GEOPAK Plotting Horizontal Chains

1) You will need to use GEOPAK Design and Computation Manager (D&C) to plot your horizontal alignment chains. These chains are different from survey chains in that they may contain spirals, curves, etc. To start D&C select Plans Preparations>D and C Manager from the Survey Toolbar.

2) Ensure that the correct D&C is open. The path shown on the first line should be W:\Highway\Design\CADD\Geopak Survey\SeedFiles\GEOPAKSurvey\DCManager\IDOTSurvey.ddb.

3) Because of the way that the survey information is broken up for the customers’ use, the MicroStation line representing the horizontal alignment is drawn in the Field_TOPO_0100 model. In D&C, double-click on the Field>TOPO_0100 folder and then double-click on the Existing Horizontal Alignment tool. This tool stands out because it is the only tool in this folder with a paint brush in front of it.
4) You will then have to press the **Draw Plan & Profile** button on the *smaller* of the two *D&C* dialog boxes.

![Image of Draw Plan & Profile button](image1.png)

5) This will open up the *Draw Plan & Profile* dialog box. Make sure that the *Element Type* is set to *Chains*. You can now single-click on the alignment that you would like to draw. Clicking on the alignment name draws it into MicroStation. You can draw multiple alignments by clicking on each individual chain name.

![Image of Draw Plan & Profile dialog box](image2.png)

6) Your alignment should look something like what is shown below. The line representing the alignment is all that is drawn in this model.

![Image of alignment](image3.png)
7) The curve information, stationing and tick marks are all drawn into the Field_TXT_0100 model. Open this model. In D&C, double-click on the Field_TXT_0100 folder and then double-click on the **Horizontal Alignment Stationing and Curve Data** tool. You can easily recognize this tool as it is the only one with a paint brush in front of it in this folder.

8) You will then have to press the **Draw Plan & Profile** button on the **smaller** of the two D&C dialog boxes.

9) The first thing we will draw in is the curve data. Make sure that the **Element Type** is set to **Chains**. Single click on the alignment name and the curve data for that chain will be drawn into the MicroStation file. Repeat for as many alignments as necessary.
10) Your curve data should look similar to this.

11) To draw the curve data into this model you must also draw in the line representing the alignment. This line is not needed in the Field.TXT.0100 and **should be deleted**.
12) To draw the tick marks and stationing, change the Element Type to Stationing. Single-click on the alignment name that you would like to draw these items for. Repeat for as many chains as necessary by single-clicking on each individual alignment name.

13) The stationing and tick marks should now be drawn into your MicroStation file.