00.00 R 1	Extend:	0.00 ++++	
End St	tation: 8	015+00.00 R 1	Extend:	0.00 ++++	Layout 4 Sheets

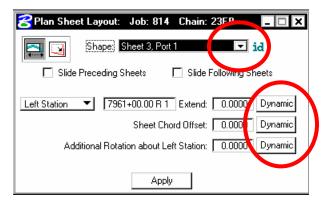
Step 8. Use the Begin Station/End Station DP buttons to identify the location of the plotting limits. When the station is identified, select the **Layout # Sheet** button to place the sheet boundaries.

<mark>2</mark> Plan Sheet La	ayout: Layout Set	tings		_ _ ×
Job: 814 Q	Multiple Sheets	•		
Port Type	Dependency	Alignment	Offset	Motif File
1 Plan	Alignment	23EB	0.00	Current
•				Þ
Begin Station: 🗍	7961+00.00 R 1	Extend:).00 +++	
End Station:	8015+00.00 R 1	Extend:).00 ++++	Layout 4 Sheets

- **Step 9.** If the plan sheet clip areas are not in the desired location, one of three methods can be used to reset the desired location.
 - The first option is to delete the clip shape using the MicroStation Delete Element tool and then repeating Step 7 until the desired location is defined.
 - A second option is to use the Modify Sheets tool to move the clip boundary.

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Identify the sheet to be moved using the Identify button, and then use the Dynamic button to move the clip boundary along the chain.



• A third option is to use the MicroStation Move Element command to move the sheet into the desired location.

Step 10. Several plan sheets can be laid out in a single file. When all plan sheets have been laid out, proceed with the Clip Sheets tool.

名 Plan Sheet Layout: Clip Sheets 🛛 💶 🗙			
Coutput File			
Directory: s:\caes\class\geopak\v8\plan sheets demo\			
Sheet Name Prefix: cp cp3.dgn			
Orientation: Rotate Reference 💌			
Sheets per File: 4 Model: Active			
Sheet Range Begin: 3 💌 End: 6 💌			
Labels and Annotations			
Sheet Title: CONSTRUCTION PLAN			
Project Number: 3408-14			
Match Line: XXX+XXX			
Auxiliary Sheet Annotations			
Create Digital InterPlot Plot Set			
IPS File: S\Geopak\V8\Plan Sheets Demo\cp.ips 🔍 🕵			
Sheet Type: Plan 💌 Open InterPlot Organizer			
Process Sheet			

- Within the Clip Sheets dialog, define the Output File parameters.
- Set the **Directory** setting to where you want the plan sheet file(s) to be located.
- Set the **Sheet Name Prefix** as desired. This will be the name of the DGN file it will generate. The program will append a # to this prefix and assign a .DGN extension.
- In general you will want all of your plan sheets in a single file. As such, set the **Rotate Reference/Rotate View** toggle to **Rotate Reference.** This will allow you to place all your sheets into a single file.
- Set the **Sheets per File** setting to include the sheets you desire in the output sheet file.
- Identify the sheets you desire to clip using the **Sheet Range Begin/End** setting. Generally this will be all the clipped sheets
- **Step 11.** If any labels or annotations are desired in your output sheet file, these can be set in the **Labels and Annotations** parameters.
- **Step 12.** If desired, Toggle ON the **Create Digital InterPlot Plot Set.** Set the IPS File to the desired name and location.

Step 13. When the Clip Sheets dialog is completed, activate by selecting the **Process Sheets** button.

😤 Plan Sheet Layout: Clip Sheets 📃 🗖 🗙			
Coutput File			
Directory: s:\caes\class\geopak\v8\plan sheets demo\ Q			
Sheet Name Prefix: cp cp3.dgn			
Orientation: Rotate Reference 🔻			
Sheets per File: 4 Model: Active			
Sheet Range Begin: 3 💌 End: 6 💌			
Labels and Annotations			
Sheet Title: CONSTRUCTION PLAN			
Project Number: 3408-14			
Match Line: XXX+XXX			
Auxiliary Sheet Annotations			
Create Digital InterPlot Plot Set			
IPS File: S\Geopak\V8\Plan Sheets Demo\cp.ips 🔍 强			
Sheet Type: Plan Open InterPlot Organizer			

Note: Clip Sheet Processing generates a new MicroStation sheet file as defined in the Output File parameters. This file has 1 or several plan sheets within it. Note that this file has several reference files attached.