



Contour Editor

By Roy Goyette

The CONTOUR EDITOR can go a long way in cleaning up those DXF contour outputs that other programs just can't make look exactly correct. With the CONTOUR EDITOR you can reposition contour lines, for example, when you get crossed lines in your output from the TIN MODEL program. You can also delete waypoints, smooth contours and simplify contours using a user-defined threshold distance. The end result is a more pleasing final product without some of those annoying contour errors that seem to pop out at you when viewing the chart.

You will find the CONTOUR EDITOR in the HYPACK® Utility menu under File Work.



1. **Open the DXF file you wish to edit.** Click the file folder in the top left corner of the window and navigate to the desired file. Double-clicking on the file and it will load into the CONTOUR EDITOR window.

FIGURE 1. Opening the DXF Chart

2. **Superimpose the soundings used to create this DXF on the presentation.** (Optional)

- Click the Data icon (third icon from the left on the toolbar) OR
- Select FILE-OPEN DATA in the menu.

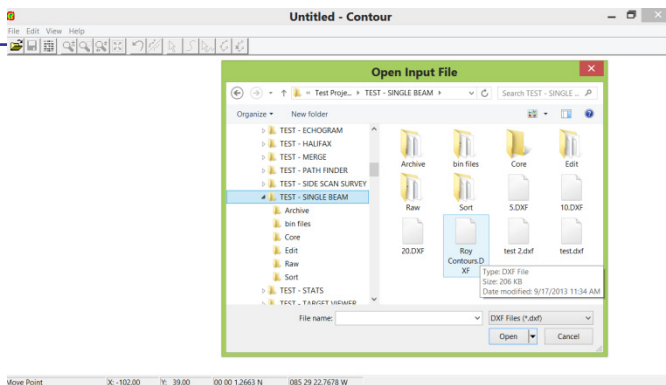
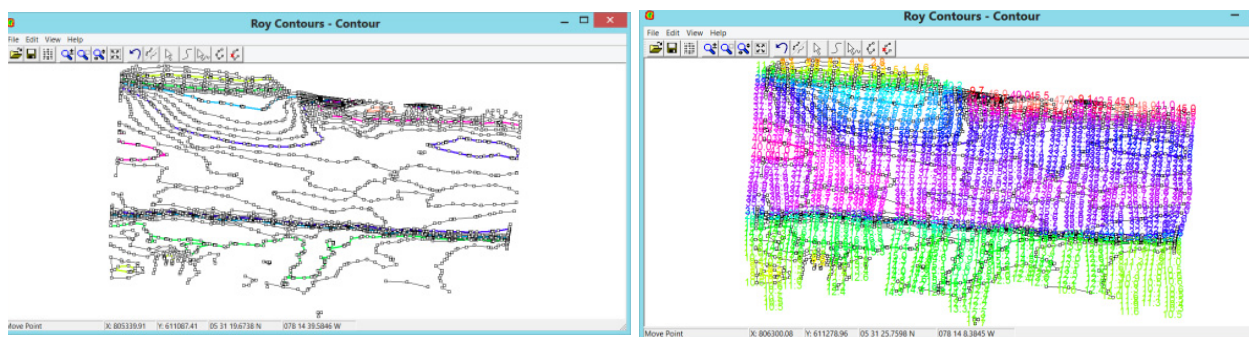


FIGURE 2. Just the DXF (left), DXF with Superimposed Soundings (right)



3. If your CONTOUR EDITOR looks like Figure 3, simply click the Grip Points Icon to get the small boxes at each waypoint.

