

MineSight 3D Tip: Solid Display Options

MineSight 3D provides numerous options for clarifying the display of geometry elements. These options are particularly useful for displaying drift solids which often overlap in the viewer. This newsletter tip explores some of those options.

Figure 1 shows a typical drift solid displayed using only the Show Faces option in the Object Properties.

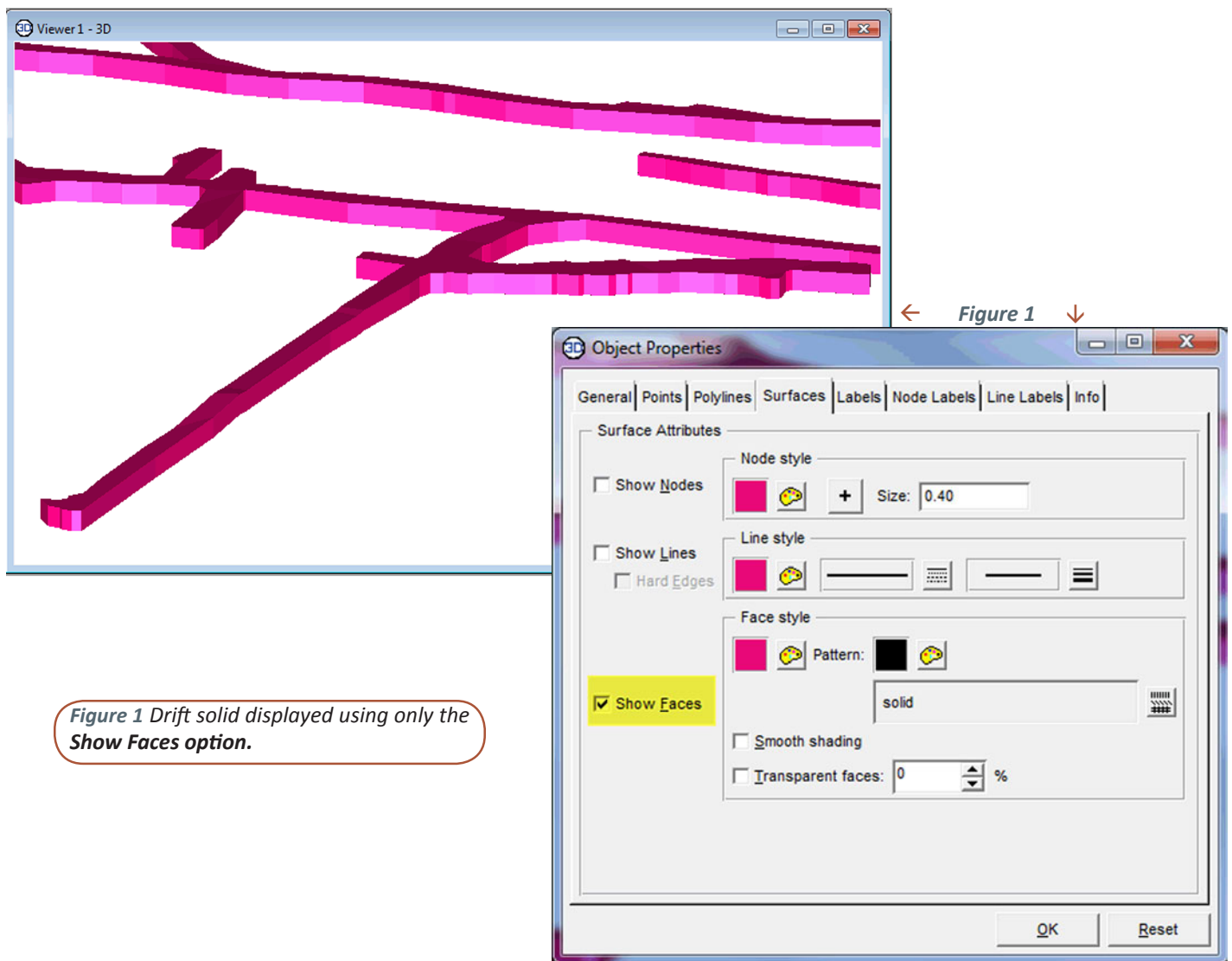


Figure 1 Drift solid displayed using only the Show Faces option.

