## **5 Scale Cross Section Sheets**

## **Cross Section Sheet Layout**

- Step 1. Create cross section sheet file using appropriate seed file
- Step 2. Open the file you just created. Access Project Manager.
- Step 3. Select the Cross Section Sheets button from the Road Project workflow dialog box.
- Step 4. Create a new run.
- Step 5. Fill in the Sheet Dimensions as shown.

Cross Section Sheets - 5scale	×
<u>F</u> iles	
Sheet Dimensions XS DGN XS Elements Left Hand Offset Horiz Clear Zone Vert Clear Zone Offset Labels Elevation Labels Station Labels Sheet Stack Orientation	Sheet Space Sheet Space Sheet Width Sheet Dimensions Sheet Height 10.00000 Sheet Width 16.00000 Sheet Space 1.500000

Step 6. Make sure that the XS DGN portion is filled out correctly.

Cross Section Sheets - 5s	cale 🔀
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Elles     Sheet Dimensions     XS DGN     XS Elements     Left Hand Offset     Horiz Clear Zone     Vert Clear Zone     Offset Labels     Elevation Labels     Station Labels	XS DGN File 1\d17682xsmainline.dgn Select Tolerance 0.100000 Lower Range Limit Upper Range Limit Chain MAINLINE
Sheet Stack Orientation	Begin Station 200+00.00 R 1
P	End Station 220+00.00 R 1

Step 7. Using the XS Elements item, enable the toggle for Levels.

Access the Level Mask dialog box using the Select button and set the levels as shown:

Cross Section Sheets - 5scale	×
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Sheet Dimensions XS DGN XS Elements Left Hand Offset Horiz Clear Zone Vert Clear Zone Offset Labels Elevation Labels Station Labels Sheet Stack Orientation	Styles       Select         Types       Select         Reset       I         Image: Control of the set       Image: Control of the set         Image: Control of the set       Image: Control of the set         Image: Control of the set       Image: Control of the set         Image: Control of the set       Image: Control of the set

Step 8. Fill out the Left Hand Offset as shown.

Cross Section Sheets - 5scale		×
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Sheet Dimensions XS DGN XS Elements Left Hand Offset Horiz Clear Zone Vert Clear Zone Offset Labels Elevation Labels Station Labels Sheet Stack Orientation	Left Hand Offset	

Step 9. Set the Horizontal Clear Zone as shown.



Step 10. Set the Vertical Clear Zone as shown.



Step 11. Set the Offset Labels as shown, using the Define button to set the text Plot Parameters (wt=4).

Cross Section Sheets - 5se Files	cale X	
Sheet Dimensions XS DGN XS Elements Left Hand Offset Horiz Clear Zone Vert Clear Zone Offset Labels Elevation Labels Station Labels Sheet Stack Orientation	Offset Label Vertical Position          00ffset Labels         00ffset Labels         Image: Contract of the state of the stat	Color 0 Font 23 TH 0.700000 TW 0.700000 Justification Bottom Center DK Cancel

## Step 12. Set the Elevation Labels as shown, using the Define button to set the text Plot Parameters (wt=4).

Cross Section Sheets - 5s	cale 🛛 🗶	
<u>F</u> iles		
Sheet Dimensions XS DGN XS Elements Left Hand Offset Horiz Clear Zone Vert Clear Zone Offset Labels Elevation Labels Station Labels Sheet Stack Orientation	Image: state stat	Elevation Labels Text   Level   Weight   Color   Font   23   TH   0.700000   TW   0.700000   Justification   Bottom   Bottom   Center

Step 13. Set the Station Labels as shown, using the Define button to set the text Plot Parameters (wt=4).

Cross Section Sheets - 556 Files	ale X	
Sheet Dimensions XS DGN XS Elements Left Hand Offset Horiz Clear Zone Vert Clear Zone Offset Labels Elevation Labels Station Labels Sheet Stack Orientation	Station Labels Station Horiz Offset 1 8.000000 Station Vertical Offset 0.000000 Plot Parameters Define	Station Labels Text Level Weight Color 0 Font 23 TH 1.050000 TW 1.050000 Justification Bottom Center DK Cancel

Step 14. Set the Sheet Stack Orientation to Vertical with the Max Number of Sheets (per stack) set to 10.



