Office of Design

Sheet Library Development – Geopak Sheeting

Design Manual
Chapter 21
Automation Tools
Instructions
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Index

Overview

The Sheet Library contains the parameters for each sheet used by the Geopak Sheeting Process. Prior to the layout or the clipping of sheets, a **Sheet Library** must be defined and attached to the current **Geopak Sheeting** session. The name of the currently attached **Sheet Library** is shown in the **Plan Sheet Layout** dialog title bar. Sheet Library files have an extension of "psl". An unlimited number of different sheets can be stored within one library file. For information on Geopak Plan and Profile (P&P) sheeting, see Section 21B-4. When beginning the sheet process, select the desired sheet layout from the attached library, which will load the associated sheet parameters.

Geopak Sheeting - Program Access

To begin working with the Sheeting process, the **Plan Sheet Layout** dialog must be accessed, in one of two ways. The first method of access is through the **Applications** pull-down menu, as shown to the right.
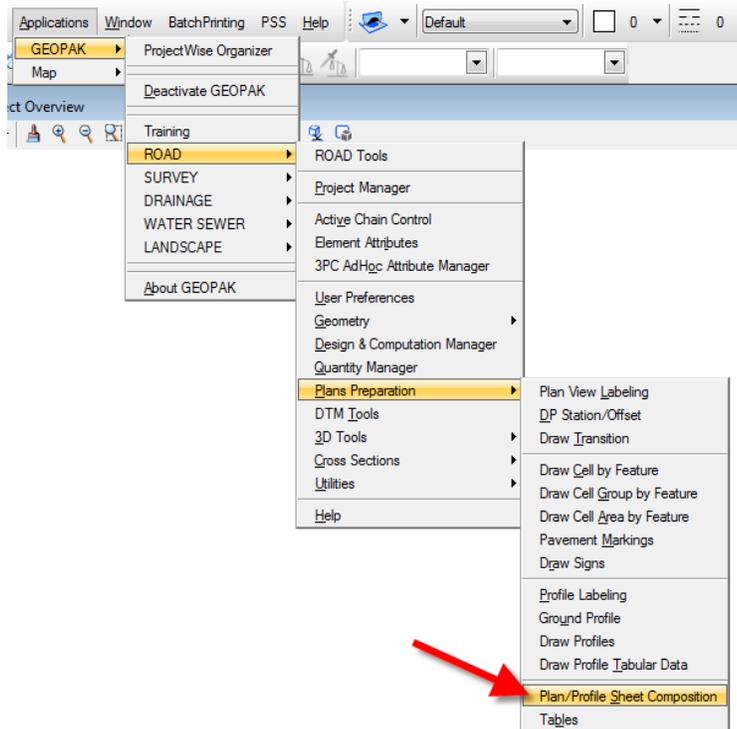
The second method of accessing the **Plan Sheet Layout** dialog is through the **Project Manager** dialog, which is accessed from the Geopak **Road Tools** dialog, shown below. For more information on the **Project Manager**, see Section 21B-65.

After accessing the **Plan Sheet Layout** dialog from either of the two methods listed above, it will display, similar to as shown below.
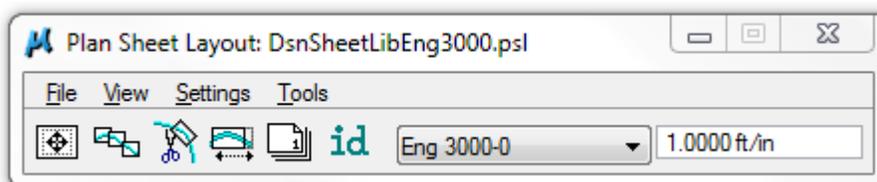
Sheet Library - Attach

> **Note:** Our **SheetLib** files are locked to editing and changes, but the procedure for the **Sheet Library Development** is explained here so it can be understood what parameters are associated with each sheet, and why the different sheets function as they do.

To **Edit** an existing **Sheet** definition, a **Sheet Library** must first be **attached** to the current session, from

File > Sheet Library > Attach, as shown at the right.
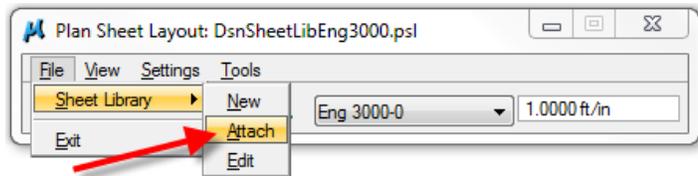
The **SheetLibs** selection list will then display, as shown below in the **Attach Sheet Library** dialog. Make a selection and *click* the **Open** button.
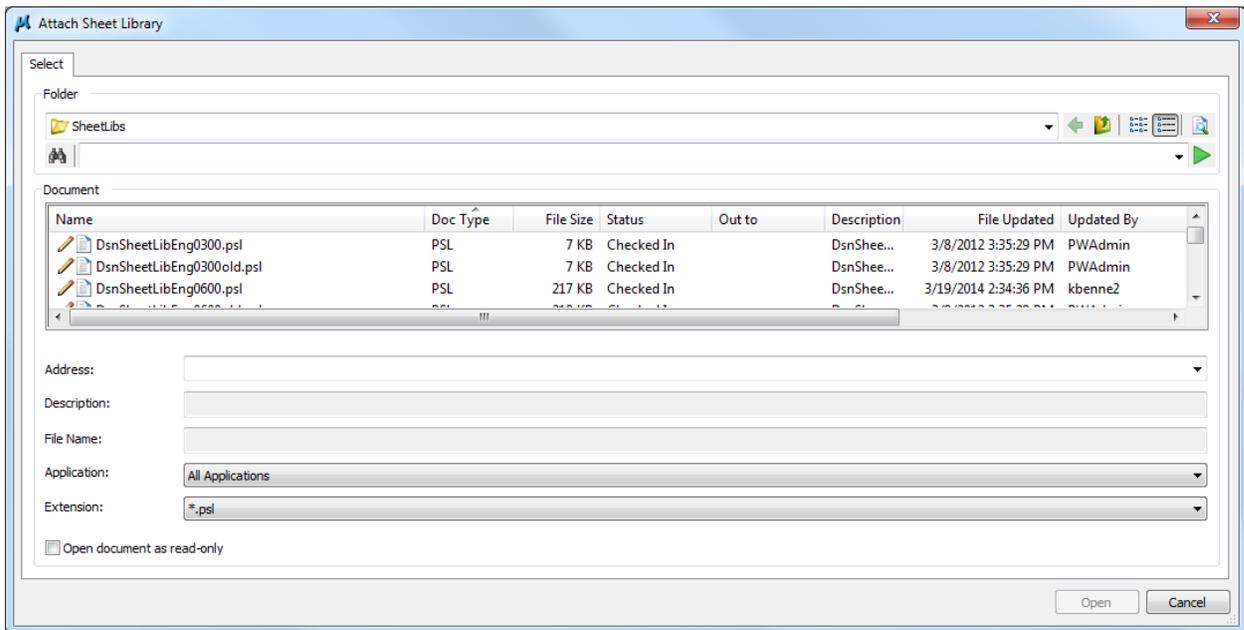
The **SheetLibs** (Sheet Library files) contain selection groups of all sheet options used by the Office of Design with the Geopak P&P sheeting process, for all sheet scales, for both English and Metric. A short description of the available **SheetLib** options is as follows:

DsnSheetLibEng600.psl	600 ft. Eng. Sheet (20 scale), 10000 pos. unit file format
DsnSheetLibEng600old.psl	600 ft. Eng. Sheet (20 scale), old 720 pos. unit file format
DsnSheetLibEng1500.psl	1500 ft. Eng. Sheet (50 scale), 10000 pos. unit file format
DsnSheetLibEng1500old.psl	1500 ft. Eng. Sheet (50 scale), old 720 pos. unit file format
DsnSheetLibEng3000.psl	3000 ft. Eng. Sheet (100 scale), 10000 pos. unit file format
DsnSheetLibEng3000old.psl	3000 ft. Eng. Sheet (100 scale), old 720 pos. unit file format
DsnSheetLibMet190old.psl	190 M Met Sheet (250 scale), old 2000 pos. unit file format
DsnSheetLibMet380old.psl	380 M Met. Sheet (500 scale), old 2000 pos. unit file format
DsnSheetLibMet750old.psl	750 M Met. Sheet (1000 scale),old 2000 pos. unit file format

Each **SheetLib** *".psl"* file, listed above, contains details and descriptions for up to 30 different sheet types for each specific scale option. A couple of example **Sheet Names** include "*Eng 1500-10-1-2*", as shown previously, and the "*Eng 3000-10-1-2-old*" shown below.