The image projection can be changed via the **Viewer Properties** on the **Options** tab. By default the **Projection** is set to **Orthographic**. However, using **Perspective** will give more visual depth to the scene as shown in Figure 2.

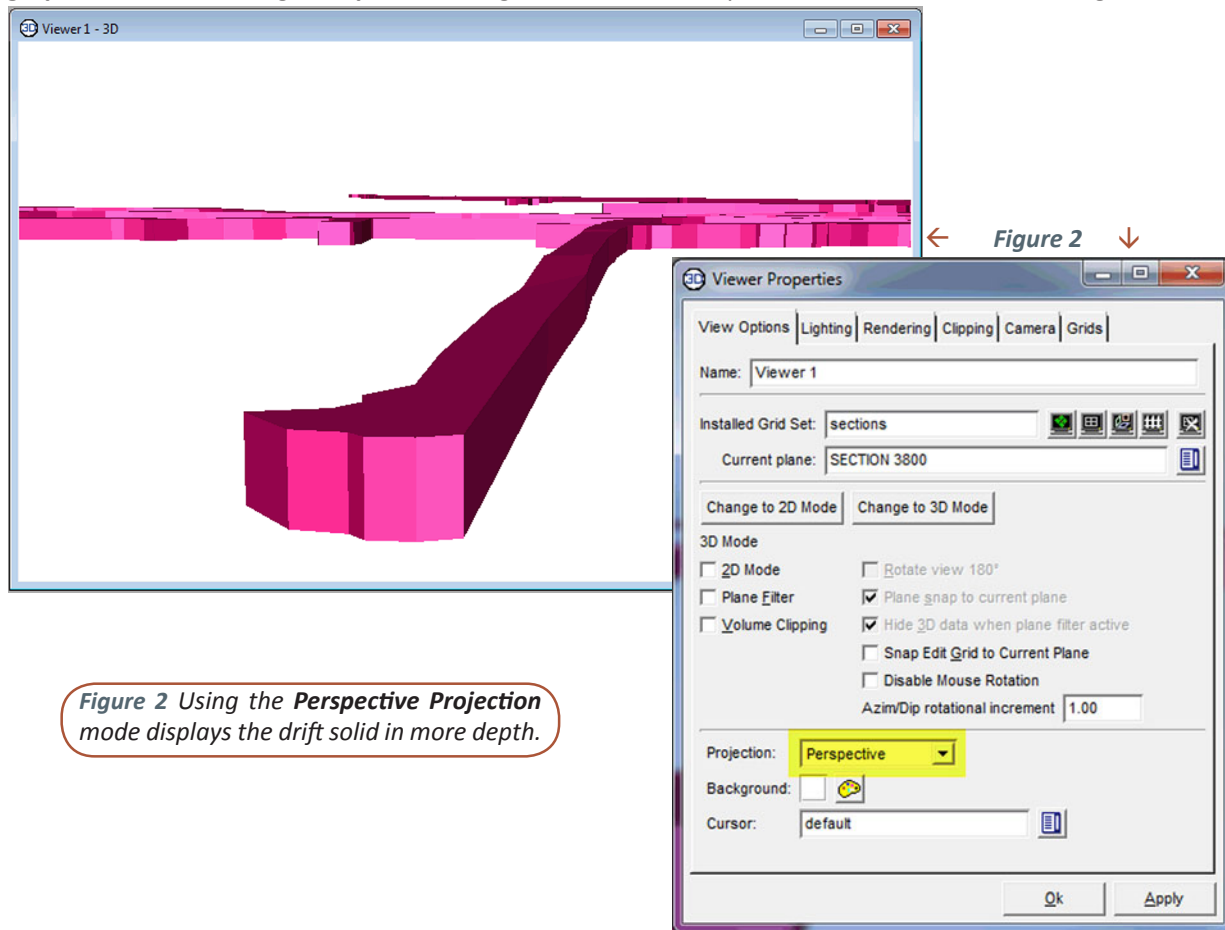


Figure 2 Using the Perspective Projection mode displays the drift solid in more depth.

