40D-14

Station and Offset Reports

Design Manual Chapter 40 Design Survey Specifications

Originally Issued: 09-30-11

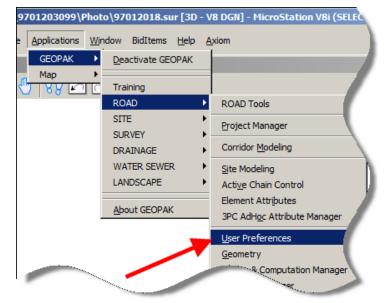
1.) Activate GEOPAK by selecting **Applications > GEOPAK > Activate GEOPAK** from the main MicroStation toolbar, as shown below.



2.) You must tell GEOPAK where the ".gpk" file containing the station and offset information is located. This is done by changing the user preferences. From the main MicroStation tool bar, select

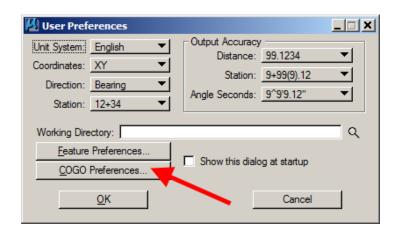
Applications >
GEOPAK >
Road >
User Preferences

as shown at the right.



3.) On the **User Preferences** dialog box *click* the **COGO Preferences** button.

This will display the **COGO Preferences** dialog, as shown below.



4.) To locate the **Job (GPK) Directory**, *click* the magnifying glass browse icon (\mathfrak{S}), as shown at the right.

This will open either the **Select Directory** dialog, as shown below, or possibly the **Browse for Folder** dialog, which performs the same function.

COGO Preferences

Job (GPK) Open Mode: Query

Job (GPK) Directory:

COGO Input File Directory:

COGO Output File Directory:

Redefinition of Elements

Force Redefinition Off Upon COGO Activation

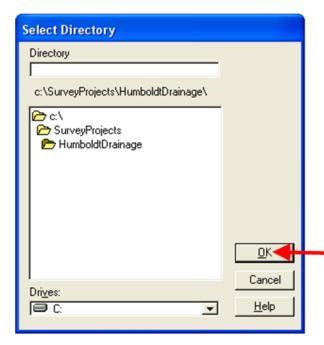
OK

Cancel

5.) *Select* the directory where the "**gpk**" file is located, then *click* the **OK** button, as shown at the right.

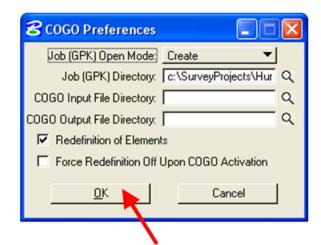
If you are using GEOPAK **Project Manager**, this should be set up within your project preferences. If you are not using **Project Manager**, but your "**gpk**" file is located in the same directory as the MicroStation file that you have open, you can leave the directory path blank and GEOPAK will list all of the "**gpk**" files in the directory that contains the open file.

The action listed above should open the **COGO Preferences** dialog, as shown below.

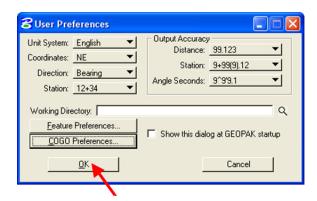


6.) In the **COGO Preferences** dialog, *click* the **OK** button to approve the selected **GPK Directory**.

This should cause the program to return to the **User Preference** dialog, as shown below.



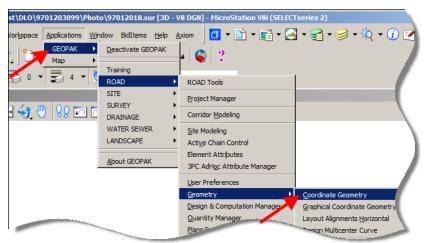
7.) To move on, click the **OK** button on the **User Preference**s dialog, as shown at the right.