Sheet Name Selection

To edit a specific sheet, the **Sheet Name,** (sheet type), must be selected from the drop-down list, with the name displayed in the **Plan Sheet Layout** dialog, as shown below.
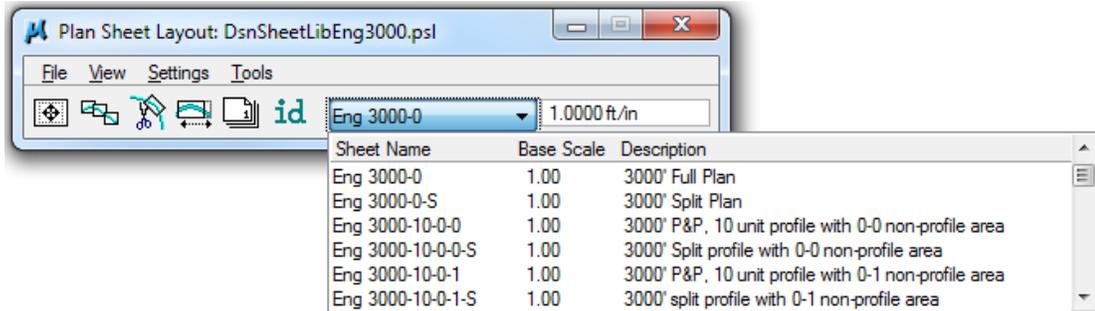
A complete list of the available "sheet name" options, with the levels and colors for the associated Sheet Port Shapes, can be found in Section 21B-7.

The **Sheet Layout: Sheet Library** editing tools are accessed through the *File > Sheet Library > Edit* pull-down menu selection, as shown below.
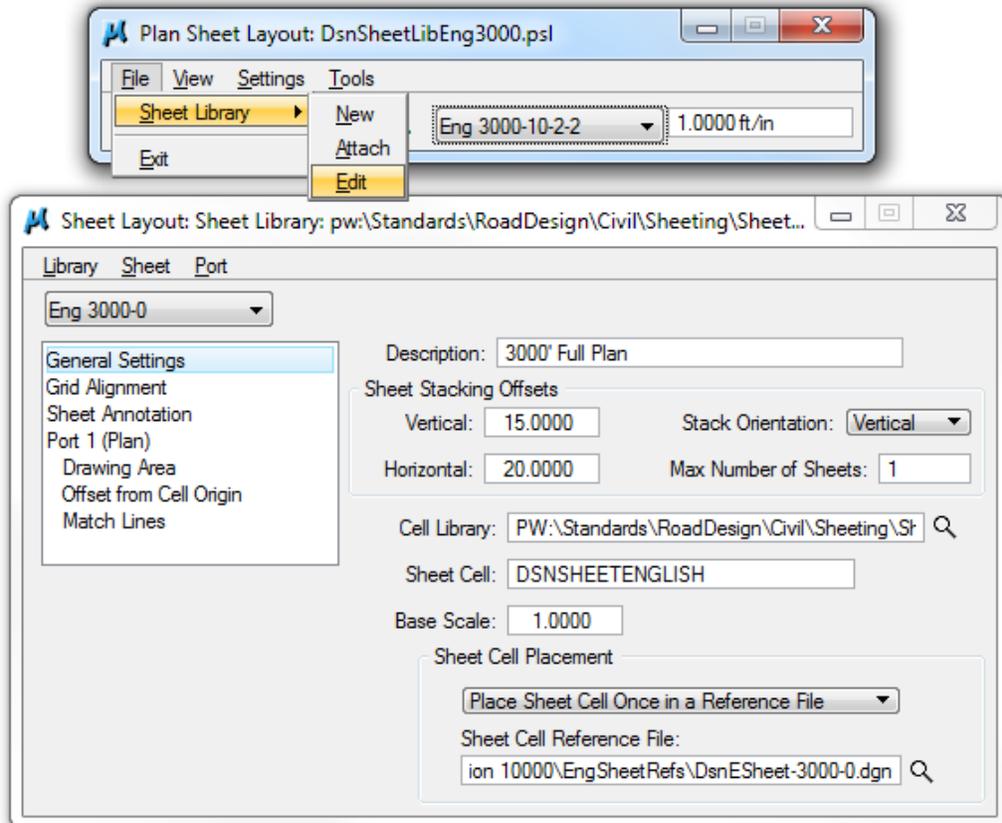
General Settings

The **General Settings** for a sheet should be similar to those shown above, providing basic information about the specific sheet listed at the top of the dialog, in this case *Eng 3000-10-1-2-old.*

Description: The Description assists in identifying the specific selected sheet.

Stacking Offset: Used when multiple sheets are placed into a single MicroStation file during the Clip Sheets process using the Rotate Reference clip option. Defines the offset between sheets (in master

units). It is the vertical distance from the bottom of one sheet to the bottom of the next sheet up in the stack. (The Office of Design neither stacks P&P sheets in a single model nor rotates the Plan reference.)

Cell Library: The Cell Library contains the sheet border cell, located as follows: PW:\Standards\RoadDesign\Civil\Sheeting\Sheet Cells\DsnSheet.cel. Key-in the library location and file name, or *click* the *Select* icon (🔍) and browse to the correct location.

Sheet Cell: The Sheet Cell is used during the Clip Sheet process, as the software draws either the cells at the correct orientation into the MicroStation file, or detects the cell in a file used as the border reference file. The Office of Design uses the reference file concept.

Base Scale: The specified scale identifies the scale of the original sheet border cell (this setting should stay at 1.0000). The **Base Scale** is the scale at which all dimensions are entered into the Library for the given sheet. It is also the "scale" at which the Sheet Cell would be placed if placed via MicroStation commands at a MicroStation Active Scale of 1.0.

Sheet Cell Placement: Two options are supported for placing the sheet cell.

> **1. Place Sheet Cell Once in a Reference File (this is the option used by the Office of Design for the standard P&P type of Geopak sheeting):** The cell is placed once in the specified Sheet Cell Reference File, (the "SheetLib" file), then referenced to each sheet model. In lieu of typing, *click* the **File Select** icon (🔍 , to the right of the key-in field) to invoke the File Manager, wherein the border reference file may be selected.

> **2. Place Sheet Cell in each Sheet File**: In this case, the sheet cell is placed for each sheet within the sheet file. Therefore, no design file reference is required. This is NOT the method used by the Office of Design.

Grid Alignment

The *Grid Alignment* values should be the distance of either the minor or major grid lines on the profile portion of the sheet. This ensures the profile is drawn on even grids when the sheet is generated. For an English 3000' sheet, these values will be set at 10 and 10. These values will be adjusted appropriately for other scale English sheets, or for Metric sheets.
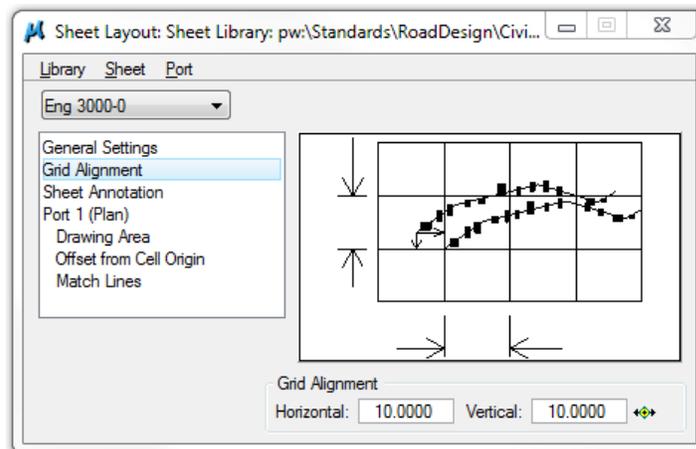
Note: Additional details of all the sheeting dialog boxes can be found in the *Geopak Help* files, located as shown to the right.
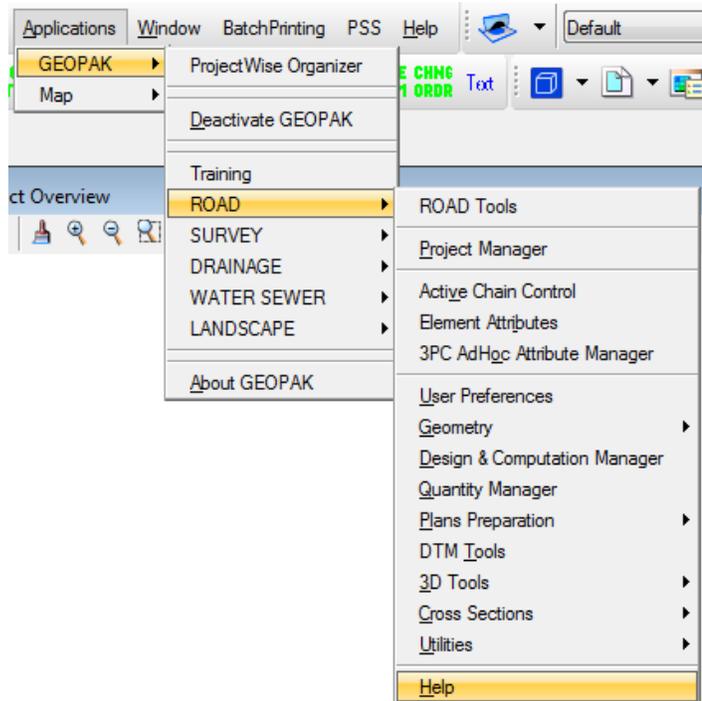
Sheet Annotation

Sheet Annotation dialogs are as shown below, even though we use the **CPNdata** concept to place the County, Project Number data on the plan sheets. For more information on the CPNdata commands, see Section 21A-1.

