

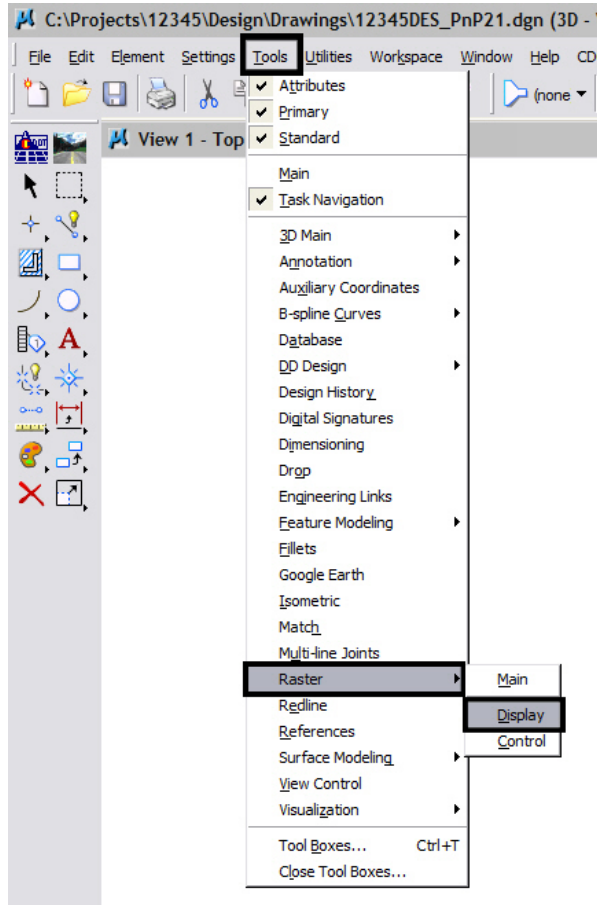
CDOT Printing Raster Images



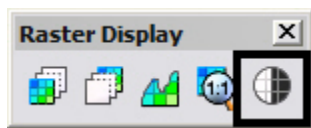
This document guides you through the display settings of raster images and modifying text for better clarity.

Adjusting Raster Display Settings

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



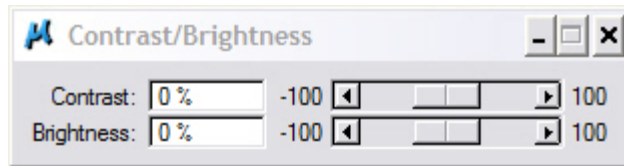
2. The Raster Display tool bar will appear. <D> the Contrast/Brightness icon.



3. If more than one raster image is displayed in the drawing, the image you want to adjust may not be active. To select a different image, <R> then select the desired image (<D>) from the view.

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4. Determine how you want to adjust the selected raster image. To make an image appear lighter, move the **Brightness** slider to the right or key in a positive value. To increase the contrast of the image (setting apart the display of different entities within the raster file), move the **Contrast** slider to the right or key in a positive value. Using a negative value for contrast will result in a darkened image.



5. Continue adjusting **Brightness** and **Contrast** until the desired result is achieved then dismiss the setting dialog.