8.) From the main MicroStation tool bar, (as shown at the right), select:

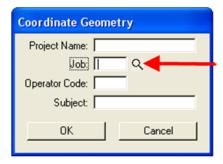
Applications >
GEOPAK >
ROAD >
Geometry >
Coordinate Geometry

This should display the initial **Coordinate Geometry** dialog, as shown below.



9.) The initial **Coordinate Geometry** (COGO) dialog box that appears allows the selection of the ".**gpk**" file that contains all of the survey information for the project. To see a list of available "**gpk**" files, *click* on the magnifying glass browse icon ($^{\mathbf{Q}}$), as shown at the right.

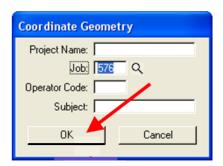
This will display the **Job:** dialog shown below.



10.) In the **Job:** dialog, *select* (highlight) the correct "**gpk**" file and *click* the **OK** button.



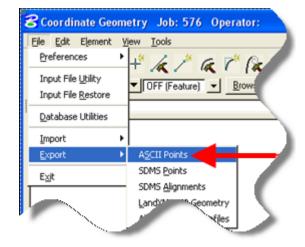
11.) When the correct **Job** displays in the **Coordinate Geometry** dialog, *click* the **OK** button to continue.



12.) On the second (and larger) **Coordinate Geometry** dialog box, shown at the right, *select* the following command:

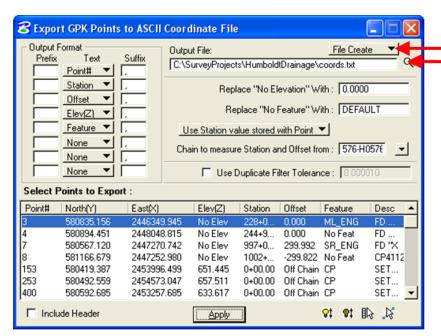
File > Export > ASCII Points

This should display the "Export GPK Points ..." dialog, as shown below.



13.) The **Export GPK Points to ASCII Coordinate File** dialog is where the actual **station offset report** is created. Use the *drop-down* list arrow, (located at the upper right corner of the dialog), to *select* the **File Create** option.

Next, *click* on the magnifying glass browse icon ($\stackrel{\bigcirc}{\circ}$). This will produce the **Export File to Create** dialog, as shown below.



14.) On the **Export File to Create** dialog, *locate* and *select* the directory where you want the file to be created. Type in what you would like to name the file. *Click* the **OK** button when done.

This will return processing to the "Export GPK Points ..." dialog, as shown below.

15.) In the **Output Format** area, you can *select* the desired attributes for each point. You can also select the preferred display order for the text file column data in the **Output** file.

In the center of the dialog box, use the *drop-down* arrow to *select* the **Compute Station value from Chain** option, as shown.

Use the next *drop-down* arrow to *select* the **Chain** name (horizontal alignment) that you would like the **stationing and offsets** measured from.

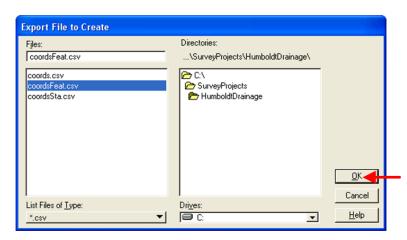
16.) You can sort the points listed in the "Select Points to Export" area by clicking on any of the column headings to sort by that point type.

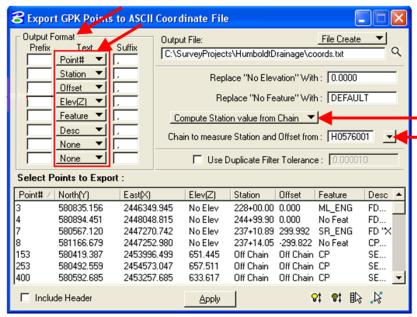
Example: To sort by the Feature code, click on the Feature heading, as located by the red arrow at the right.