In our sheet libraries, the **Sheet Title** and **Project Number** check-boxes (☑), shown below, are not checked (☐), therefore the options are not available and grayed out. They are only checked below to show the associated parameters.

The Office of Design DOES use the **Sheet Number** parameters for placement of the sheet number.

Sheet Title
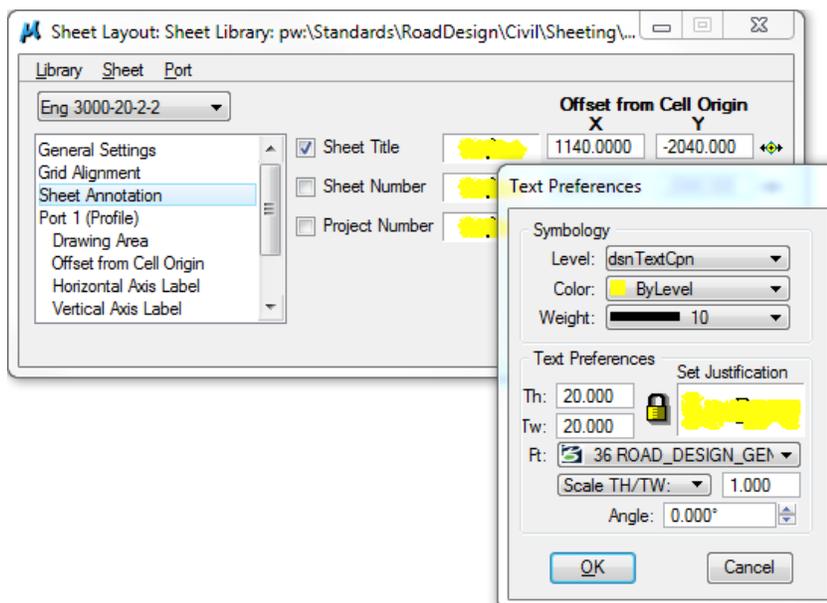
Sheet Number

The Sheet Number parameters, shown below, are for a 3000 ft. sheet. The "X,Y" offset distances are from the cell origin, which is the upper left corner of the sheet.
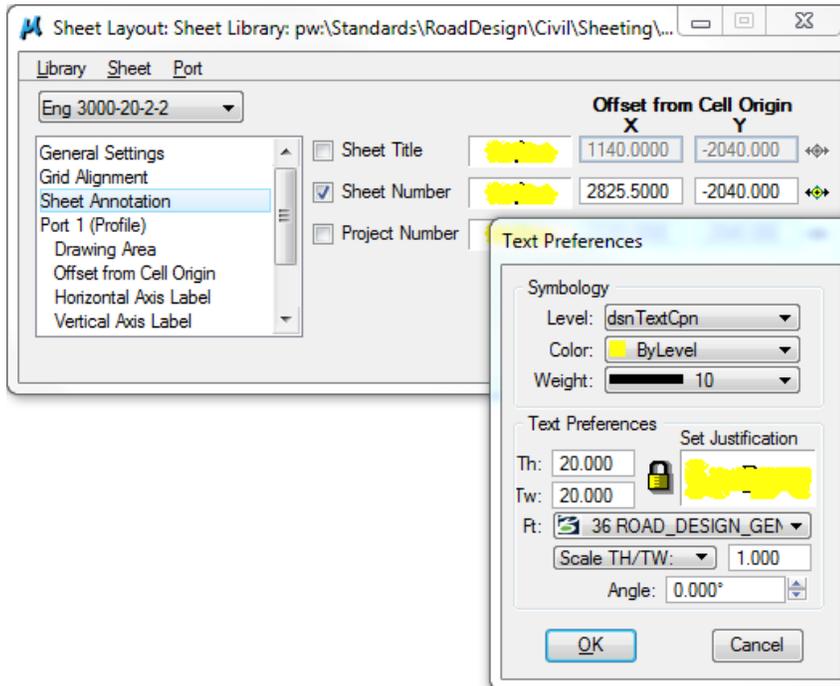
Project Number

We do not use the Project Number option, shown below.
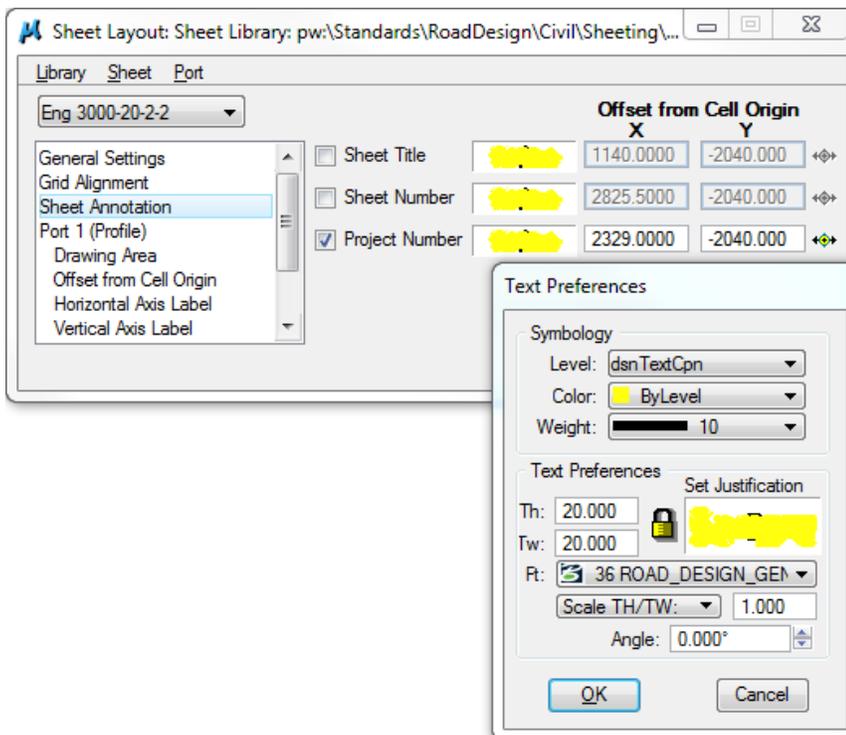
Adding (Creating) a New Sheet Port

When a new **Port** is needed, (either while creating a new sheet or editing an existing sheet), it is created by accessing the **Port > New** pull-down menu command, (red arrow at the right). When a new sheet is being created, there are no **Ports** initially displayed in the list box, (as shown by the blue oval at the right), until a **New** one is requested, as shown below.
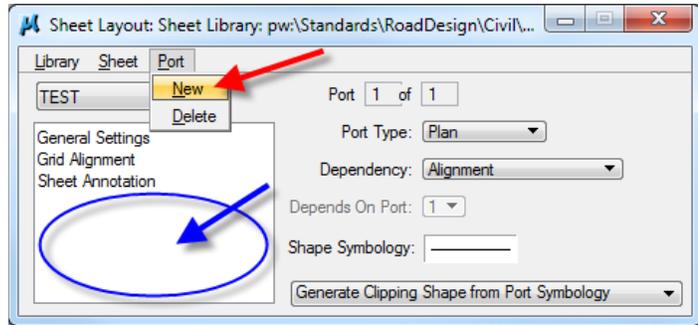
The new **Port Type,** (red arrow at the right**),** will default to whatever the **Port Type** setting is at the time the new **Port** is requested, (blue arrow at the right). To change the **Port Type**, (red arrow), just click a different **Port Type** selection from the drop-down option list, (blue arrow).
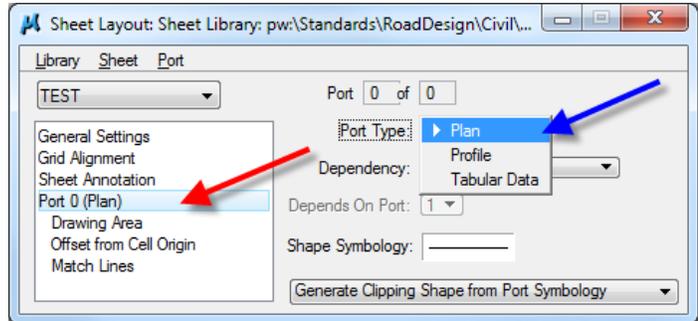
A sheet port must be dependent on either an alignment, (which is typical for a plan port), or on another port, (which is typical for a profile.) When the **Dependency** is set to **Alignment**, (red arrow at the right), no other input is required within the Sheet Library. However, during the sheet lay-out process, (which is a later step, accomplished in a different dialog), the actual chain name must be specified. When the "**Other Port …"** option is selected, the "**Depends On Port"** field unghosts (becomes active), and the number of the port upon which it depends must be selected, (blue arrow at the right).
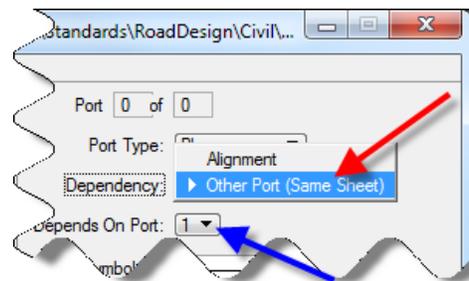
To set the drawing symbology for the Port Shape elements, *double-click* the "Clipping Shape Symbology" group box, (red arrow at the right), which will display the **Clipping Shape Symbology** dialog, (blue arrow). In addition, it utilizes this symbology for the "**Take C**lipping **Shape from Sheet Cell"** option, shown below**.** The symbology may be set by manually entering the values, or via the picker options for Color, Weight and Style.
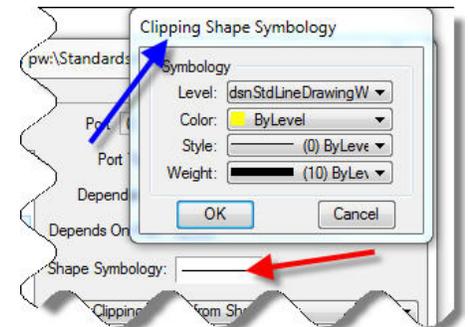
The option normally used by the Office of Design is "**Generate Clipping Shape from Port Symbology"** as shown at the right. This will cause the system to produce **Port Shapes** with the symbology as set above. If the Port Shape is irregular, (which is rarely used), use the "**Take Clipping Shape from Sheet Cell"** option. See the Geopak help files for more information on this second, rarely used option.
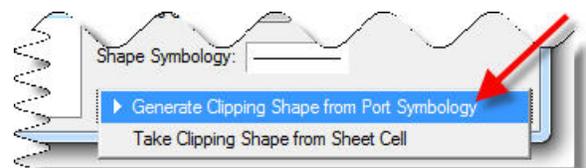
Port 1 (Plan)

