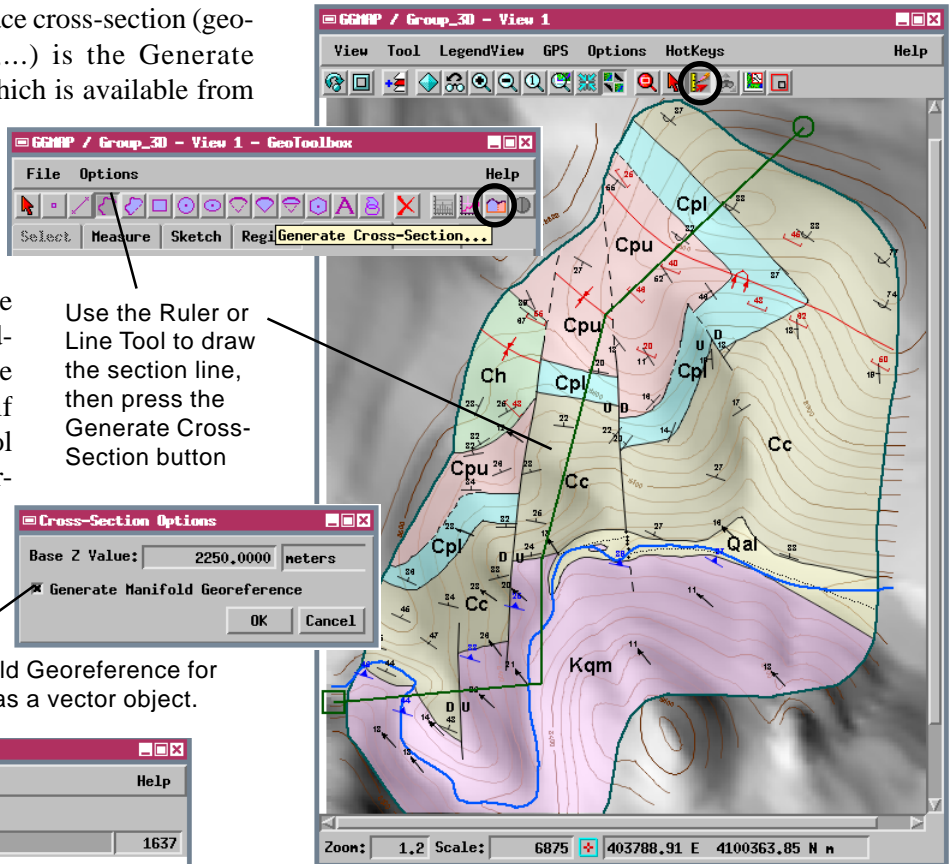


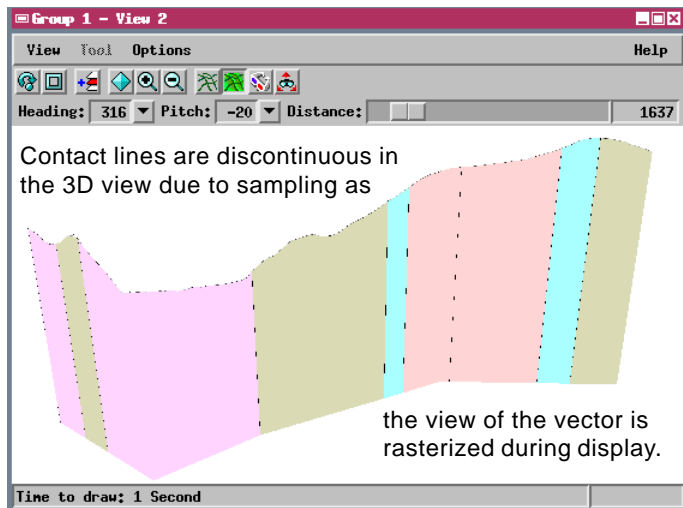
Create Cross-Section Manifold Objects

A good place to start in creating a subsurface cross-section (geological, geotechnical, archaeological,...) is the Generate Cross-Section tool in the GeoToolbox, which is available from any TNTmips 2D View window. This tool creates a prototype vertical cross-section along the straight line or polyline you designate in the 2D view. The vector object created by the tool includes a topographic profile (created from elevation values in the group's surface layer) and polygon boundaries and associated styles (created from the active vector layer or the top vector layer if the active layer is not a vector). The tool also automatically creates a manifold surface for the cross-section vector object so that the section can be displayed in its correct orientation in 3D perspective views.



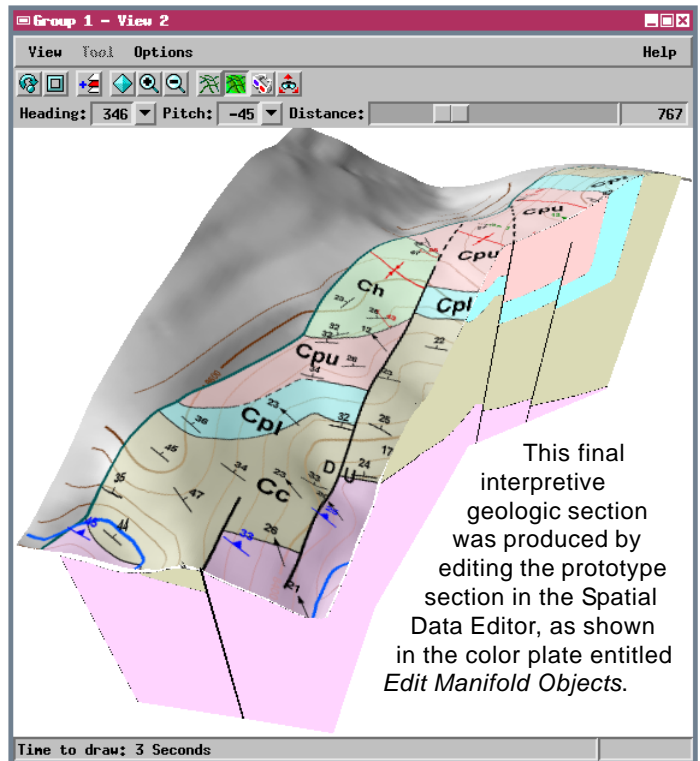
Use the Ruler or Line Tool to draw the section line, then press the Generate Cross-Section button

Use the toggle button to set whether or not to create Manifold Georeference for the cross-section being saved as a vector object.



Perspective view of a computer-generated prototype vector cross-section with manifold georeference. Polygon boundaries are generated as vertical lines which you can later edit to their correct configuration.

Polygon boundaries in the generated cross-section are vertical lines extending down from the surface profile to the base elevation you set for the section. These simple boundaries serve as a starting point for your intended interpretive cross-section. You can use the Spatial Data Editor to modify the boundary lines to your desired configuration and add any additional required subsurface elements (see the color plate entitled *Edit Manifold Objects*). You can also refine the manifold surface if necessary by using the Georeference process to edit the control point triangulation (see the color plate entitled *Editing Manifold Surface Triangulation*).



3D perspective view of the completed cross-section after editing in the Spatial Data Editor, shown with a masked rendering of the surface map data.