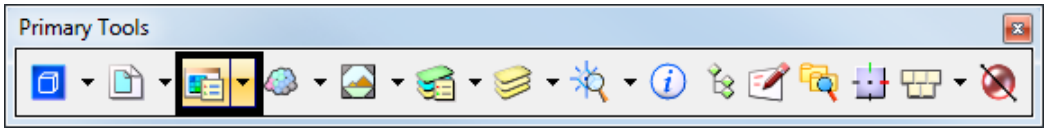
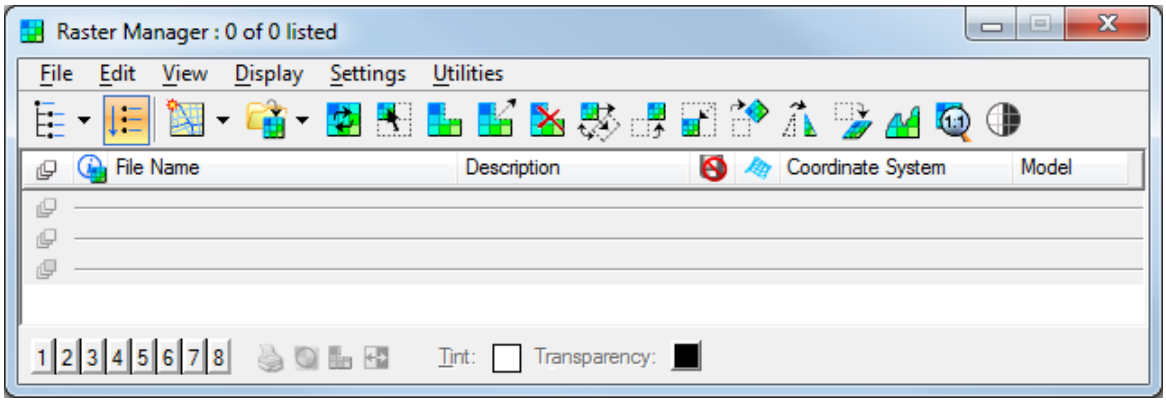
Workflow MS 14 - Raster Manager

This document guides you through ***MicroStation Raster Management*** including Attaching Rasters, Clipping Rasters, Masking Rasters, and setting Raster Transparency. For additional settings on raster images including text clarity see *CDOT Printing Raster Images.pdf* .

Raster Manager Dialog Box

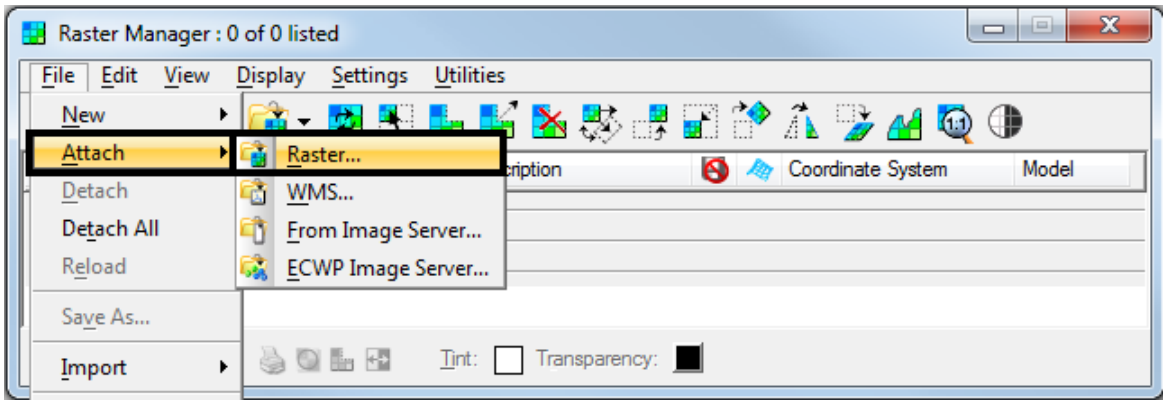
1. The **Raster Manager** is used to display images as a reference to a DGN file. To access Raster Manager select **File > Raster Manager** or **<D>** the **Raster Manager** icon from MicroStation's Primary Tool Bar.





Attaching a Raster Image

1. In the Raster Manager dialog box, select **File > Attach >Raster** (This Workflow uses **C:\Projects\12345\Design\Drawings\12345DES_PnP10.dgn** as the master design file.)