All three types of Sheet Port Shapes (*PLN, PRF, DBG*) are placed at different colors, but on the same level for any given Sheet Type (Sheet Name). Five levels are presently used for the Sheet Port Shapes, *DsnShtPortLev01* through *DsnShtPortLev05*. Therefore, no two **Sheet Port Shapes** of differing type or size will have the same combination of level and color. For additional information, and a complete listing of Sheet Names with associated Sheet Port levels and colors, see 21B-6.

The **Clipping Shape Symbology** dialog, (blue arrow below), shows the parameters for the **Plan** port shape for the *Eng-3000-10-0-0* sheet name (red arrow below).
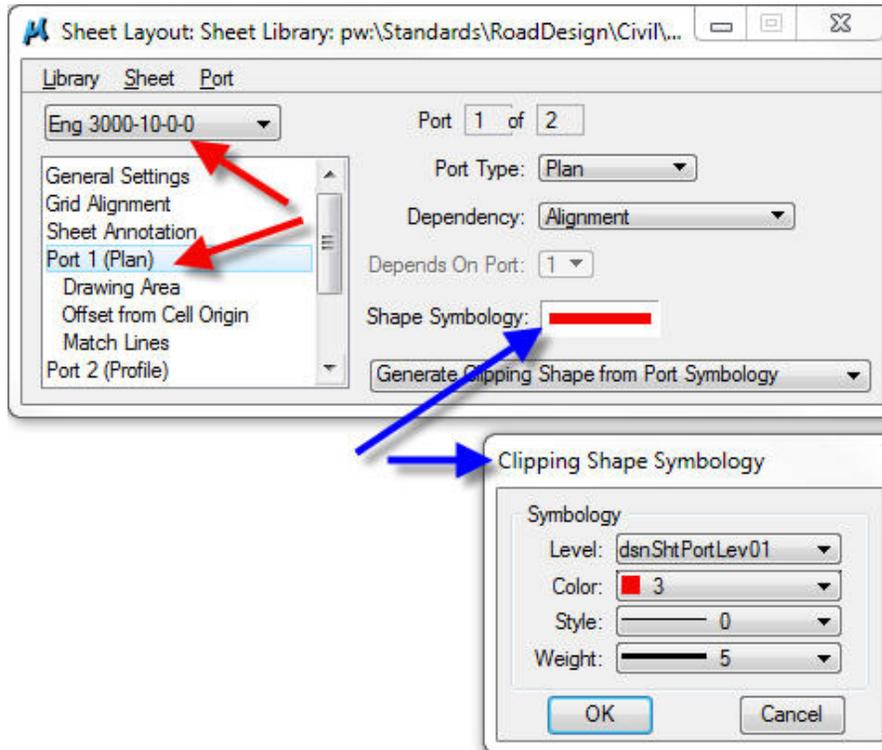
Drawing Area (Plan Port)

The drawing area for the Plan Port includes the entire Plan portion of the sheet. The Plan length matches the Profile length, plus the "Plan Overlap" area at each end of the sheet.
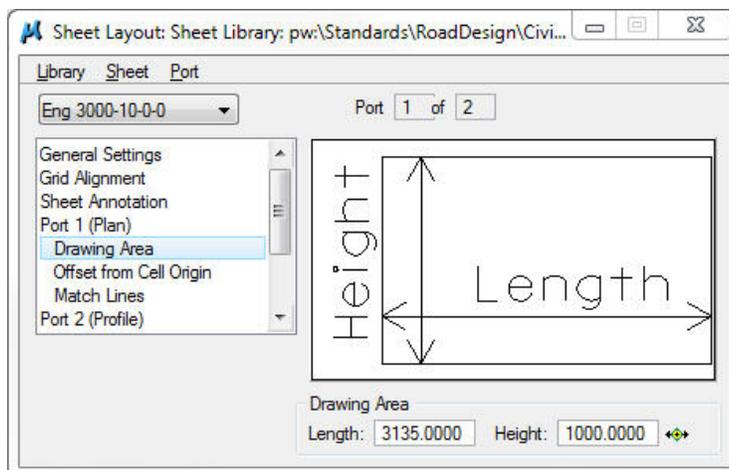
Offset from Cell Origin (Plan Port)

The "*Offset from Cell Origin*" is always measured from the Sheet Cell Origin to the lower left corner or the Port Shape. Unlike the graphic below, our Plan Sheet Cell Origin is the upper left corner of the sheet, therefore the negative (-1000) "Y" offset to the lower left corner of the **Port Shape**.
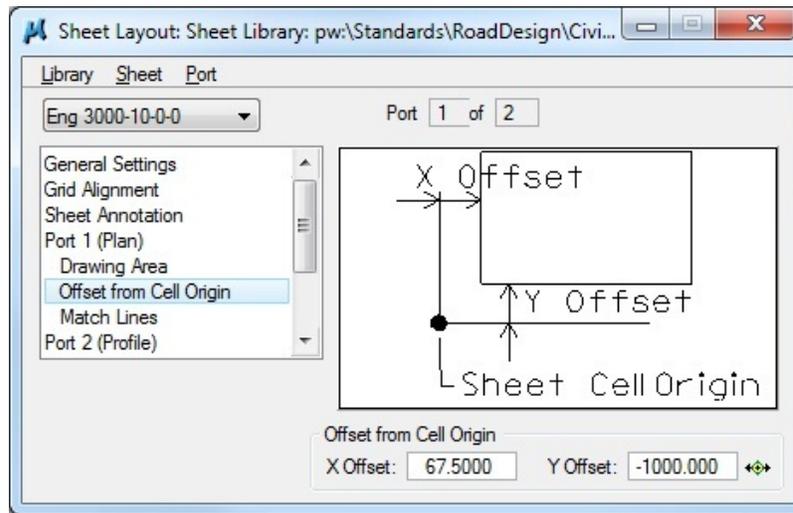
Match Lines (Plan Port)

No values have been set for *Match Lines* since we run our **Plan** information all the way to the left and right sheet borders, and do not use match lines in the **Plan** portion.
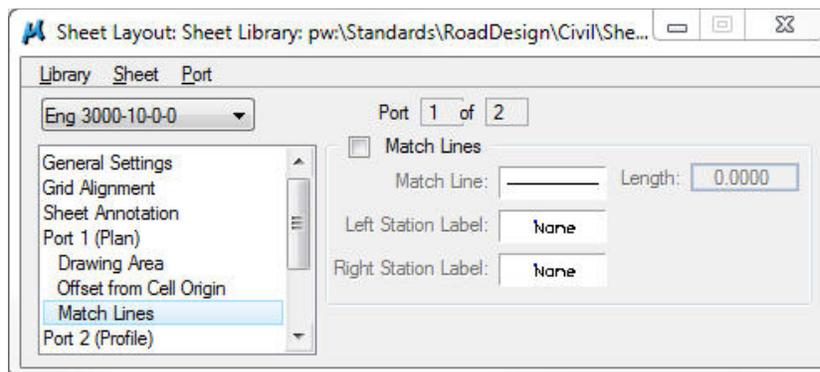
Port 2 (Profile)

The **Profile Port** encompasses the portion of the **Profile** part of the sheet that is reserved for placement of the Vertical Alignment information. As with **Port 1 (Plan)**, The **Clipping Shape Symbology** dialog, (blue arrow at the right), shows the parameters for the **Profile** port shape for the *Eng-3000-10-0-1* sheet name (red arrow at the right).
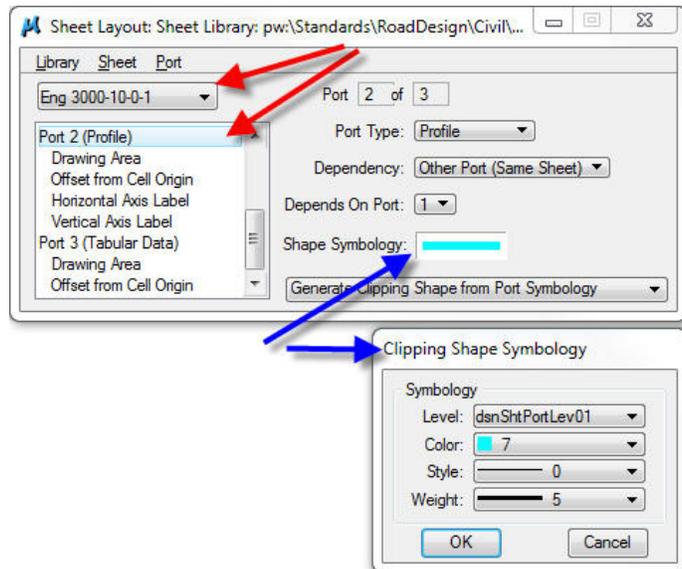
Drawing Area (Profile Port)

The dimensions of the drawing area for the *Eng-3000-10-1-2-old* sheet are shown at the right.