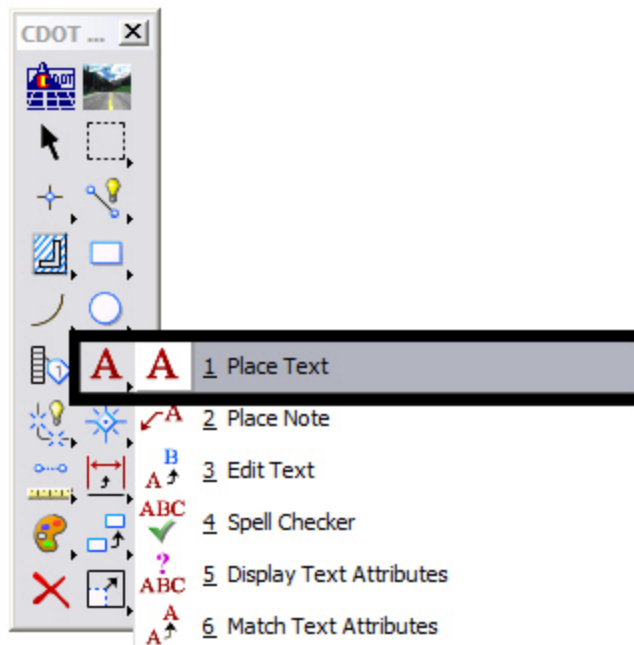
Using a Text Style with a Background

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

Placing Text with a Background

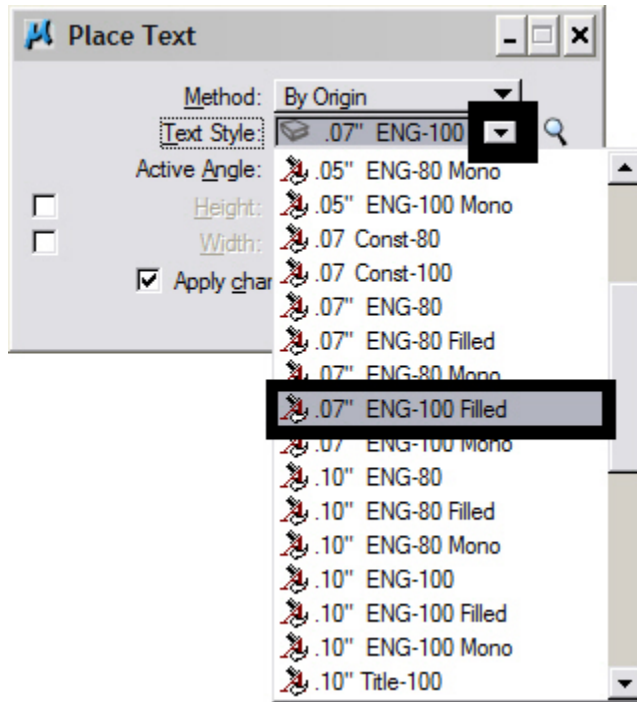
The only change required for placing text with a background is to select one of the “Filled” Text Styles.

1. Select the **Place Text** icon from the **Main** toolbar.

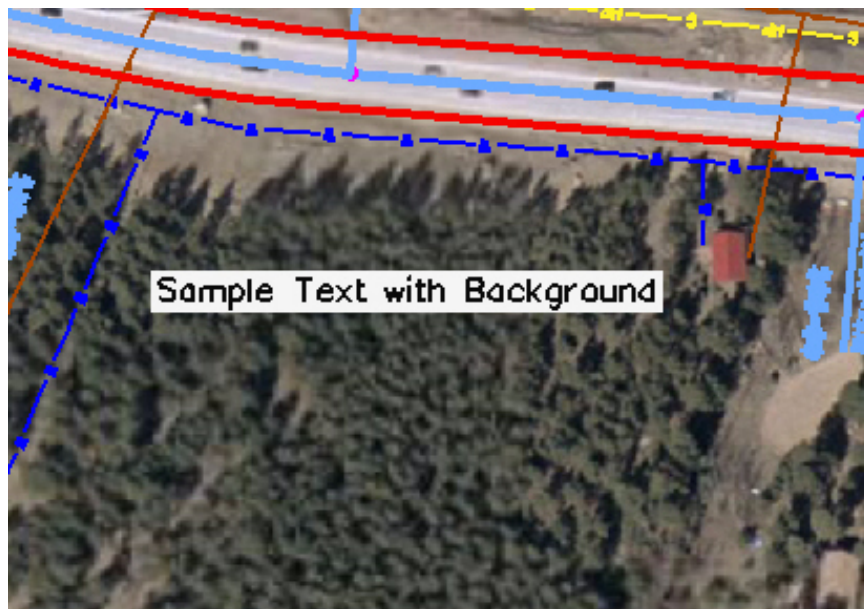


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2. In the **Place Text** settings dialog box, use the **Text Style** pull down menu and select the desired **"Filled"** Text Style.