The view can be further enhanced by the use of **Transparent faces** which is set on the **Object Properties | Surfaces** tab. This will allow geometry elements under the solid to be viewable as shown in Figure 3.

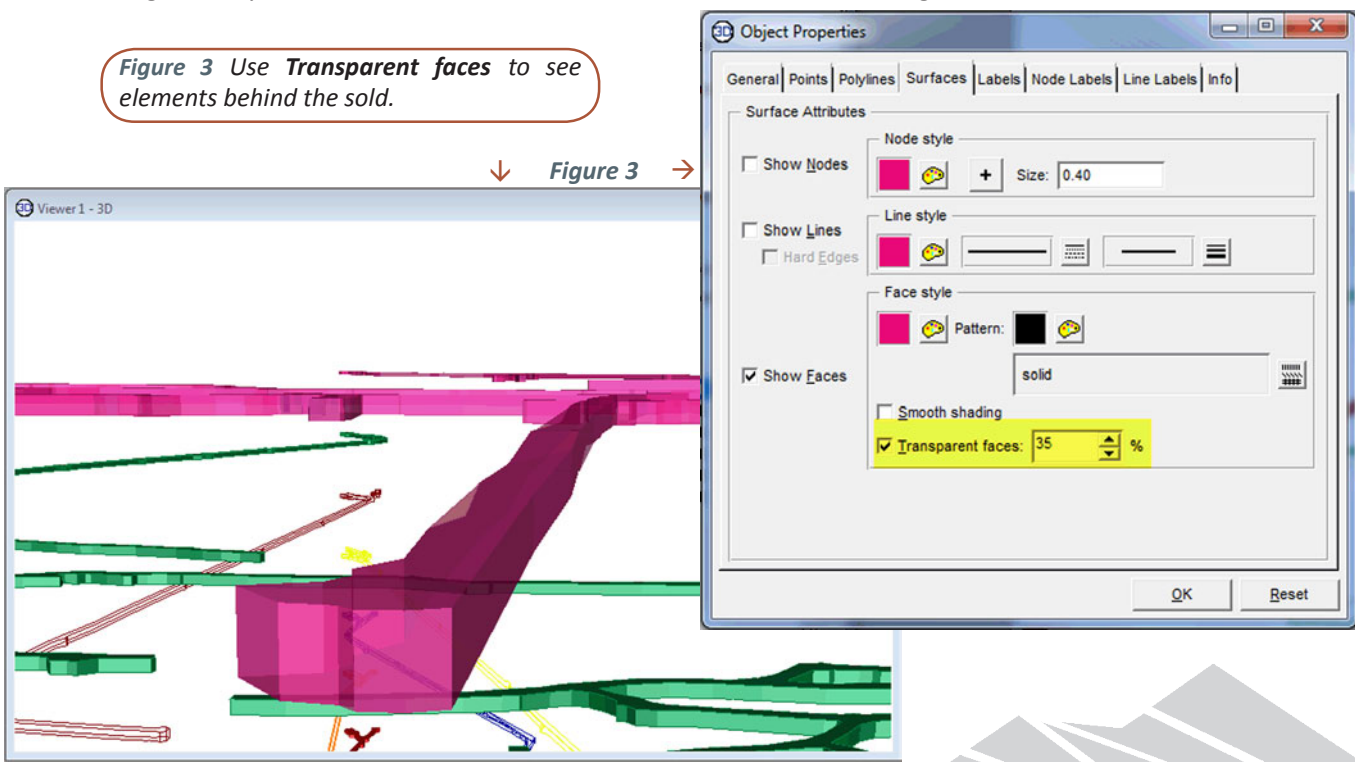
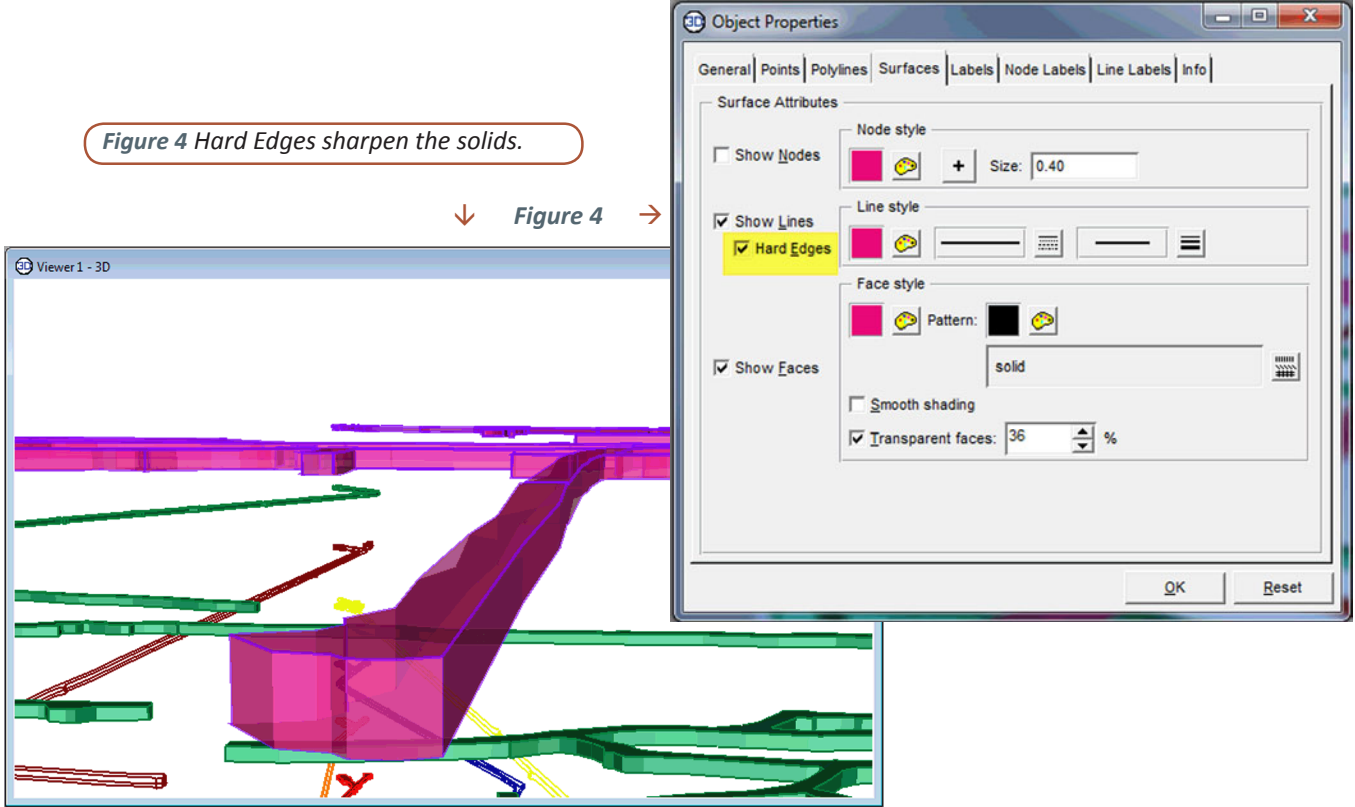


Figure 3 Use Transparent faces to see elements behind the solid.