> The Drawing Area and Sheet Name are directly related, as explained below for sheet name "*Eng 3000-10-1-2-old*".

1. "Eng" represents an English sheet, "Met" is used for Metric

2. *"3000" provides the width measurement of the profile portion of the sheet, other English units will be 1500 and 600, and Metric units will be 750, 380, and 190*

3. *The "10" indicates the profile portion measures 10 Major Grid Units (1000') vertically*

4. *The "1" indicates one Major Grid Unit (100') at the top of the profile area of the sheet is not included in the Profile Port Shape.*

5. *The "2" indicates two Major Grid Units* (200') at the bottom of the profile area of the sheet are not included in the Profile Port Shape. This area is reserved space for other information, such as the Profile Grade Elevations and the Ditch Bar Graph information.

6. "Old" indicates the sheet type is designed for an older "720 positional unit" file.

7. The sum of the "1 and 2" (1+2=3) indicates that 300' of the 1000' profile area is not included in the Profile Port, therefore the Profile Port has a height of 700', (1000-300=700) as shown above.
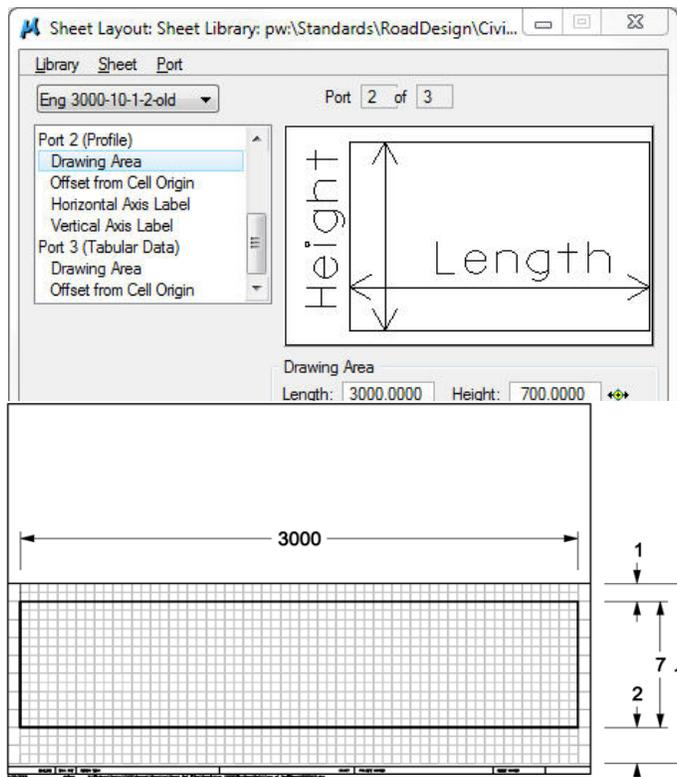
Offset from Cell Origin (Profile Port)

The "**Offset from Cell Origin**" is the same for the **Profile** as for the **Plan,** and is always measured from the Sheet Cell Origin to the lower left corner or the Port Shape. Again, unlike the graphic below, our Plan Sheet Cell Origin is the upper left corner of the entire P&P sheet, therefore the negative (-1800) "Y" offset to the lower left corner of the **Port Shape**.

The "Plan Port" portion of this sheet measures 1000 feet vertically. Add the Plan Port height to the 700' Profile Port height, (shown above), and also the 100' space above the Profile Port, and this equals the "Y" offset distance of -1800. The 3000' English "Plan portion" overlap distance is 67.5' on each end of the sheet.
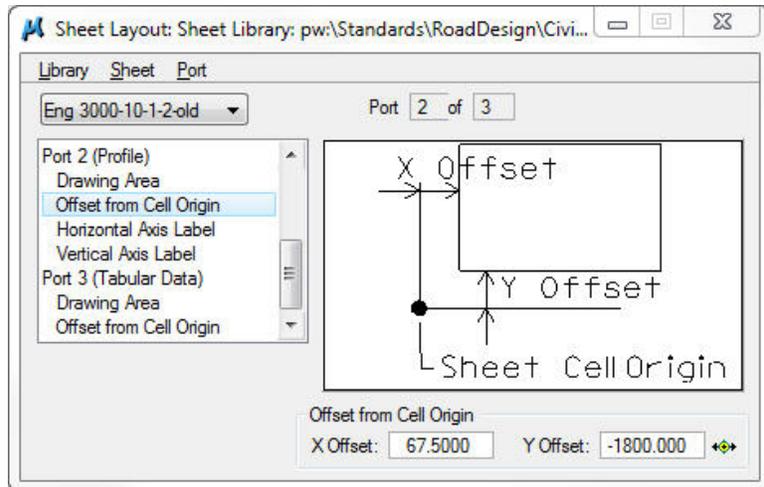
Horizontal Axis Label (Profile Port)

The **Horizontal Axis Label (Profile Port)** dialogs are shown below.

(See the next sheet for an explanation of the **Horizontal Axis Label** and **Anchor Point Shift**.)
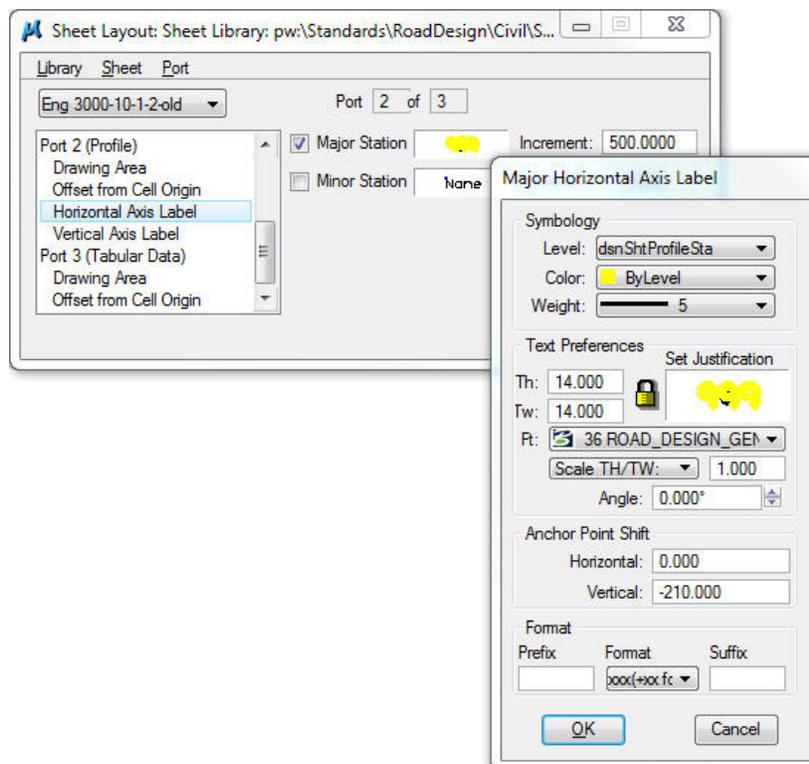
The **Horizontal Axis Label**, (shown on the previous sheet), refers to the alignment **Stationing** at the bottom of the Profile portion of the sheet.

The **Anchor Point Shift** vertical distance for the 3000' sheet is ten feet (10') plus the size of the "DBG reserved area", (which is 2 major grid units, or 200'). The sum of these two values is 210. The

direction of the **Anchor Point Shift** is down from the corner of the **Profile Port Shape**, therefore the value is -210'.

The **Anchor Point Shift** numbers and the text sizes are adjusted accordingly for different sheet types and scales.

(Example: For a "1500-1-2" sheet, the "10" value used for a 3000' sheet will reduced by half for the "1500" sheet, and will become "5".

The "200" value, listed above, is assigned to the "3000" sheet because of the "2" in the "3000-1-2" sheet name. This would become "100" for the "1500" sheet, again because the "1500" sheet is half the "3000" sheet. Therefore the total Shift would be "-105" instead of the "210" for the "3000-1-2" sheet.

