

Exercise 13-1

This is a group exercise to demonstrate the process for specifying the location of cross sections using pattern lines and creating existing ground at those locations.

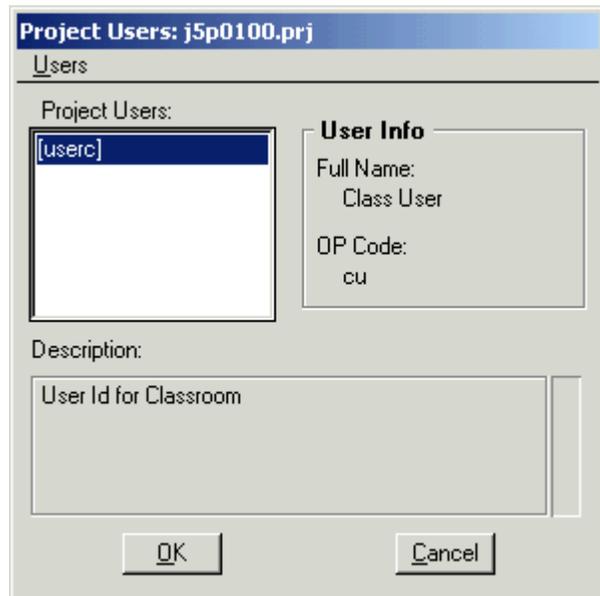
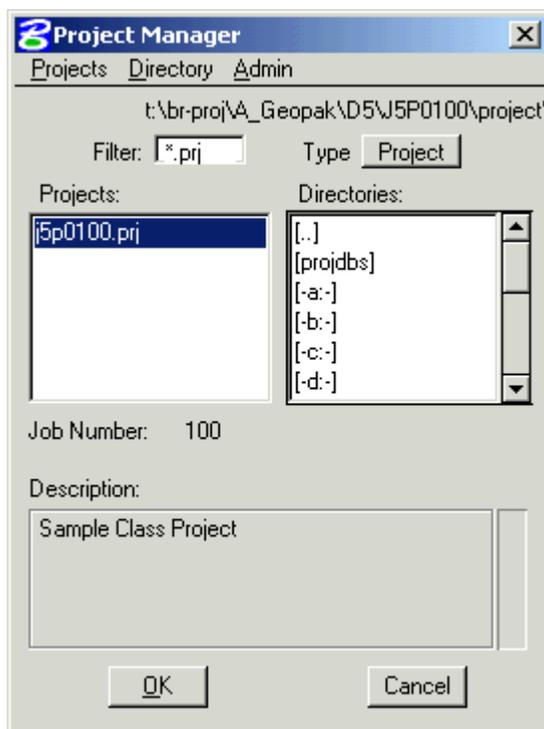
1. Open the MicroStation file
t:\br-proj\A_geopak\d5\j5p0100\data\pattern_shape_j5p0100.dgn.

Attach the following files as references:

- t:\br-proj\A_geopak\d5\j5p0100\data\plan_50_j5p0100.dgn** and
t:\br-proj\A_geopak\d5\j5p0100\data\plan_bh_j5p0100.dgn.

Save changes to the MicroStation file **pattern_shape_j5p0100.dgn.**

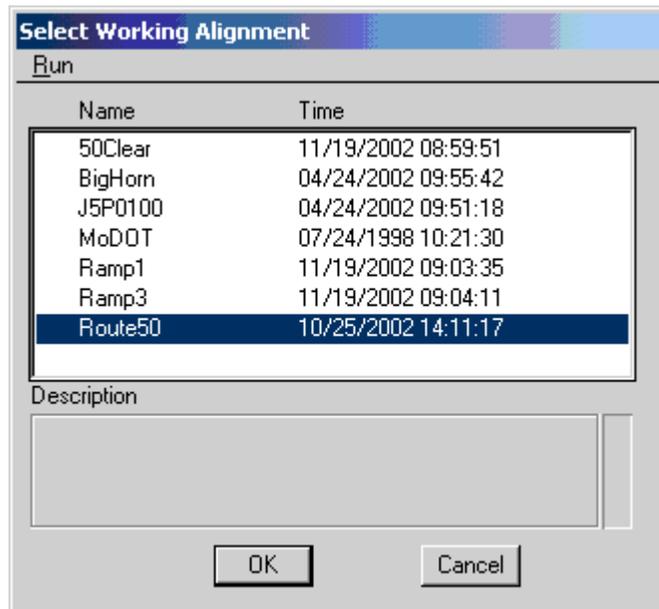
2. Open the project **t:\br-proj\A_geopak\d5\j5p0100\project\j5p0100.prj**. Select user **userc**.



