

Chapter 2 - InRoads Options

InRoads has a number of options and global settings that affect the availability of commands and operation of the program. This chapter discusses the locks and options settings for InRoads V8i.

Chapter Objectives:

- Discuss the function of each of the InRoads Locks.
- Discuss the Options dialog box and identify the tabs that users can modify.

InRoads Locks

The locks in InRoads determine what can be displayed, how displayed items are updated, and how items are selected for use by the program.

Section Objectives:

- ◆ Describe the Feature Filter Lock
- ◆ Describe the Feature Highlight Lock
- ◆ Describe the Style Lock
- ◆ Describe Write modes.
- ◆ Describe the Locate Lock
- ◆ Describe the Snap Lock
- ◆ Describe the Station Lock
- ◆ Describe the Report Lock
- ◆ Describe adding toolbars.

Feature Filter Lock



The Feature Filter lock is used to limit the number of features displayed in menu pick lists, based on used defined criteria. This lock has two parts, the Filter Name drop down menu and the Feature Filter Lock (on/off switch).

- **Filter Name** – Lists the name of the Feature Filter that is currently active. It has no affect if the Feature Filter lock is off. If the Feature Filter lock is on, it will limit dialog boxes to showing only the features that pass the filter. Feature Filters are stored in the CDOT-Civil.xin file and are accessed by using the drop-down arrow next to the name.
- **Feature Filter lock** – If on, activates the current filter. If off, has no affect and all surface features are shown in boxes that list features.

Feature Highlight Lock



This lock highlights features in the MicroStation view window that are selected in an InRoads dialog box. This lock should be left off until needed because many of the InRoads dialog boxes open with all of the features selected and it can take a long time to highlight all the features.

Style Lock



The Style lock, if on, forces many of the Surface View commands to display the requested data (triangles, contours, etc.) without bringing up the dialog box. The preference used is the one associated with the surface under Surface > Surface Properties. Style lock also forces the Cross Section Annotation command to use the named symbology associated with the feature for annotation properties. If off, the Style lock has no affect.

Write Modes



The Write Mode determines how InRoads graphic elements will behave when the data that generated the graphics changes. There are two modes; Pencil and Pen.

- **Pencil mode**  - The graphics are updated whenever the same display command is selected again. For example, if contours are displayed, then a different preference is selected and they are displayed again, the old contours are deleted and new contours are displayed.
- **Pen mode**  - The graphics are not updated when the same display command is selected again. Instead, another copy is placed in the design file.

Delete Ink



Delete Ink overrides the Pen mode so that the graphics are treated like Pencil mode and the old ones are removed before new ones are placed.

Note: The Write mode of an element is saved with that element. For example, contours that are displayed in pencil mode will still be deleted if the command is reused, even if the Write mode has been switched to Pen mode.

Locate Lock



There are several commands in InRoads that will work on either DTM Features or on MicroStation graphical elements (Drape Surface, for example). These commands will “look” for features if toggled to Locate Features  and for MicroStation elements if it is set to Locate Graphics. It is shown here in Locate Graphics  mode.

Point Snap



Point Snap is used primarily when creating geometry and for some surface editing commands. It can lock on to COGO points or feature vertices, or it can import a geometry element's length and bearing into a dialog box input field. Point Snap has three modes: No Snap, Point Snap and Element Snap

- **No Snap**  – No affect. This is the mode used most often.
- **Point Snap**  – Some geometry commands (especially cogo commands) will lock onto the nearest geometry point's coordinates when you select something graphically. This is useful when you need to identify a PC or PT, for example. Also, some DTM editing commands, such as Partial Delete Feature, will lock onto the vertices or points that make up the feature.
- **Element Snap**  – In Geometry when commands require a distance or a bearing, the Element Snap can be used. An existing geometry element needs to be identified (such as part of an existing alignment) and it will read the elements length or bearing (whichever is required).

Station Lock



Station lock locks onto even stations in the event that the alignment does not start on an even station. The station will be determined by the interval that is specified. For example, if an alignment is stationed at 100 ft. intervals, the displays will show even 100 ft. stations. This affects not only station displays but virtually everything that uses a stationing interval, such as cross sections, profiles and modeling.

Report Lock



Some commands will return information if this lock is on. For example, if a COGO point is stored and the Report lock is on, a Results box will pop open showing the coordinate and point number of the new point. If the Results box is left open, it will keep a running list of messages, which can be saved to a text file if desired.

COGO Audit Trail Lock



This lock is used to create a text file of the results of all COGO commands that were executed. The data stored here is the same that is displayed in the Results window, if the Report Lock is on.