2. In the ***Attach Raster Reference*** dialog box, navigate to the folder containing the image that will be referenced.

3. Highlight the file to be attached.

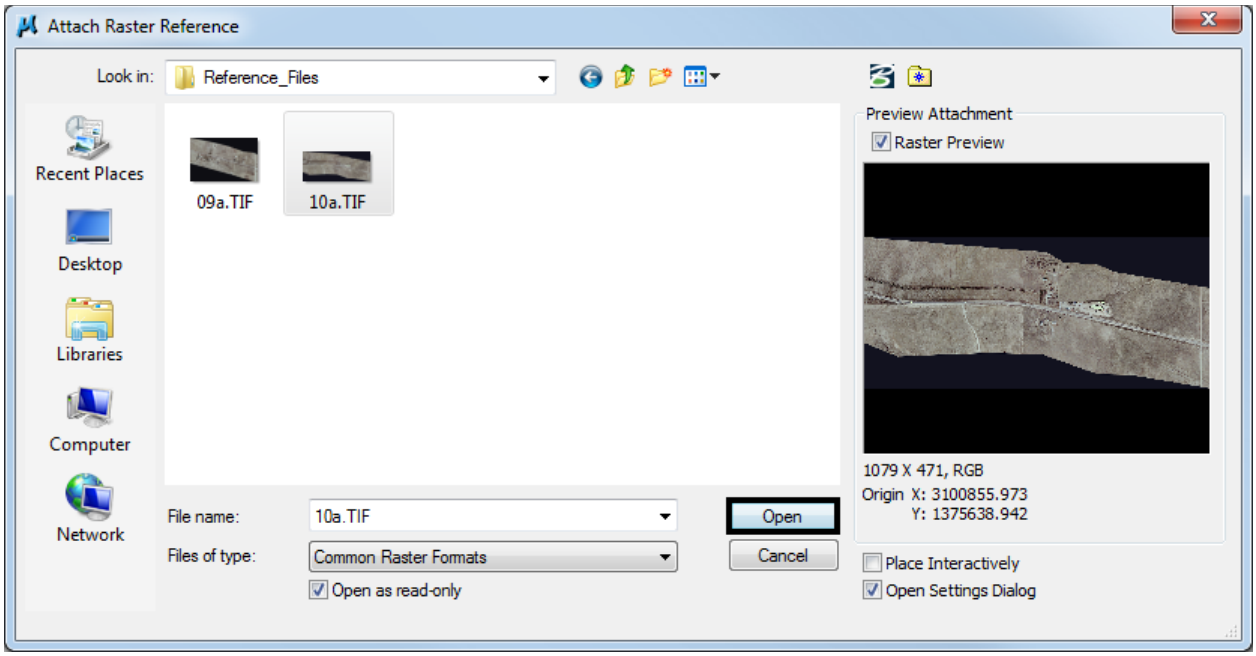
4. Toggle On or Off ***Place Interactively*** as desired.

   Note: If the file is Georeferenced, then ***Place Interactively*** should be toggled off.

   Note: Placing a non-georeferenced file with the ***Place Interactively*** toggled off will cause the image to be placed at the ***Global Origin***.

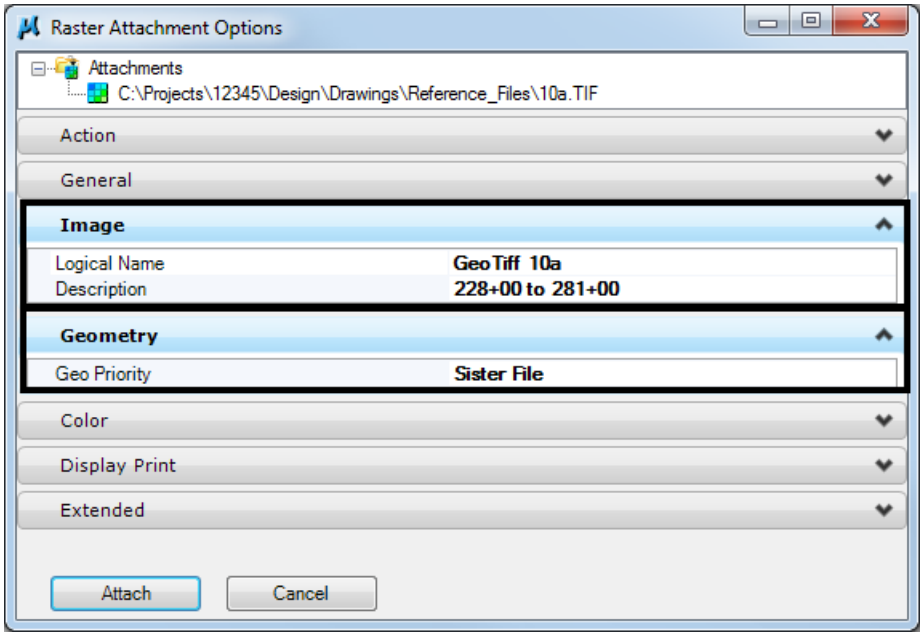
Toggle on **Open Settings Dialog**. This will display the ***Raster Attachment Options*** dialog box which is used below.

