The OpenRoads Designer Cross Sections File (XSEC)

Displaying 3D design in drawing and sheet models in an OpenRoads Designer Cross Sections (XSEC) file is the only method that OpenRoads Designer provides for expressing **permanent** cross section graphics that can be annotated and used to produce volumes, details or contract plans.

The XSEC file is a type of Container File and whatever is displayed in the Default-3D model of the XSEC file will be displayed in the drawing and sheet models that are generated. Models that are created in the XSEC file may be attached as references to other files in order to assemble detail drawings or plans.

Steps to Create the XSEC File

1. Create a new DGN file from Seed2D.dgn in the 6_Civil_Data folder.
2. Working in the Default model, attach references to terrains, geometries (alignments), corridors, etc. This data is typically found in the 6_Civil_Data folder. Use live nesting, depth=1, if attaching a container file as a reference.
3. Select the terrain element and "Set as Active Terrain Model". This will create the Default-3D model.
4. Right-press and select View Control>2 views Plan/3D.
5. Save Settings

   Perform the following steps in exact order

6. Ensure that View 1, Default is active and use Place Named Boundary Civil Cross Section .
7. Select a drawing boundary seed such as "XS Inch 20 Stacked".
8. Left-click on the horizontal alignment (for example, the horizontal alignment is named "L")
9. Set and lock the start and stop stations
10. Set the interval value if different from seed, for example 100
11. Leave the Group = (New) and the Name (of the group) = L
12. Enter a Description (of the group) = L-Line 100' Sections (this is just an example)
13. Toggle on "Include Control Points" for cardinal stations are desired
14. Check on "Create Drawing" to immediately create models
15. Uncheck "Show Dialog"
16. Left-click 3 times in View 1, Default to place the boundaries and then wait while ORD creates the models.

Drawing-type models are created for each section and all are automatically attached as references into one sheet-type model with stations increasing from the bottom to the top. Civil annotations should be placed in the drawing models and will automatically appear in the sheet model. The Cross Section Navigator can be used to navigate quickly between cross section drawing models.

To use the Cross Section Navigator, use the View Group Manager to go to the Default Views. Select the Cross Section Navigator from the Drawing Production tab and when prompted, open an additional view window and left-click in the new view window. The drawing-type models for each section will be displayed in the new view according to the station selected on the Cross Section Navigator tool.