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

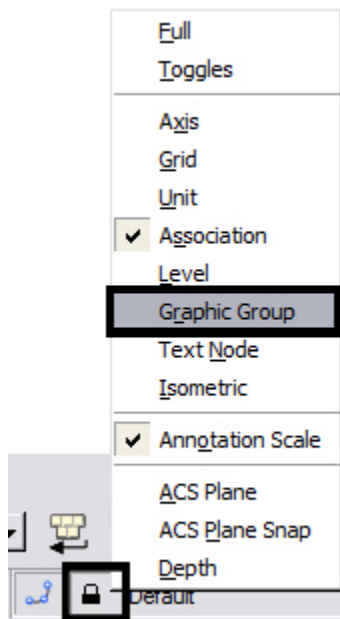


Note: The color of the text in this example has been changed for clarity.

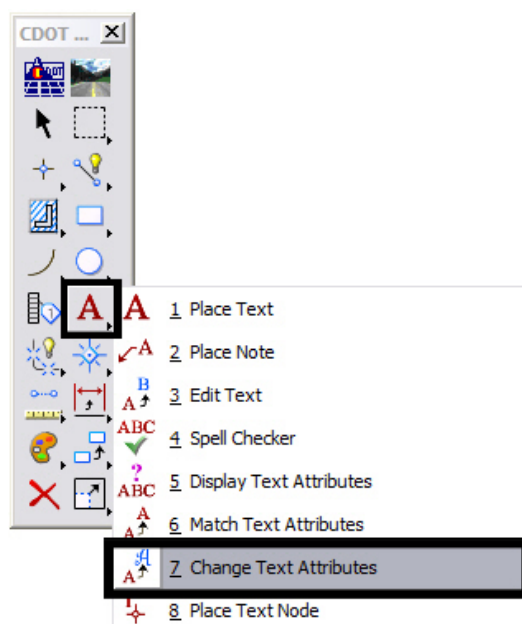
Modifying InRoads Text to Have a Background

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

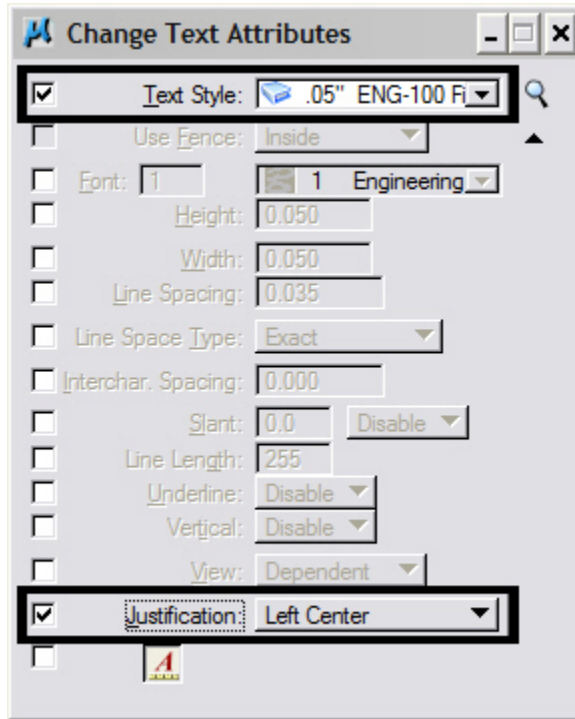
1. Turn *off* the **Graphic Group Lock**. All Cardinal Point text and all P.I. text are contained in graphic groups. Turning off the **Graphic Group** lock will allow the justification to be set for each piece of text as needed.



1. Select **Change Text Attributes** from the Main toolbar.



2. In the **Change Text Attributes** 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, set 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

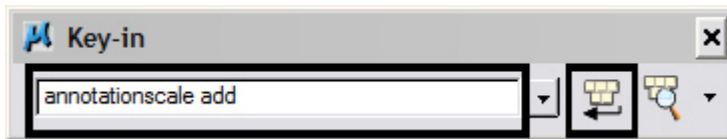
Cardinal Right of Centerline - Left Bottom

3. Select the desired text from the MicroStation view. Text may be selected individually or use 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 them 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 for now. 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 text size in the image on the left is correct, but the text styles are wrong. The text in the image on the right has had the correct text style applied, but no adjustment to the text size has been made.



4. Repeat steps 10 and 11 for all of the text placed by InRoads.
5. Highlight all of the InRoads placed text that has been changed to a “Filled” text styles.
6. 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.
7. In the **Key-in** window, type “**annotationscale add**” and <D> the **Run Key-in** icon or press the **Enter** key. This will restore the text to its proper size.



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