Section Summary:

- ◆ The Feature Filter lock is used to limit the number of choices in surface related dialog boxes.
- ◆ The Feature Highlight Lock Shows features selected in an InRoads dialog box in the MicroStation view window also. It should only be used when needed as it can be slow to update.
- ◆ The Style Lock tells InRoads to use predefined settings when displaying data. It also takes away the users ability to make settings changes.
- ◆ The Write modes determine if InRoads graphics are updated when the command is rerun or not.
- ◆ The Locate Lock is used “snap” to either surface features or MicroStation graphics.
- ◆ The Snap Lock is used to “snap” to COGO points or feature vertices, or to place geometry element data into dialog box input fields.
- ◆ Station Lock forces processing to occur at even (*+00.00) stations, even when the alignment starts at an odd station.
- ◆ The Report Lock allows InRoads to supply the user with feedback.
- ◆ The COGO Audit Trail lock does the same thing as the report lock, but just for COGO commands.

The Options dialog box

The Options dialog box contains global settings that affect the overall function of the InRoads software. Most of the settings are predefined for CDOT work and do not have to be modified. However, some settings affect element display and must be changed by the user to fit their needs.

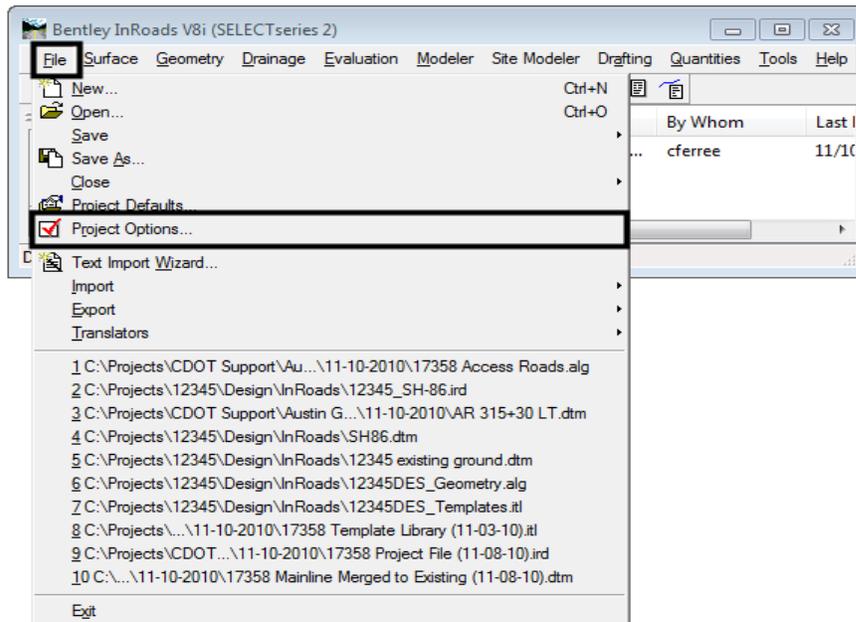
Section Objectives:

- ◆ Describe the Options Precision tab.
- ◆ Describe the Options Factors tab.

The Precision tab

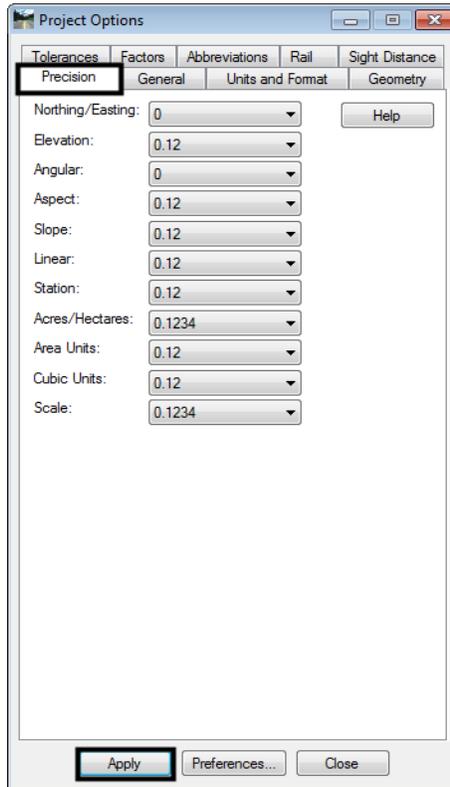
The settings on this tab determine the number of decimal places InRoads displays in the dialog boxes. To change the precision:

1. Select **File > Project Options** from the InRoads menu bar.



2. <D> the **Precision** tab.
3. Use the drop down menus to set the desired precision.