5. **<D> Open.**



6. In the ***Raster Attachment Options*** dialog box, expand the **Image** leaf and key in a ***Logical Name*** and ***Description***

7. If the file attached is a georeferenced file, expand the **Geometry** task.

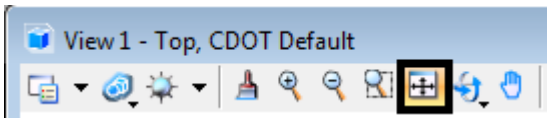


8. Verify that the ***GeoPriority*** is set correctly for the file being attached.

   Note: The the ***Raster Attachment Options*** dialog box may appear different based on the size the box has been set to and the options selected when starting the attachment. However, the ***Image*** leaf will always be available. The Geometry leaf is only available when ***Place Interactively*** is toggled off.

9. Select **Attach**.

   Note: A **Fit View** may be required to see the raster image.

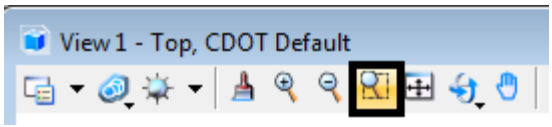


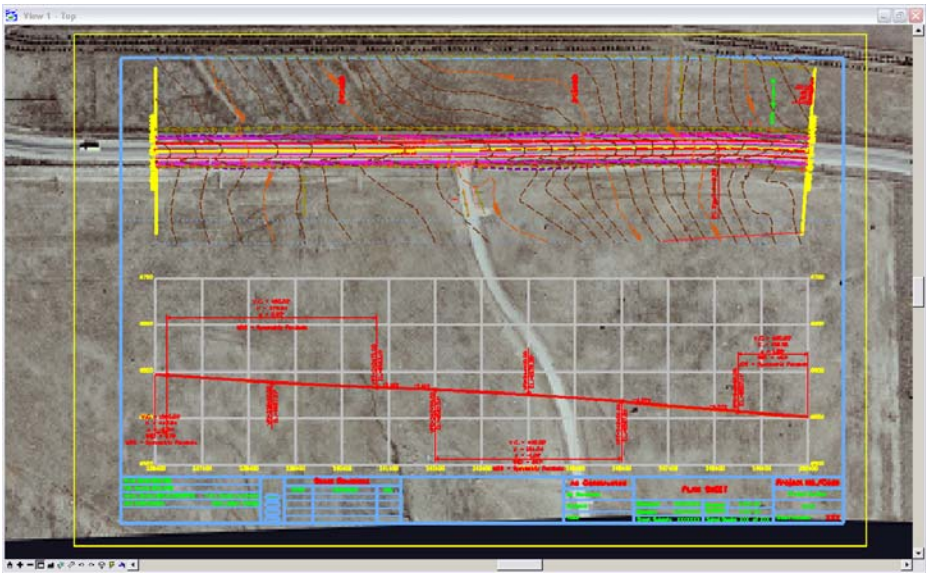
Note: The above screen capture was captured with a white MicroStation background for ease of viewning (the referenced image has a black background). To rid raster image of black borders see ***Setting Raster Transparency*** at the end of this document. Geo-Referenced Files typically will not need any modifying or relocating. These files have their coordinates and scaling embedded either within the tif itself or in an accompanying world file (.twf).