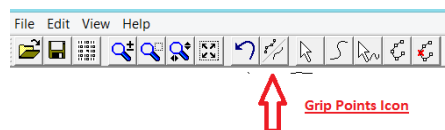
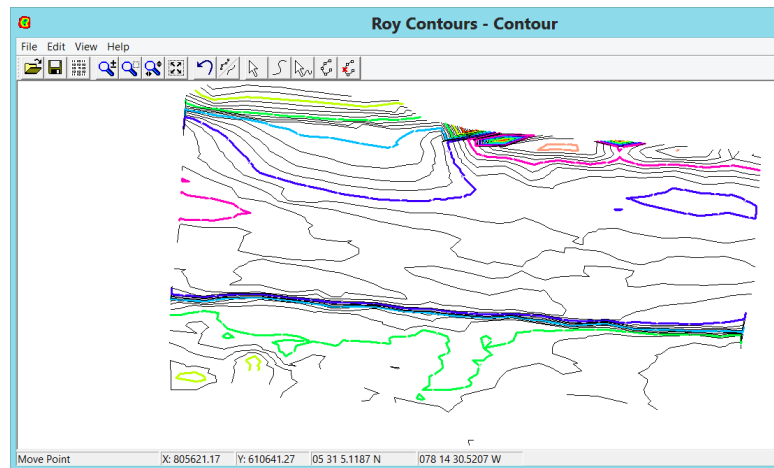


FIGURE 3. Contours with no Grip Points



RELOCATING A CONTOUR

Let's try relocating a contour first. The procedure is a click-and-drag one:

1. **Click the Move Point Tool.**
2. **Click on the waypoint and, holding the mouse button down, drag the waypoint to the new location.**

FIGURE 4. Moving the Waypoint to a New Position

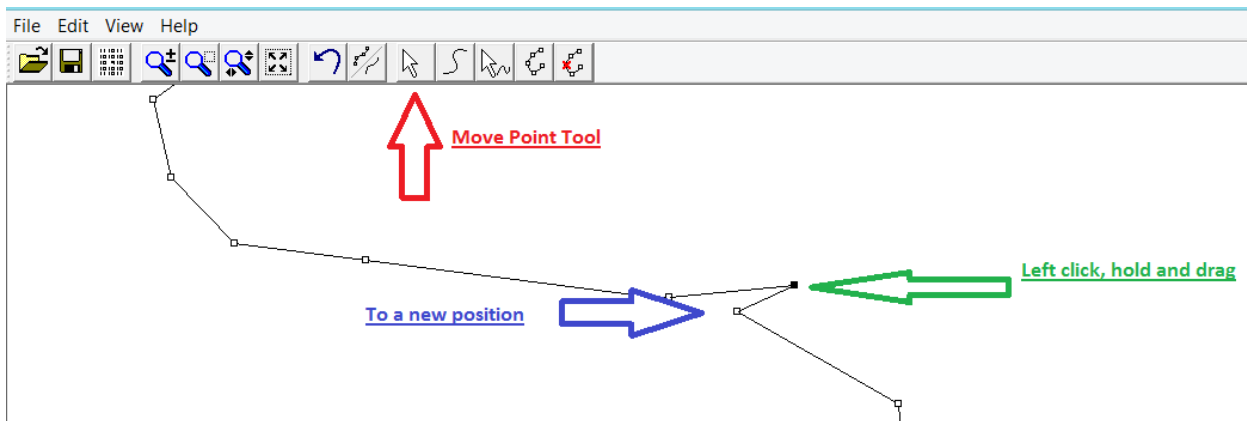
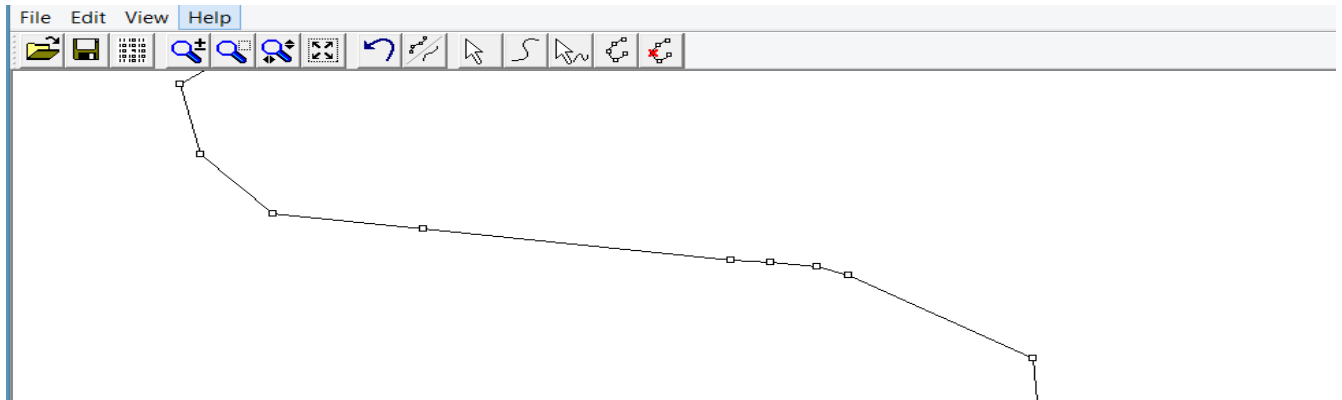