4. <D> **Apply** to accept the change.



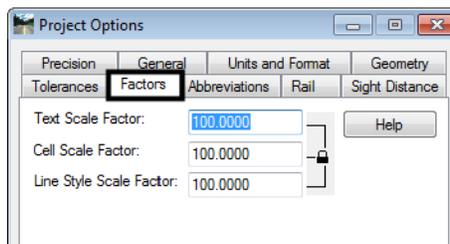
5. <D> **Close** to dismiss the dialog box.

The Factors tab

The settings on the Factors tab controls scale factors for MicroStation elements displayed by InRoads. InRoads displays three element types; Lines, Cells, and Text. Each element type has a Factors setting.

To access the Factors settings:

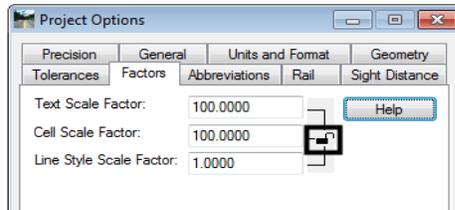
1. Select **File > Project Options** from the InRoads menu bar.
2. <D> the **Factors** tab.



The Text Scale Factor and the Cell Scale Factor should both be set to the same value, equal to the plot scale for the drawing. The Line Style Scale Factor should be set to 1, this is modified by the Annotation Scale set in MicroStation.

To change the Factors settings:

3. Toggle the “Lock” icon open.



4. Key in the desired value for the *Text Scale Factor*.
5. Key in the desired value for the *Cell Scale Factor*.

Note: The *Text Scale Factor* and the *Cell Scale Factor* should match.
6. Key in **1** for the *Line Style Scale Factor*.
7. <D> **Apply** to accept the change then <D> **Close** to dismiss the *Options* dialog box.

Section Summary:

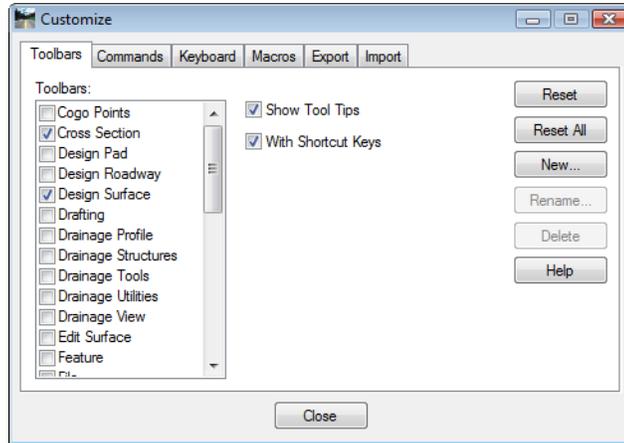
- ◆ The options dialog box contains settings used throughout the InRoads program.
- ◆ Users should only have to access the Precision and Factors tabs.
- ◆ Precision settings change the readout in InRoads dialog boxes.
- ◆ Factors affect the display of MicroStation elements created from InRoads.
- ◆ The Line Style Scale Factor is affected by the MicroStation Annotation Scale but the Text Scale Factor and the Cell Scale Factor are not.

InRoads Toolbars

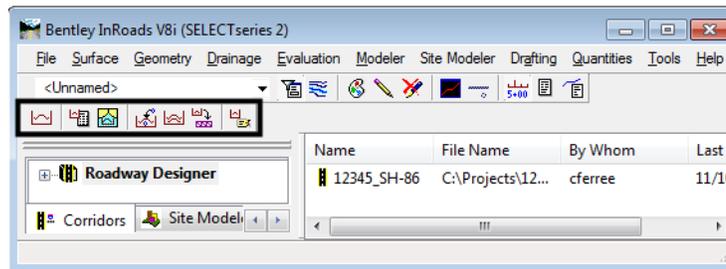
Section Objectives:

- Demonstrate how to access InRoads toolbars.

Most of the InRoads commands are located on toolbars as well as on the pulldown menus. These toolbars are accessed through the **Tools > Customize** dialog. Toolbars can be turned on and off at will. You can also create your own toolbars using the customize dialog.



Initially, toolbars are docked on the InRoads menu, but may be pulled off of it and will remember their last location when they are closed and reopened.



Section Summary:

- Use InRoads toolbars for easy access to commands that are used often

Chapter Summary: The InRoads locks can be used to limit items in pick lists, force the program to use predefined display settings, automatically update graphics when data is changed, locate particular data types, and adjust processing locations.

Options are used to set the precision displayed in dialog boxes and set the scale factor for MicroStation elements created from InRoads.