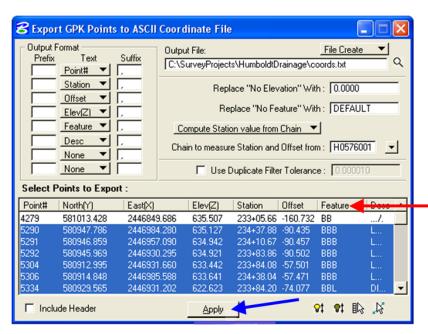
To select the points that are to be included in the **Station Offset** report, highlight the desired rows of data by to be included in the list.

To highlight several points, *click* on one of the points to be selected and then hold down either the **Shift** or **Ctrl** keyboard key while selecting additional points.

When the *selection* is complete *click* the **Apply** button.





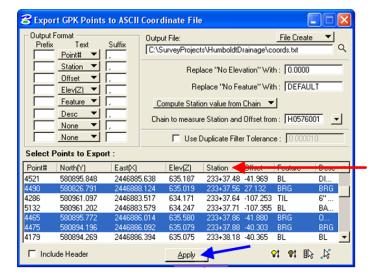


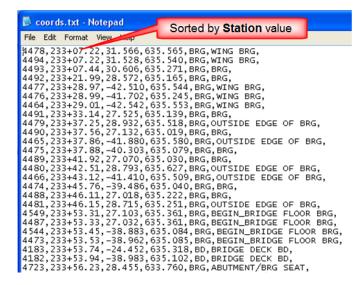
17.) The **Station Offset** report has now been created. Because of the "**txt**" file extension used in the **Output File** area of the example above, the output produced is in an ASCII text format. A file of this type can be opened with Microsoft Word, Notepad, WordPad, or the PFE32 text editor. Because the **Select Points to Export** list (above) was sorted by the **Feature** column, the "**txt**" file will also be sorted by the **Feature**.

18.) Sorting by the **Feature** is often the best way to select points to highlight for a report. The information can be sorted by any feature for the purpose of locating and *selecting* the desired points for the **Output List**. After the points have been *selected* and highlighted, they can be resorted (if desired) to produce a different order for the final **Output List**.

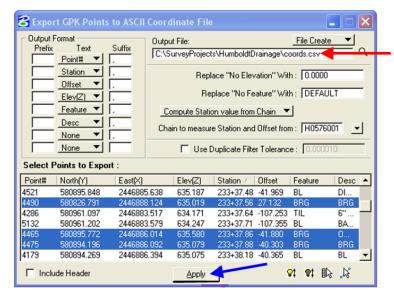
In the example list below the same points were selected as in the example listing above, but after the points were selected, they were resorted by the **Station** value prior to creating the list. After *highlighting* the points in the **Select Points** area, resort by *clicking* on the **Station** heading and then press the **Apply** button to create the list.

19.) The points shown in the "**txt**" file listing at the right are essentially the same as in the list above except that they are sorted by **Stationing**.

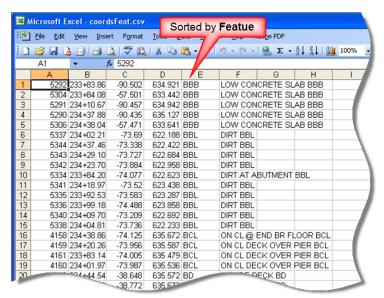




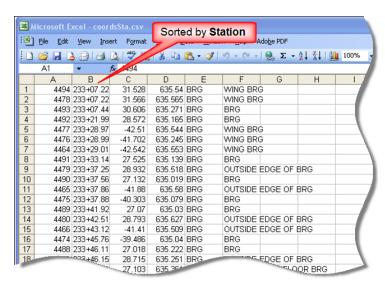
20.) If you would rather look at the station offset report in Microsoft Excel, you can change the file extension to "csv", as shown by the red arrow at the right, then click the Apply button to produce the list.



21.) This will create a comma delineated file that can be opened easily in Excel. This is the same points list sorted by **Feature**.



22.) These are the same points again, sorted by **Station** in Excel.



Chronology of Changes to Design Manual Section:

040D-014 Station and Offset Reports

9/30/2011

NEW New