If the "1500" sheet name was "1500-1-1", the "100" value, listed immediately above, would be reduced by half again, because the "DBG" reserved area is now "1" major grid unit instead of "2", as it would be for either the "3000-1-2" sheet or the "1500-1-2" sheet. Since the "1500" sheet is half the size of the "3000" sheet the text size will become "7" rather than "14".)

The profile Station elements are placed "live" in each sheet model.

Vertical Axis Label (Profile Port)

The **Vertical Axis Label** refers to the Elevation numbers located on both sides of the Profile portion of the sheet. As with the **Horizontal Axis Label** information listed above, the **Anchor Point Shift** values and the text sizes will be proportionately altered for different sheet scales. The profile "side elevation" text elements are also placed "live" in each sheet model.

The information shown below is for the Elevation labels on the left side of the "3000" sheet.
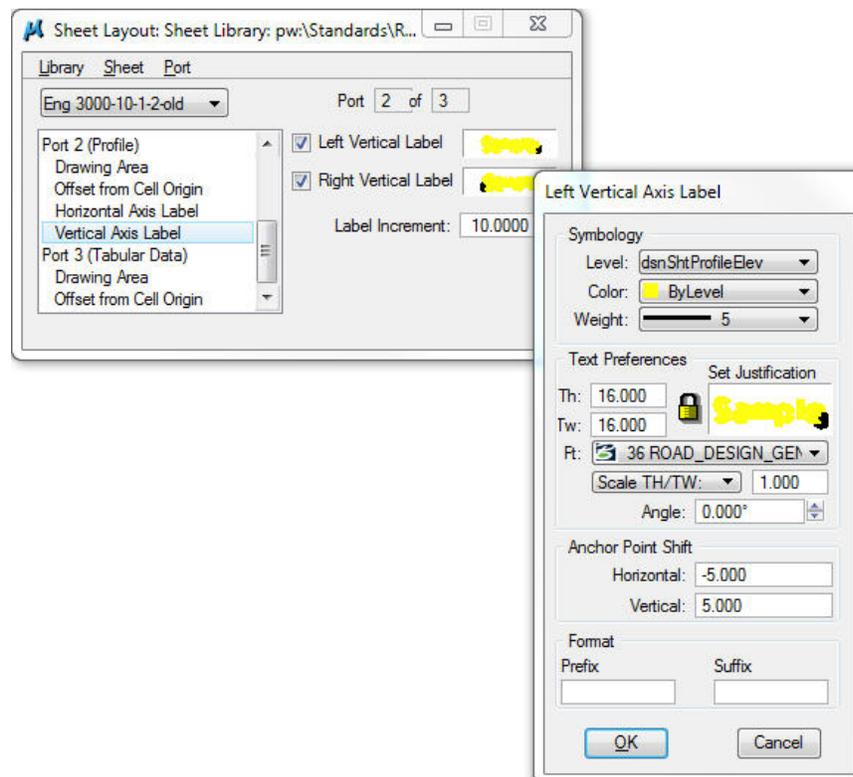
The information shown below is for the Elevation labels on the right side of the "3000" sheet.
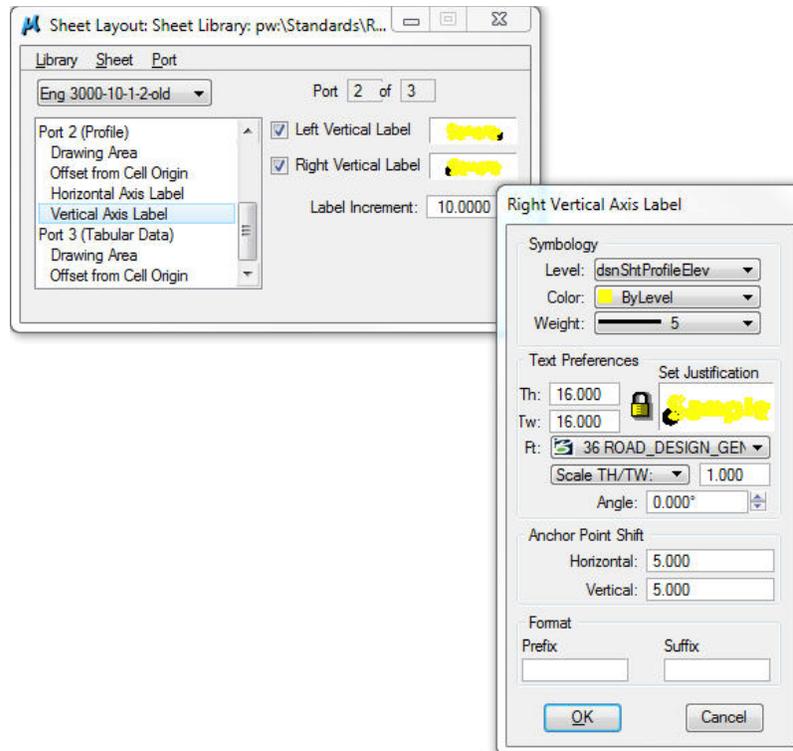
Port 3 – Tabular Data (DBG)

The **Tabular Data** Port (red arrow, below) includes the following items, if they exist: The Profile Elevation list and the Ditch Bar Graph information, both located at the bottom of the profile portion of the sheet.

If Ditch Bar Graph information is to be included, the sheet name would be similar to "Eng 3000-10-1-2", which would provide a 100' space at the bottom of the sheet for the profile elevations, and an additional 100' for the DBG information.
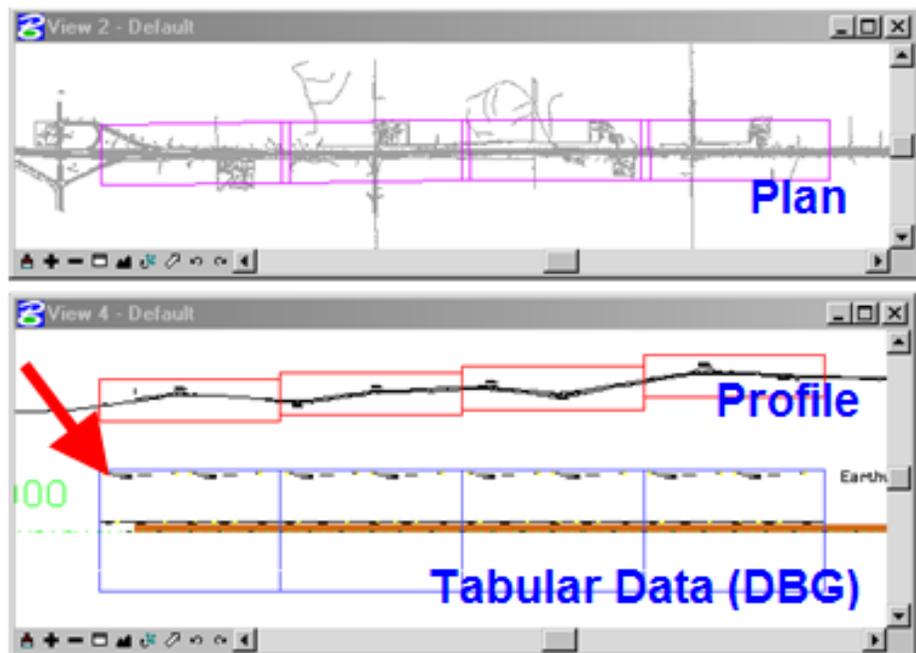
The **Tabular Data Port** is centered vertically about the Geopak Profile Cell (see the red arrow, above).

The general settings for the Tabular Data (DBG) port are as shown at the right.
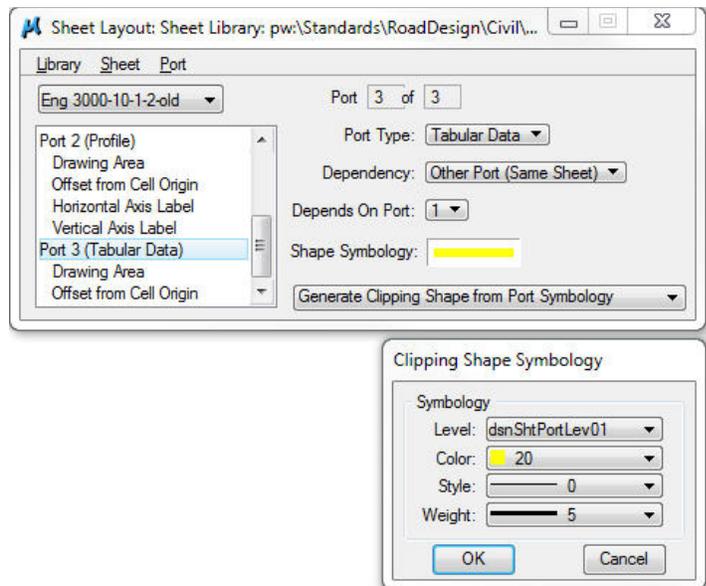
Drawing Area (Tabular Data)