When using transparent faces, the **Hard Edges** option will further help distinguish the solids as shown in Figure 4.

Figure 4 Hard Edges sharpen the solids.



There is also a combination of options useful for displaying the outlines of a non-planar drift. Make sure the **Show Lines**, **Hard Edges**, and **Show Faces** options are toggled ON in the drift element's **Object Properties** as shown in Figure 5.

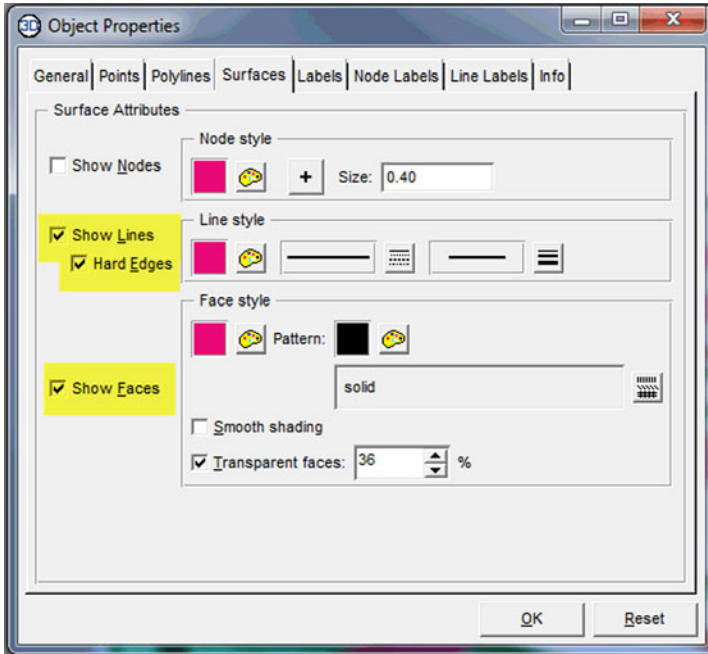


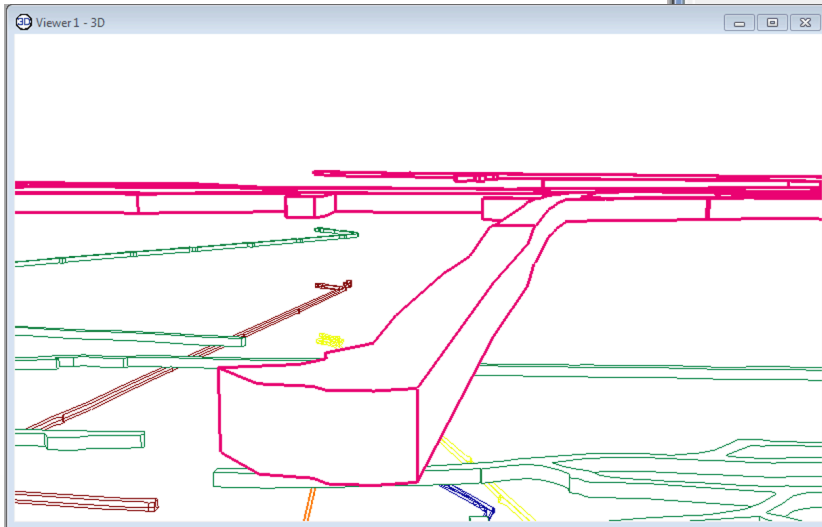
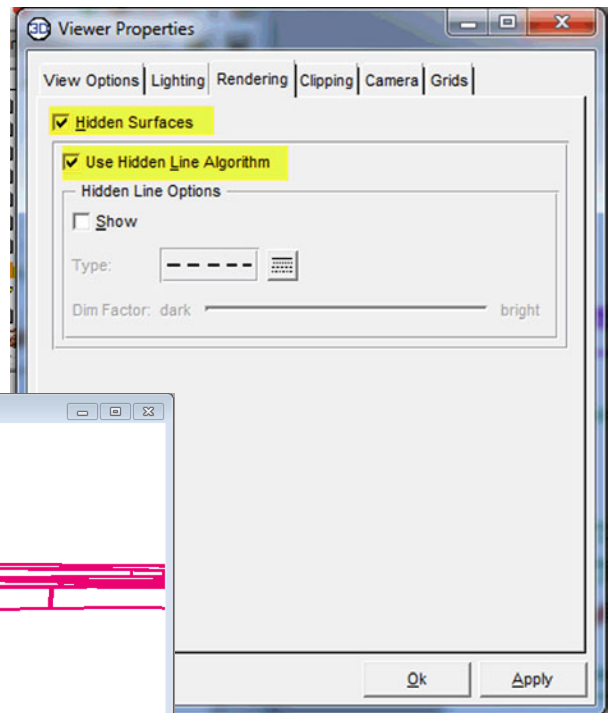
Figure 5 Set these Object Properties options to use the Viewer Hidden Surfaces option.

