# 5. Horizontal Alignment Displays

In this exercise, we display some graphics for our proposed centerline.

### I.) Accessing Design and Computation Manager

1) **Open** the MicroStation file

C:\Projects\Roane\SR95PoplarCr\ROSR95Alignments.dgn

Access Project Manager.

2) Select the Plan View Design button from the Project Manager workflow dialog which opens the Plan View Design tool box.



**Select** the **Design and Computation Manager** icon to invoke the Design and Computation Manager shown below. It can also be accessed from the Main Task group when the Civil Workflows are set.

A secondary dialog will appear to be used in conjunction with the Design and Computation Manager dialog.

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	Place Influence     Adhoc Attributes     Match Point Text     New Element Only     Draw COGO Element

## **II.)** Drawing Horizontal Alignments

1) In the Design and Computation Manager dialog, select the following item:

Drafting Standards  $\rightarrow$  Roadway Horizontal Alignments  $\rightarrow$  HA Roadway.

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HA Points place roadway horiz. alignment poi		
CL Cells cells for horizontal alignments		
HA Intersection label horiz. alignment intersections		
Roadway Vertical Alignments		
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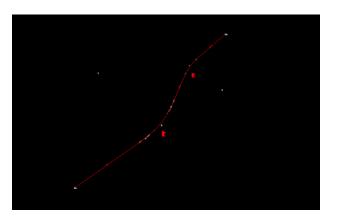
2) Next, select the Draw Plan and Profile button from the secondary dialog:



3) Set the Element Type to Chains. Chain SR95 should be displayed in the list box as shown. Notice that the options that are to be drawn with the chain are already activated. Set the Label Scale to 50 if not set.

Item:	HA Road	way prop, roadway horiz, alignment
Element Type:	Chains	<ul> <li>Label Scale: 50</li> </ul>
Key-in Points:		
Select Chain to	Draw	
SR95 SR95PRELIMIN	ARY	💷 Line Dimetion Labola
		Line Direction Labels
		Line Length Labels
		Line Labels Only
		Curve Labels
		Curve Data
		Curve Labels Only
		Place Curve Data by DP
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		Spiral Labels Only
		Place Spiral Data by DP

4) To draw the chain, **click** on **SR95** in the list box. Use the MicroStation **Fit View**  $\rightarrow$  **Active** to see the chain. Make sure all of the chain is in view.



#### NOTE:

**DO NOT** double click on the chain name. Each click will display the chain and a double click will place two sets of graphics.

5) Change the Element Type to Stationing and make sure the dialog is filled out as shown below. Annotate the alignment SR95 by clicking on the chain name in the list box.

Item: HA Roadway prop, roadway horiz. alignment Element Type: Stationing Label Scale: 50 Key-in Points: Select Chain to Draw SR95 SR95PRELIMINARY V Tick Marks V Tick Mark Stations V PC/PT/TS/CS/SC/ST/PI Labels PI Labels Small Ticks Ticks Left; Labels Left Large Ticks
Key-in Points:         SR95         SR95PRELIMINARY         Image: Constraint of the second state
Select Chain to Draw         SR95         SR95PRELIMINARY         Image: Construction of the second structure         Image: Constructure         Image: Cons
SR95         SR95PRELIMINARY         Image: Constraint of the state in the sta
Ticks Both; Labels Left       Control Point Labels       As Per Preferences

**Close** the GEOPAK Draw Plan and Profile dialog.

6) We have another application in D&C Manager that will place symbols for us at all of the alignment's key points. Before executing the following steps, make sure your entire alignment is shown in View 1.

7) **Double-click** on the following item in D&C Manager:

### Drafting Standards $\rightarrow$ Roadway Horizontal Alignments $\rightarrow$ HA Points

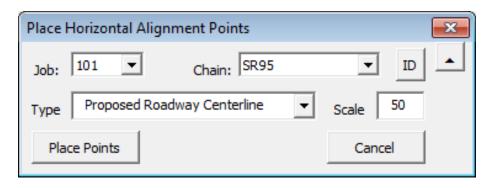
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<ul> <li>C:\Users\Public\Geopak Standards\tdot.ddb</li> <li>Drafting Standards</li> <li>Tools</li> <li>Cross Sections</li> <li>Roadway Horizontal Alignments</li> <li>HA Roadway_20 prop. roadway horiz. alignment - 20 Scale Offsets</li> <li>HA Roadway_20 prop. rdwy horiz. alignment - 20 Scale Offsets</li> <li>HA Roadway Pre preliminary roadway horiz. alignment</li> <li>HA Roadway Ex existing roadway horiz. alignment</li> <li>HA Points place roadway horiz. alignments</li> <li>CL Cells cells for horizontal alignments</li> <li>HA Intersection label horiz. alignment intersections &amp; ends</li> <li>Roadway Vertical Alignments</li> <li>Exist. Profiles</li> <li>Survey Control</li> </ul>	
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#### NOTE:

Since this D&C Manager item is run by a separate program double clicking on the item prompts D&C to open the application and run it. These types of items can usually be recognized by their description which starts with a **verb** such as **place**, **draw**, **access**, **etc**.

#### 8) The **Place Horizontal Alignment Points** dialog is displayed.

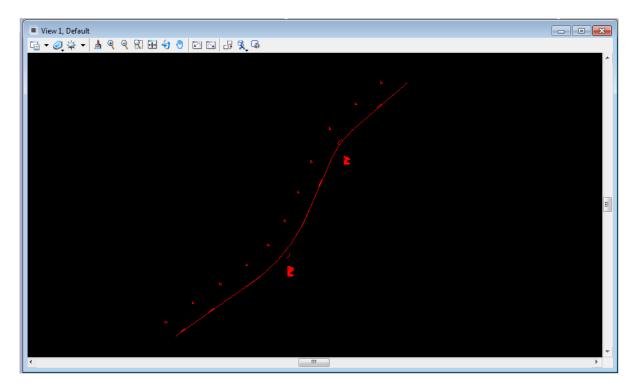
All GEOPAK jobs found within the current active folder are listed in the Job drop down box. If this tool was used previously for that job, the last chain processed is set as well as the last horizontal alignment type which was used. Scale defaults to active scale set in the MicroStation DGN file. 9) The Job should be set to 101 and the Chain to SR95. Set the Type to Proposed Roadway Centerline and if not already set, change the Scale to 50.



**Click** the **Place Points** button to place the horizontal alignment point symbols for chain SR95.

**10)** Review the results of the previous steps used to display and annotate the proposed centerline SR95.

You may wish to turn off the visualizations from COGO work done for the chain. They are on level **DESIGN - CENTERLINE - Proposed GPK Visualizations**.



- **11) Exit** the Design and Computation Manager dialogs.
- **12) Dismiss** the Plan View Design tool box.