The dimensions for the *Tabular Data Port,* (as we utilize it), match the length of profile are, (3000), and DOUBLE the profile area height, (1000 x 2 = 2000). The lower half of the Port, (the portion of the port located below the Geopak cell), is unused, but the size is necessary since the Port is automatically centered vertically about the *Geopak Profile Cell*.
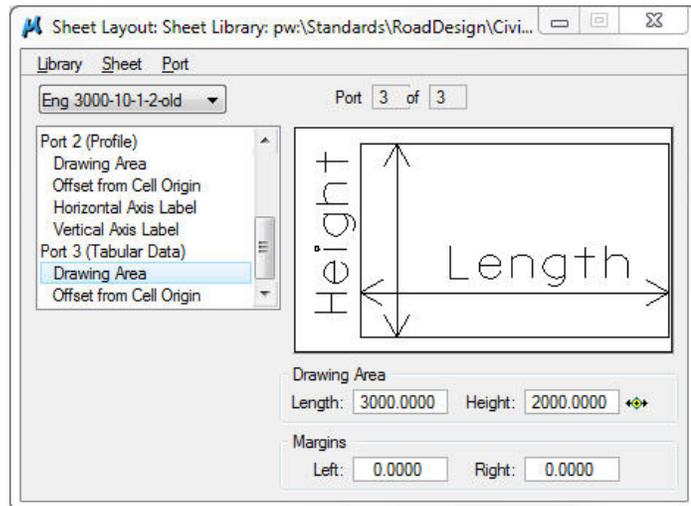
Offset from Cell Origin (Tabular Data)

The "X" offset value for the 3000' sheet **Tabular Data Port** *"***Offset from Cell Origin** matches the 67.5' plan-overlap distance in the "X" direction. Since the **Cell Origin** for our sheets is located in the upper left corner of the sheet, the "Y" offset is a negative value and includes the sum of the height of the Plan portion of the sheet, (1000' for a 3000' sheet), plus twice the Profile portion height (2 x 1000) therefore = "-3000".
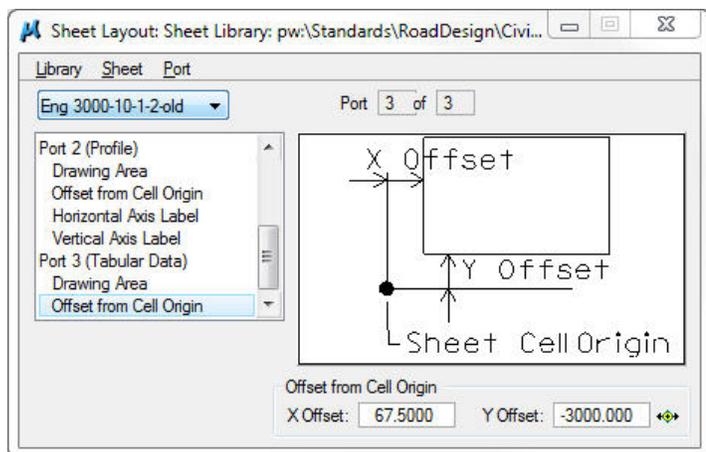
Library > Save

> ⚠ When all of the above settings are complete, the most important step in the entire "Sheet Type Creation" process is "**Library ➜ Save**", as shown below. Without this step, none of the sheet settings will be saved.
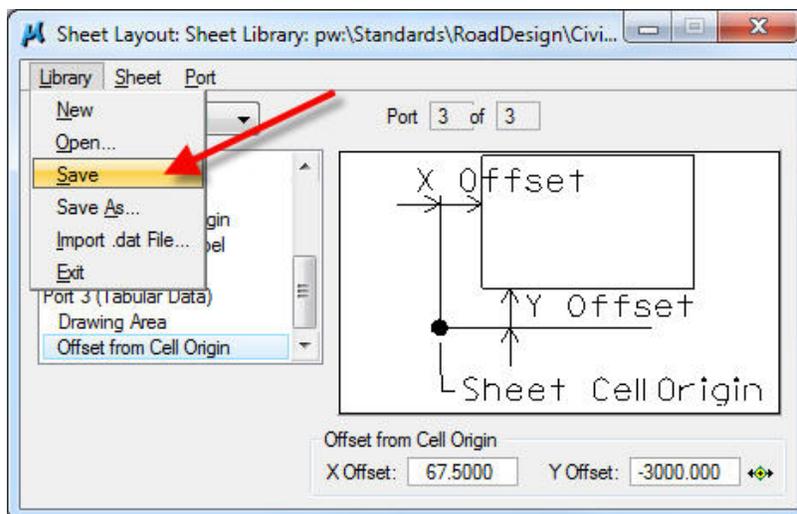
Sheet Library ascii Text File

All of the above settings for the individual sheet names are stored in a "***Sheet Library***" text file. Values can be edited through the dialogs above or directly in the ascii text file. The text file for just the "***Eng 3000-10-1-2-old***" sheet, as described above, is shown below.

(pw:\\Documents\Standards\RoadDesign\Civil\Sheeting\SheetLibs\DsnSheetLibEng0300old.psl)

```
 [VERSION=8.0]
[Sheet]
  NAME=Eng 3000-10-2-2-old
  DESCRIPTION=3000' P&P, 10 unit profile area with 2-2 non-profile space
  BASE_SCALE=1.0000
  VERTICAL_STACKING_OFFSET=15.0000
  HORIZONTAL_STACKING_OFFSET=20.0000
  MAX_NUMBER_OF_SHEETS=100
  STACK_ORIENTATION=1
  CELL_LIBRARY=PW:\Standards\RoadDesign\Civil\Sheeting\Sheet Cells\DsnSheet.cel
  CELL_NAME=DSNSHEETENGLISHOLD
  CELL_PLACEMENT_OPTION=0
  REFERENCE_FILE_NAME=PW:\Standards\RoadDesign\Civil\Sheeting\Sheet Ref Files\Resolution 720-
2000\EngSheetRefs\DsnESheet-3000-10-old.dgn
  HORIZ_GRID_ALIGNMENT=10.0000
  VERT_GRID_ALIGNMENT=10.0000
[Annotation: Title]
  LABEL_OPTION=0
  LABEL_TEXT=
  LABEL_LEVEL_NAME=dsnTextCpn
  LABEL_COLOR=0
  LABEL_WEIGHT=10
  LABEL_FONT=36
  LABEL_TEXT_JUSTIFICATION=7
  LABEL_HEIGHT=20.0000
  LABEL_WIDTH=20.0000
  LABEL_SCALE_FACTOR_OPTION=1
  LABEL_SCALE_FACTOR=1.0000
  LABEL_X_OFFSET=1140.0000
  LABEL_Y_OFFSET=-2040.0000
  LABEL_ANGLE=0.0000
[Annotation: Number]                                    LABEL_LEVEL_NAME=dsnTextCpn
  LABEL_OPTION=1                                         LABEL_COLOR=0
  LABEL_TEXT=                                            LABEL_WEIGHT=10
```

LABEL_FONT=36
LABEL_TEXT_JUSTIFICATION=7
LABEL_HEIGHT=20.0000
LABEL_WIDTH=20.0000
LABEL_SCALE_FACTOR_OPTION=1
LABEL_SCALE_FACTOR=1.0000
LABEL_X_OFFSET=2825.5000
LABEL_Y_OFFSET=-2040.0000
LABEL_ANGLE=0.0000
[Annotation: Project]
LABEL_OPTION=0
LABEL_TEXT=
LABEL_LEVEL_NAME=dsnTextCpn
LABEL_COLOR=0
LABEL_WEIGHT=10
LABEL_FONT=36
LABEL_TEXT_JUSTIFICATION=7
LABEL_HEIGHT=20.0000
LABEL_WIDTH=20.0000
LABEL_SCALE_FACTOR_OPTION=1
LABEL_SCALE_FACTOR=1.0000
LABEL_X_OFFSET=2329.0000
LABEL_Y_OFFSET=-2040.0000
LABEL_ANGLE=0.0000
[Plan Area]
PORT_NUMBER=1
DEPENDS_ON=1
DEPENDENCY=0
SYMBOLOGY=0
LEVEL_NAME=DsnShtPortLev01
COLOR=21
WEIGHT=5
LINE_STYLE=0
LENGTH=3135.0000
HEIGHT=1000.0000
LMARGIN=0.0000
RMARGIN=0.0000
[PA: Offset]
X_OFFSET=67.5000
Y_OFFSET=-1000.0000
[PA: Match Lines]
MATCH_LINE_OPTION=0
MATCH_LEVEL_NAME=Default
MATCH_COLOR=0
MATCH_WEIGHT=0
MATCH_LINE_STYLE=0
MATCH_LINE_LENGTH=0.0000
[PA: Match Left Line]
LABEL_LEVEL_NAME=Default
LABEL_COLOR=0
LABEL_WEIGHT=0
LABEL_FONT=36
LABEL_HEIGHT=0.2500
LABEL_WIDTH=0.2500
LABEL_SCALE_FACTOR_OPTION=0
LABEL_SCALE_FACTOR=1.0000
LABEL_LT_SIDE_OFFSET=0.0000
LABEL_LT_SIDE_TRAVERSEOFFSET=0.0000
LABEL_LT_SIDE_ANGLE=0.0000
LABEL_LT_SIDE_TEXT_JUSTIFICATION=0
LABEL_STA_FORMAT_PLUSLOC=0
LABEL_STA_FORMAT_COMPOSITION=0
LABEL_STA_FORMAT_NUM_DECIMALS=0
[PA: Match Right Line]
LABEL_LEVEL_NAME=Default
LABEL_COLOR=0
LABEL_WEIGHT=0
LABEL_FONT=36
LABEL_HEIGHT=0.2500