← Figure 5

Next, on the **Viewer Properties | Rendering** tab, toggle ON the **Hidden Surfaces** and **Use Hidden Line Algorithm** options.

The drift's outline will be displayed as shown in Figure 6.

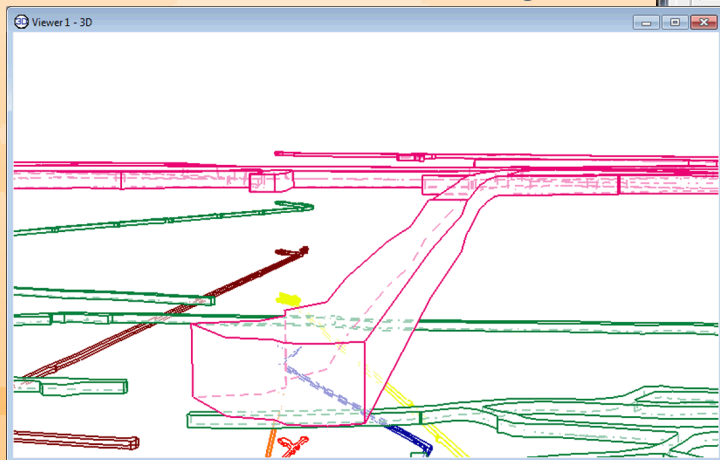
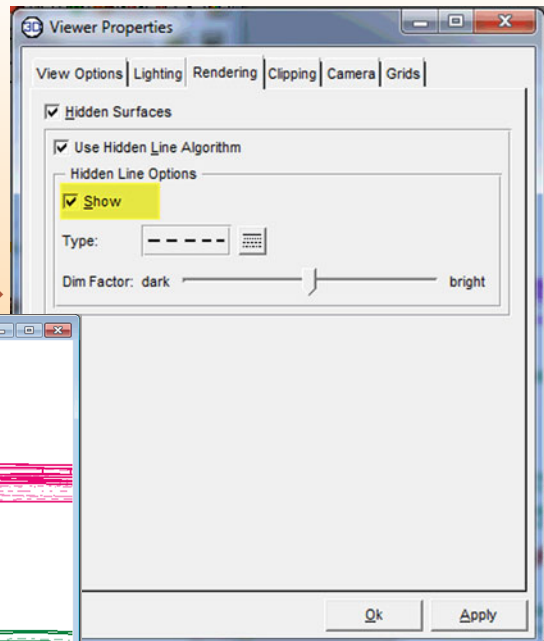
*Figure 6 Outline of the drift solid displayed using the Viewer **Hidden Surfaces** option.*



← **Figure 6** ↑

Finally, to display the outlines that are behind the solid, use the **Show** option on the **Viewer Properties | Rendering** tab (Figure 7). The outlines can be displayed in various styles and intensities.

Figure 7 Outline of the drift solid with the outlines of underlying elements shown as dashed lines.



↓ **Figure 7** →