FIGURE 5. Our End Result: a Smoother Contour

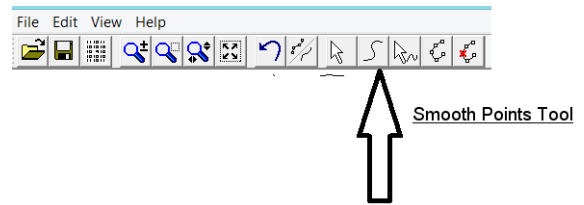


This is just one waypoint. Your contours will most likely contain several points that will need to be moved to get the desired effect.

SMOOTHING A SELECT CONTOUR

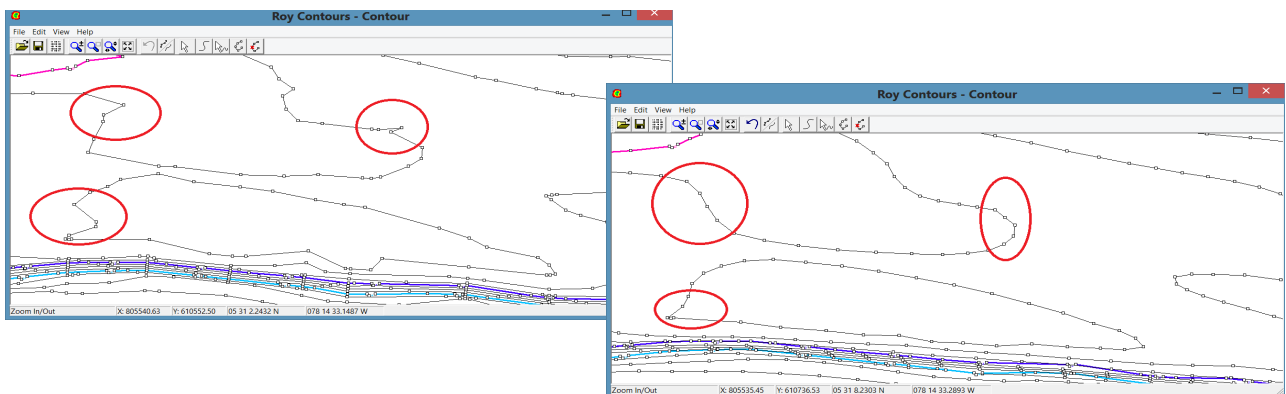
The next tool is the Smooth Points Tool. It's used to smooth all the contour lines at once. Click it as many times as you desire to get the best result.

In Figure 6, I've circled three areas where we can see the results of the Smooth Points Tool after clicking the icon 4 times.



Note: This tool will smooth *all* the contours so it pays to be conservative with those clicks.

FIGURE 6. Smoothing the Contour—Before (left) and After (right)



It might be better to use our Smooth Segments tool.