Step 15. Set the Sheet Stack Single/Double to Single Stack.

Cross Section Sheets - 5sc	ale X
<u> </u>	
Horiz Clear Zone         Vert Clear Zone         Offset Labels         Elevation Labels         Station Labels         Sheet Stack Orientation         Sheet Stack Single/Double         Earthwork Quantities         Sheet DGN File         Add Elevations	300       400         000       400         000       400         000       400         000       400         000       400         000       400         000       400         000       400         000       0000000

Step 16. Set up the Earthwork Quantities as shown (wt=5).



**Step 17.** Set up the **Sheet DGN File** section as shown. Use appropriate dgn file, the one shown below is just an example.

Cross Section Sheets - 5scale		×
<u>F</u> iles		
Horiz Clear Zone Vert Clear Zone Offset Labels Elevation Labels Station Labels Sheet Stack Orientation Sheet Stack Single/Double Earthwork Quantities Sheet DGN File Add Elevations	Sheet DGN File eo\vdot\road1\fivescalexs.dgn Horiz. Scale 10.000000 Vert. Scale 10.000000 Reference Data Point Beginning X Coord 10000.0000 Beginning Y Coord 10000.0000	Files

- **Step 18.** Process the cross sections onto the sheets using the **File > Run** pulldown. Create a log file called **xssheets.log**.
- Step 19. Exit Cross Section Sheets dialog box and save your run. Review the results.

## **5 Scale Cross Section Sheet Numbering**

- **Step 1.** Zoom in on the lower right corner of the lower left sheet to see the title block more clearly. You should also see two active points, one the Project No. field, and one in the Sheet No. field. You will use these in steps 5 and 6.
- Step 2. Open Design and Computation Manager. Double click item Location & Design>Special Applications>XS Sheet Number.
- **Step 3.** Populate the dialog box as show below. Note that your **Total Sheets** may be different. The **Begin Station Prefix** is followed by a space, and the **End Station Prefix** has a space at the beginning and end. Click **OK**.

Sheet Number Prompt			
Total Sheets       24         Start Sheet Number       1         # Sheets / Stack       24         Vertical Spacing       115.00         Horizontal Spacing       175.00         Upper Sht. No. Spacing       98.4			
Begin Station Prefix Sta	<ul> <li>Yes</li> </ul>		
End Station Prefix to Sta.	O No		
Sheet & Project Number Text         Text Level       61       1-1         Text Color       0       0-3         Text Weight       5       0-3         Text Font       23       1         Text Size       0.8       1         Text Angle       0       1	Station Range Text           63         Text Level 1         1-63           254         Text Color 0         0-254           8         Text Weight 5         0-8           Text Font 23         Text Size 1.05         0		
	<u>Cancel</u>		

Step 4. Use the File button to select the xssheets.log file created previously then push OK.

Prompt		
Select XS Sheet Log File:		
C:\data\geo\vdot\road1\xsshee	ts.log	File
<u>DK</u>	Cancel	

**Step 5.** Snap to the active point in the Sheet Number box, then hit data button, when the prompt below appears.

🔗 Prompt	×
Location Of First Sheet Number?	
Cancel	

**Step 6.** Snap to the active point in the Project Number box, then hit the data button, when the prompt below appears.

8 Prompt	×
Location Of Project Number?	
Cancel	

**Step 7.** Place a data point at any location you desire when the prompt below appears. This will be **Right Justified**.

2 Prompt	×
Location Of Beginning Station?	
Cancel	

**Step 8.** Place a data point at any location you desire when the prompt below appears. This will be **Left Justified**.

8 Prompt	×
Location Of Ending Station?	
Cancel	

**Step 9.** Push **OK** when the prompt below appears.

Prompt	
Complete! Use Graphic Group T	o Move Labels.
	Cancel

**NOTE:** The Sheet number, Project Number, From Station and To Station text strings are in their own graphic groups. If necessary, each can be relocated on all sheets by turning on the Graphic Group Lock and using the MicroStation Move element command.