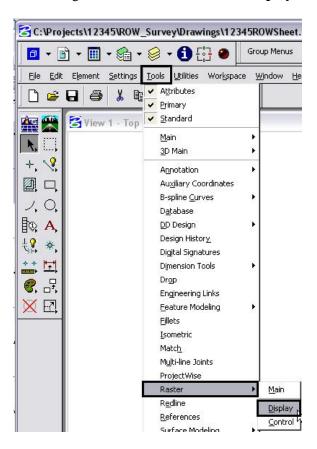
CDOT Printing Raster Images



This document guides you through the display settings for raster images and modifying text for better clarity.

Adjusting Raster Display Settings

1. The Contrast and Brightness controls are used to adjust the display characteristics of raster images. Select **Tools > Raster > Display.**

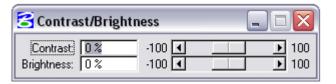


2. The **Raster Display** tool bar will appear. Select the **Contrast/Brightness** icon.



3. If more than one raster image is present, the desired image may not be active. To select a different image, **Reset** then select the desired image.

4. How the **Contrast/Brightness** dialog will be used is determined by the effect desired. To lighten an image, move the **Brightness** slider to the right or key in a positive value. To darken am image move the **Contrast** slider to the right or key in a positive value.



5. Continue adjusting **Brightness** and **Contrast** until the desired result is achieved.

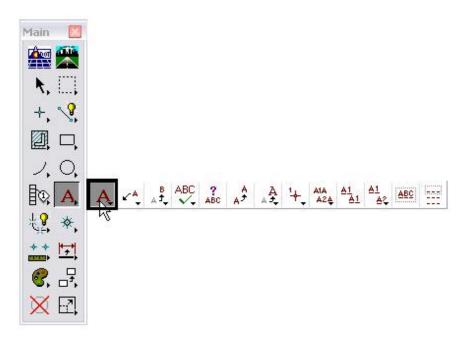
Using a Text Style with a Background

If the raster image is dominated by dark colors, it may be necessary to use a text style with a background.

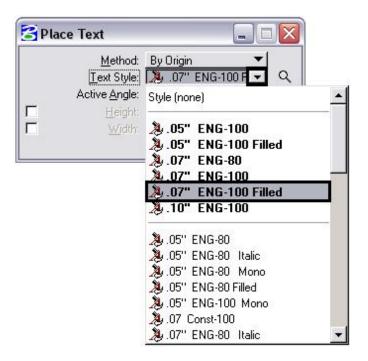
Placing Text with a Background

The only change required for placing text with a background is to select one of the "Filled" Text Styles.

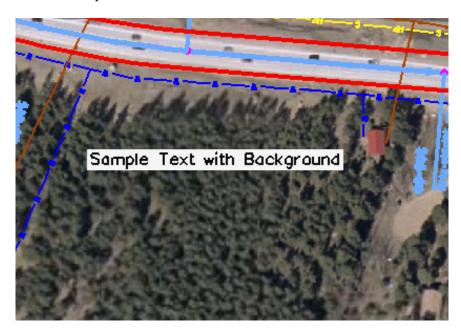
6. Select the **Place Text** icon from the **Main** menu.



7. In the **Place Text** tool settings dialog box, use the **Text Style** pull down menu and select the desired "Filled" **Text Style**.



8. In the **Text Editor**, key in the desired text and place as normal. The result will look like the example below:

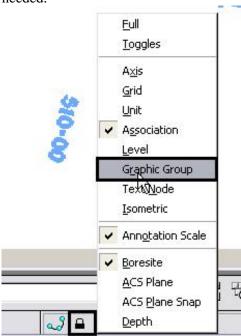


Note: The color of the text in this example has been changed for clarity.

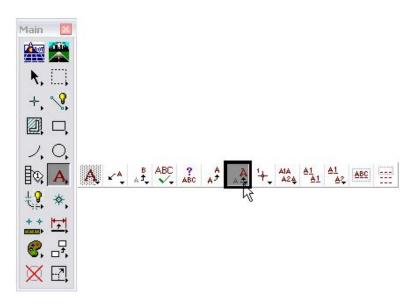
Modifying InRoads Text to Have a Background

InRoads does not use Text Styles or Annotation Scale. Therefore, text displayed by this program will have to be modified to display a background.

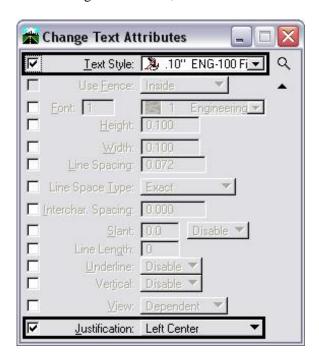
9. Turn off the **Graphic Group Lock.** All Cardinal Point text and all P.I. text are graphic groups. This will allow the justification to be set for each piece of text as needed.



10. Select **Change Text Attributes** from the Main menu.



11. In the **Change Text Attributes** Tool Settings dialog box, set the **Text Style**. Use .10" ENG-100 Filled for Major Stations and .07" ENG—100 Filled for PC, PT, and PI stationing Points. Also, select the desired **Justification**.



Note: the following justifications are used by InRoads:

Major Stations - Left Center
P.I. Left of Centerline - Right Center
P.I. Right of Centerline - Left Center
Cardinal Left of Centerline - Right Bottom
Cardinal Right of Centerline - Left Bottom

12. Select the desired text. Text may be selected individually or using the MicroStation element selection tools to select multiple text entities. Use the element selection tools to select a large number of elements that have the same Text Style and Justification (like Major Stations, for example). For Cardinal Points and P.I. stations, selecting these individually may be a better option as their justification is dependent on the direction of the curve.

Note: The text will change to a very small size. Do not worry about that at this time, an **Annotation Scale** will be added to all of the text that was modified at one time. This will restore the text to its proper size. As shown below, the image on the left is correct before changing text styles. The image on the right has had the text style applied.



- 13. Repeat steps 10 and 11 for all of the text placed by InRoads.
- 14. Highlight all of the InRoads Placed text that has been changed to the "Filled" text styles. If no text is highlighted when the "annotationscale add" key in is run, then the annotation scale is applied to all text. This will enlarge InRoads geometry symbols (which come from symbol fonts) by the annotation scale factor.
- 15. In the **Key-in** window, type "annotationscale add" and select the **Run Key-in** icon or press the **Enter** key. This will restore the text to its proper size.



16. Below is an example of InRoads text with a background and correct annotation scale.