Enter **Road**.



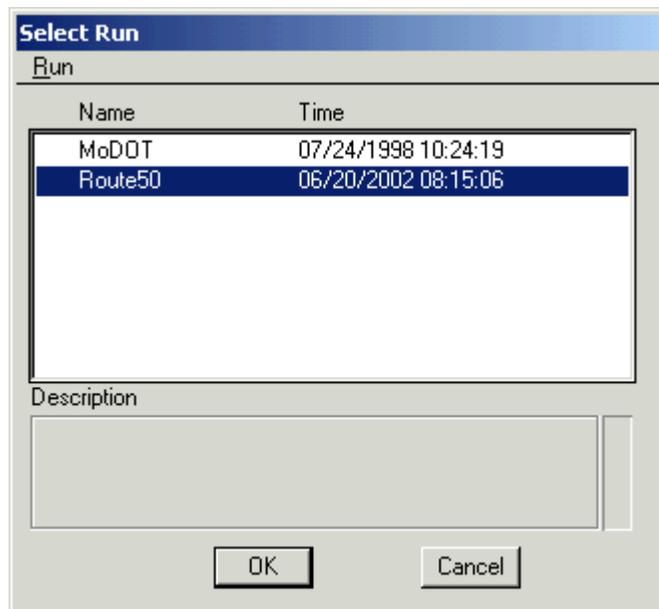
3. Select the **Route50** working alignment.



4. Choose **Draw Pattern** from the **Road Project** dialog.



Copy the **MoDOT** run and name the new run **Route50**.



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5. Create the pattern lines for the Route50 alignment in the vicinity of Big Horn Dr. but away from the proposed bridge ends by using the following settings.

Job: **100**
 Chain: **Route50**
 Beginning Ending
 Offset Lt: **200** Offset Rt: **200**
 Station: **465+00** Station: **465+40**
 Offset Lt: **200** Offset Rt: **200**
 Even: **10**

After enter this information in the Draw Pattern Lines dialog, plot the pattern lines by clicking on **Apply**.

Repeat the process with a beginning station of **465+90** and ending station of **466+50**.

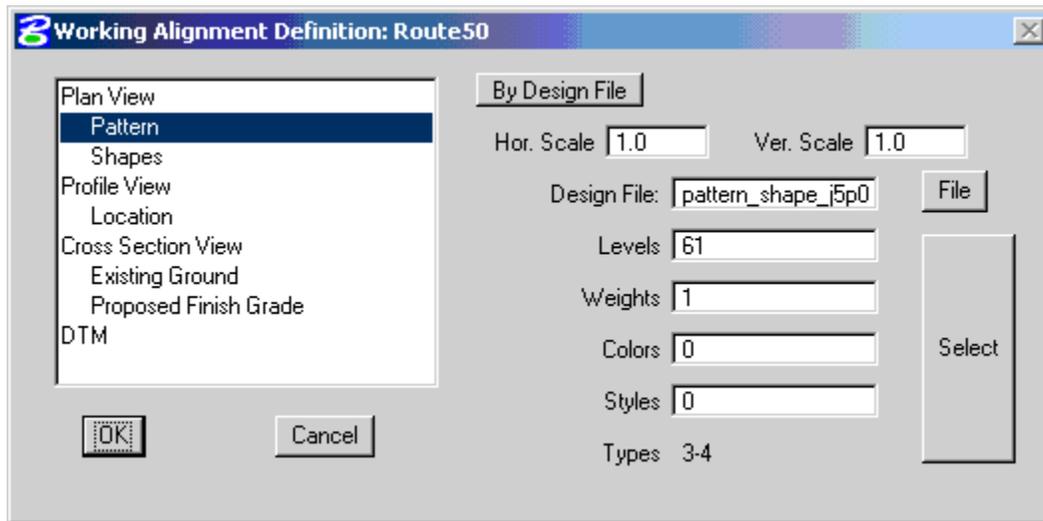
6. Add pattern lines at 1' increments in the vicinity of the proposed bridge ends. To do this, change the **Even** value to **1** and add the following two ranges of pattern lines as follows. **Make sure you do not add pattern lines on top of any already plotted lines.**

Beginning Station **465+50** Ending Station: **465+80**
 Beginning Station **466+60** Ending Station: **467+00**

7. Exit Draw Pattern and save the changes to the MicroStation file.

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8. In the **Pattern** section of the Route 50 **Working Alignment Definition** note that the Design file is **pattern_shape_j5p0100.dgn** and the symbology for the pattern lines.