LABEL_WIDTH=0.2500
LABEL_SCALE_FACTOR_OPTION=0
LABEL_SCALE_FACTOR=1.0000
LABEL_RT_SIDE_OFFSET=0.0000

LABEL_RT_SIDE_TRAVERSEOFFSET=0.0000
LABEL_RT_SIDE_ANGLE=0.0000
LABEL_RT_SIDE_TEXT_JUSTIFICATION=0
LABEL_STA_FORMAT_PLUSLOC=0
LABEL_STA_FORMAT_COMPOSITION=0
LABEL_STA_FORMAT_NUM_DECIMALS=0
[Profile Area]
PORT_NUMBER=2
DEPENDS_ON=1
DEPENDENCY=1
SYMBOLOGY=0
LEVEL_NAME=DsnShtPortLev01
COLOR=22
WEIGHT=5
LINE_STYLE=0
LENGTH=3000.0000
HEIGHT=600.0000
LMARGIN=0.0000
RMARGIN=0.0000
[PFA: Offset]
X_OFFSET=67.5000
Y_OFFSET=-1800.0000
[PFA: Major Horiz. Axis Label]
LABEL_OPTION=1
LABEL_PREFIX=
LABEL_SUFFIX=
LABEL_LEVEL_NAME=DsnShtProfileSta
LABEL_COLOR=0
LABEL_WEIGHT=5
LABEL_FONT=36
LABEL_TEXT_JUSTIFICATION=7
LABEL_HEIGHT=14.0000
LABEL_WIDTH=14.0000
LABEL_SCALE_FACTOR_OPTION=1
LABEL_SCALE_FACTOR=1.0000
LABEL_ANGLE=0.0000
LABEL_INCREMENT=500.0000
LABEL_VERT_OFFSET=-210.0000
LABEL_HORIZ_OFFSET=0.0000
LABEL_STA_FORMAT_PLUSLOC=2
LABEL_STA_FORMAT_COMPOSITION=2
LABEL_STA_FORMAT_NUM_DECIMALS=0
[PFA: Minor Horiz. Axis Label]
LABEL_OPTION=0
LABEL_PREFIX=
LABEL_SUFFIX=
LABEL_LEVEL_NAME=Default
LABEL_COLOR=0
LABEL_WEIGHT=0
LABEL_FONT=36
LABEL_TEXT_JUSTIFICATION=0
LABEL_HEIGHT=0.2500
LABEL_WIDTH=0.2500
LABEL_SCALE_FACTOR_OPTION=1
LABEL_SCALE_FACTOR=1.0000
LABEL_ANGLE=0.0000
LABEL_INCREMENT=0.0000
LABEL_VERT_OFFSET=0.0000
LABEL_HORIZ_OFFSET=0.0000
LABEL_STA_FORMAT_PLUSLOC=2
LABEL_STA_FORMAT_COMPOSITION=0
LABEL_STA_FORMAT_NUM_DECIMALS=0
[PFA: Vert. Left Axis Label]
LABEL_OPTION=1

```
  LABEL_PREFIX=
  LABEL_SUFFIX=
  LABEL_LEVEL_NAME=DsnShtProfileElev
  LABEL_COLOR=0
  LABEL_WEIGHT=5
  LABEL_FONT=36
  LABEL_HEIGHT=16.0000
  LABEL_WIDTH=16.0000
  LABEL_SCALE_FACTOR_OPTION=1
  LABEL_SCALE_FACTOR=1.0000
  LABEL_ANGLE=0.0000
  LABEL_INCREMENT=10.0000
  LABEL_LT_SIDE_VERT_OFFSET=5.0000
  LABEL_LT_SIDE_HORIZ_OFFSET=-5.0000
  LABEL_LT_SIDE_TEXT_JUSTIFICATION=14
[PFA: Vert. Right Axis Label]
  LABEL_OPTION=1
  LABEL_PREFIX=
  LABEL_SUFFIX=
  LABEL_LEVEL_NAME=DsnShtProfileElev
  LABEL_COLOR=0
  LABEL_WEIGHT=5
  LABEL_FONT=36
  LABEL_HEIGHT=16.0000
  LABEL_WIDTH=16.0000
  LABEL_SCALE_FACTOR_OPTION=1
  LABEL_SCALE_FACTOR=1.0000
  LABEL_ANGLE=0.0000
  LABEL_INCREMENT=10.0000
  LABEL_RT_SIDE_VERT_OFFSET=5.0000
  LABEL_RT_SIDE_HORIZ_OFFSET=5.0000
  LABEL_RT_SIDE_TEXT_JUSTIFICATION=2
[Tabular Data]
  PORT_NUMBER=3
  DEPENDS_ON=1
  DEPENDENCY=1
  SYMBOLOGY=0
  LEVEL_NAME=DsnShtPortLev01
  COLOR=23
  WEIGHT=5
  LINE_STYLE=0
  LENGTH=3000.0000
  HEIGHT=2000.0000
  LMARGIN=0.0000
  RMARGIN=0.0000
[TD: Offset]
  X_OFFSET=67.5000
  Y_OFFSET=-3000.0000
[TD: Major Horiz. Axis Label]
  LABEL_OPTION=0
  LABEL_PREFIX=
  LABEL_SUFFIX=
  LABEL_LEVEL_NAME=Default
  LABEL_COLOR=0
  LABEL_WEIGHT=0
  LABEL_FONT=36
  LABEL_TEXT_JUSTIFICATION=0
  LABEL_HEIGHT=0.2500
  LABEL_WIDTH=0.2500
  LABEL_SCALE_FACTOR_OPTION=0
  LABEL_SCALE_FACTOR=1.0000
  LABEL_ANGLE=0.0000
```

```
  LABEL_INCREMENT=1.0000
  LABEL_VERT_OFFSET=0.0000
  LABEL_HORIZ_OFFSET=0.0000
  LABEL_STA_FORMAT_PLUSLOC=0
  LABEL_STA_FORMAT_COMPOSITION=0

LABEL_STA_FORMAT_NUM_DECIMALS=1414
545731
[TD: Minor Horiz. Axis Label]
  LABEL_OPTION=0
  LABEL_PREFIX=
  LABEL_SUFFIX=
  LABEL_LEVEL_NAME=Default
  LABEL_COLOR=0
  LABEL_WEIGHT=0
  LABEL_FONT=36
  LABEL_TEXT_JUSTIFICATION=0
  LABEL_HEIGHT=0.2500
  LABEL_WIDTH=0.2500
  LABEL_SCALE_FACTOR_OPTION=0
  LABEL_SCALE_FACTOR=1.0000
  LABEL_ANGLE=0.0000
  LABEL_INCREMENT=0.0000
  LABEL_VERT_OFFSET=0.0000
  LABEL_HORIZ_OFFSET=0.0000
  LABEL_STA_FORMAT_PLUSLOC=0
  LABEL_STA_FORMAT_COMPOSITION=0
  LABEL_STA_FORMAT_NUM_DECIMALS=0
[TD: Vert. Left Axis Label]
  LABEL_OPTION=0
  LABEL_PREFIX=
  LABEL_SUFFIX=
  LABEL_LEVEL_NAME=Default
  LABEL_COLOR=0
  LABEL_WEIGHT=0
  LABEL_FONT=3
  LABEL_HEIGHT=0.2500
  LABEL_WIDTH=0.2500
  LABEL_SCALE_FACTOR_OPTION=0
  LABEL_SCALE_FACTOR=1.0000
  LABEL_ANGLE=0.0000
  LABEL_INCREMENT=0.0000
  LABEL_LT_SIDE_VERT_OFFSET=0.0000
  LABEL_LT_SIDE_HORIZ_OFFSET=0.0000
  LABEL_LT_SIDE_TEXT_JUSTIFICATION=0
[TD: Vert. Right Axis Label]
  LABEL_OPTION=0
  LABEL_PREFIX=
  LABEL_SUFFIX=
  LABEL_LEVEL_NAME=Default
  LABEL_COLOR=0
  LABEL_WEIGHT=0
  LABEL_FONT=3
  LABEL_HEIGHT=0.2500
  LABEL_WIDTH=0.2500
  LABEL_SCALE_FACTOR_OPTION=0
  LABEL_SCALE_FACTOR=1.0000
  LABEL_ANGLE=0.0000
  LABEL_INCREMENT=0.0000
  LABEL_RT_SIDE_VERT_OFFSET=0.0000
  LABEL_RT_SIDE_HORIZ_OFFSET=0.0000
  LABEL_RT_SIDE_TEXT_JUSTIFICATION=0
```

Chronology of Changes to Design Manual Section:

021B-005   P & P Sheeting Library Development

10/13/2014   Revised
                Updated to reflect migration to ProjectWise.

6/30/2011   Revised
                Added information on creating a new sheet port

5/29/2009   NEW
                Previously Updated.