SMOOTHING SEGMENTS

The Smooth Segments tool will smooth select segments of the contours, *not all* of the contours.

1. **Select the Smooth Segment tool.**
2. **Click on the waypoint to smooth,** one or more times until you achieve the desired contour.

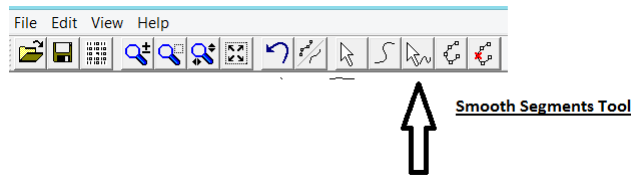
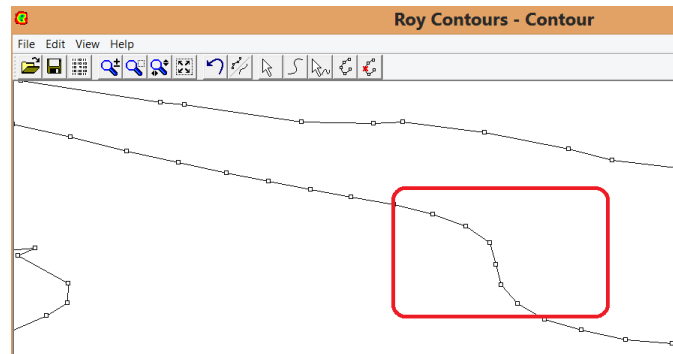


FIGURE 7. Smoothed Segment



REDUCE POINTS

To simplify your contours

1. **Click the Reduce Points Icon.** You get the Threshold dialog.
2. **Enter the distance between waypoints you would like to keep to define your contours and click [OK].** In my example I've selected every 50 feet along the line.

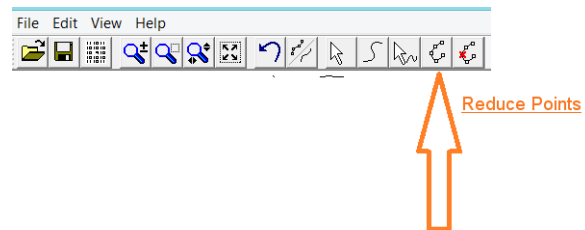
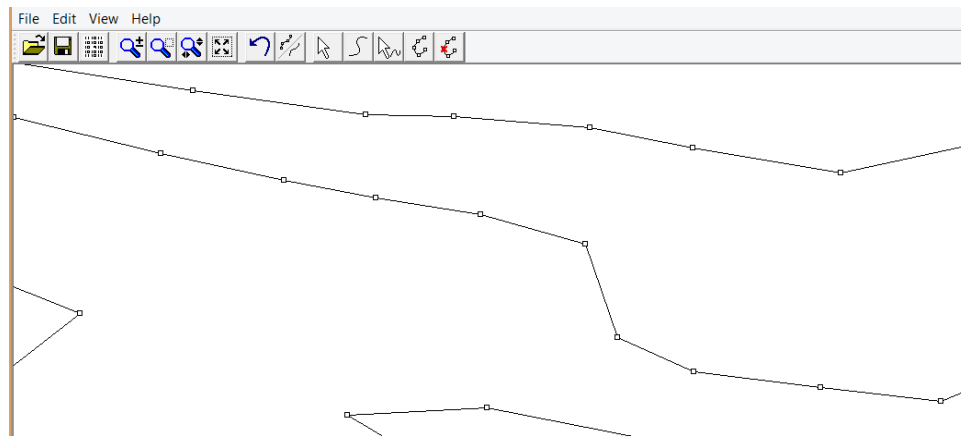


FIGURE 8. Contours with Waypoints Every 50 Feet



DELETING POINTS

Finally, the last tool in the CONTOUR EDITOR is the Delete Point tool.

To use this tool, click the icon then click on any waypoint and it will be deleted.



Delete a Point

The Contour Editor a simple utility to make some super looking contour charts.