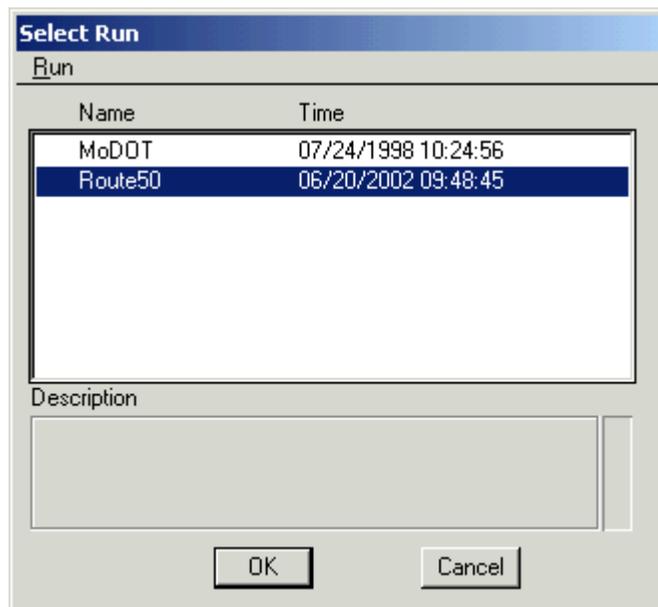
9. Open the MicroStation file **t:\br-proj\geopak\d5\j5p0100\data\xs_j5p0100.dgn**.

Save the file as **xs_50_j5p0100.dgn** so **xs_j5p0100.dgn** remains a blank file.

10. Choose **Existing Ground Cross Sections** from the **Road Project** dialog.



Copy the MoDOT run to **Route50** and enter that run.



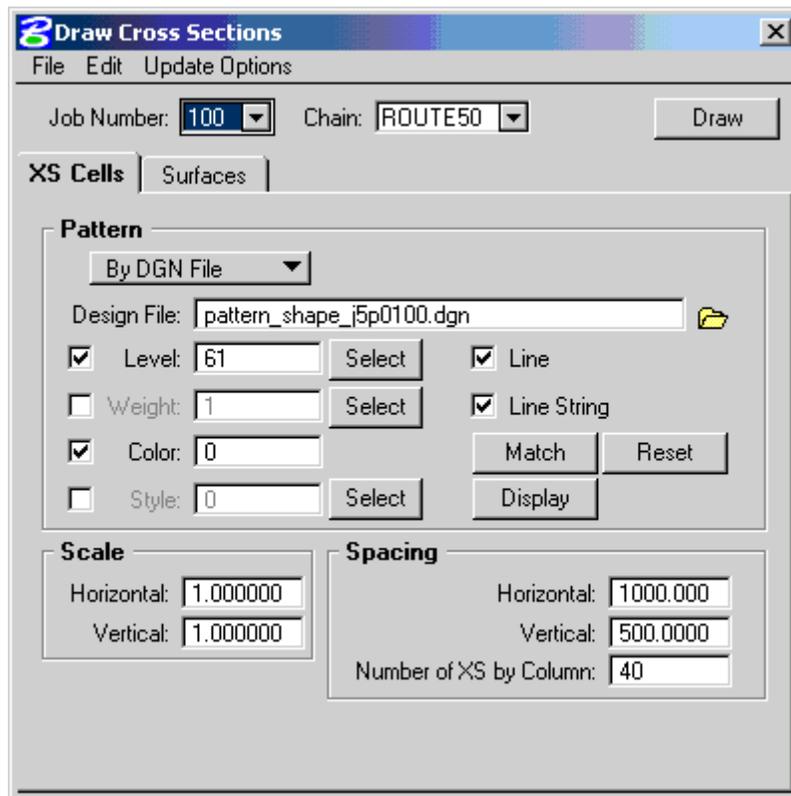
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11. Cut the existing ground cross sections with the following parameters in the top portion of the dialog:

Job Number: **100**
Chain: **Route50**

In the **XS Cells** tab, set the following:

Pattern: **By DGN File**
Design File: **pattern_shape_50_j5p0100.dgn**



In the **Surfaces** tab, set the **TIN File** to **j5p0100.tin**.



Click on **Draw** to cut the cross sections.

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12. Exist Draw Cross Sections and save the changes to the run and the MicroStation drawing **xs_50_j5p0100.dgn**.

13. In the **Cross Section View** section of the **Route50 Working Alignment Definition** set the **XS DGN File** to **xs_50_j5p0100.dgn**.

