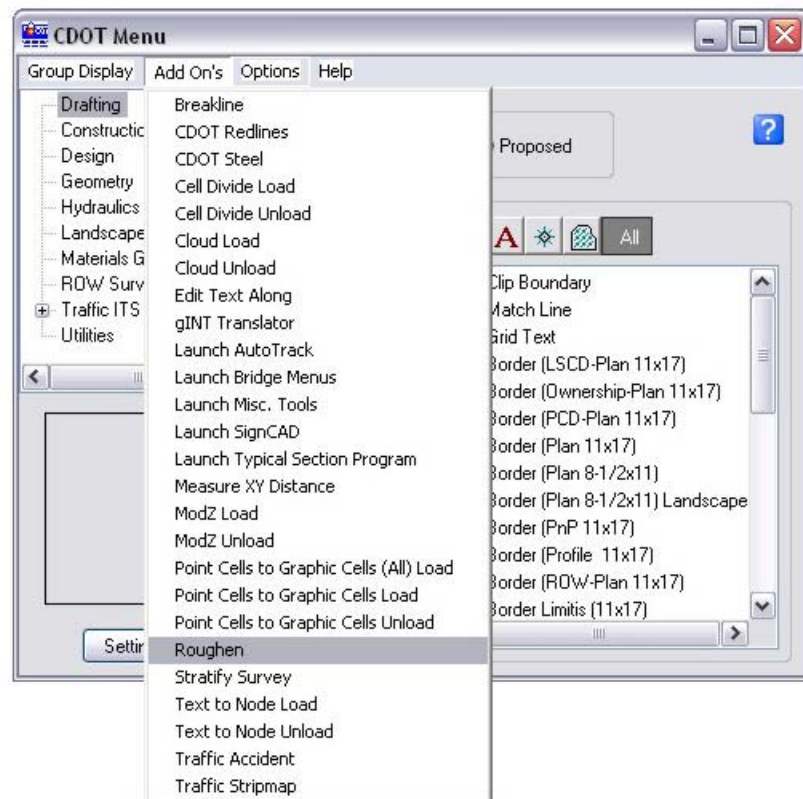This document guides you through using the Roughen command.   This is an update to the previous **Roughen Load** and **Roughen Unload** commands found in the CDOT Menu Add On's. There is now only a single Roughen entry on the CDOT Menu that provides a menu interface for entering the roughen parameters. The Roughen command will also modify arcs, ellipses, and complex elements in addition to simple linestring elements.
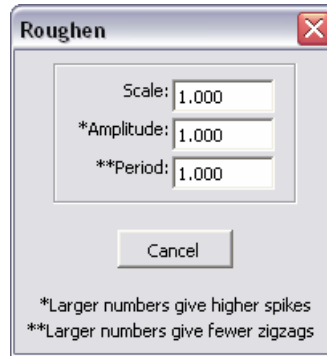
Roughen

Launching Roughen

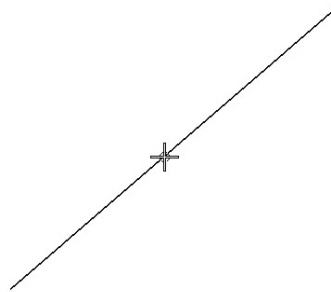1. From the CDOT Menu, select **Add On's > Roughen**.

Using the Roughen command

2. Verify and/or change the settings as desired in the Tool Settings dialog.

As noted in the dialog box, larger numbers for the *Amplitude* setting result in higher spikes. Larger numbers for the *Period* setting will result in fewer zigzags.

3. Select the element that is desired to change.

4. Left click to accept the change.

The element is changed or 'roughened'.