Clipping and Masking Raster Images

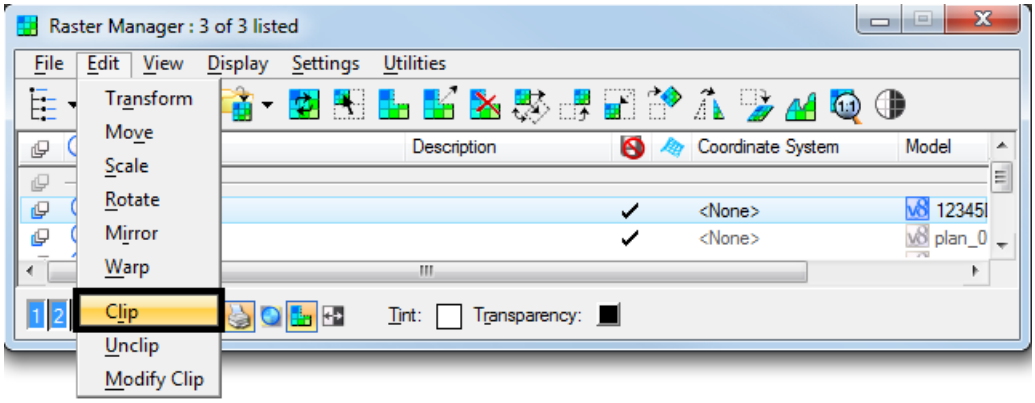
If for some reason there are portions of the raster image that you do not want to see, two commands are available to accomplish this: **Clip Raster** and **Mask Raster.** These parallel the options available for MicroStation reference files. **Clip Raster** hides the image outside the selected area while **Mask Raster** hides the image inside the selected area.

1. **Window Area** to show your area of interest.

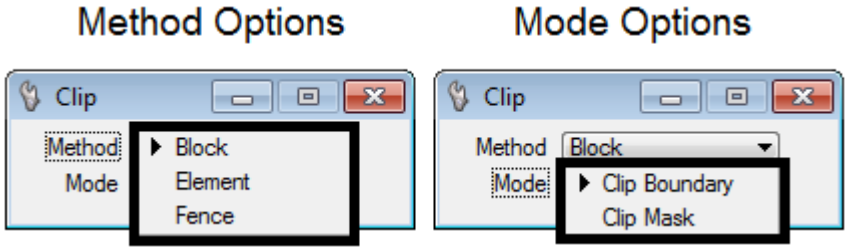




2. From **Raster Manager**, select **Edit > Clip.**



3. The **Clip** dialog box presents the clipping options. Select the appropriate **Method** and **Mode** from the drop-down lists.

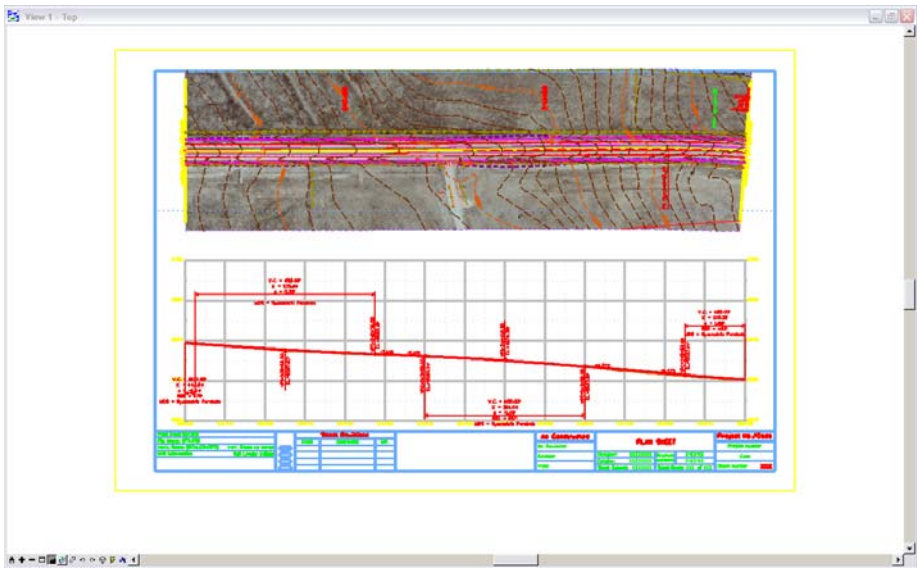


4. Define the clip boundary.

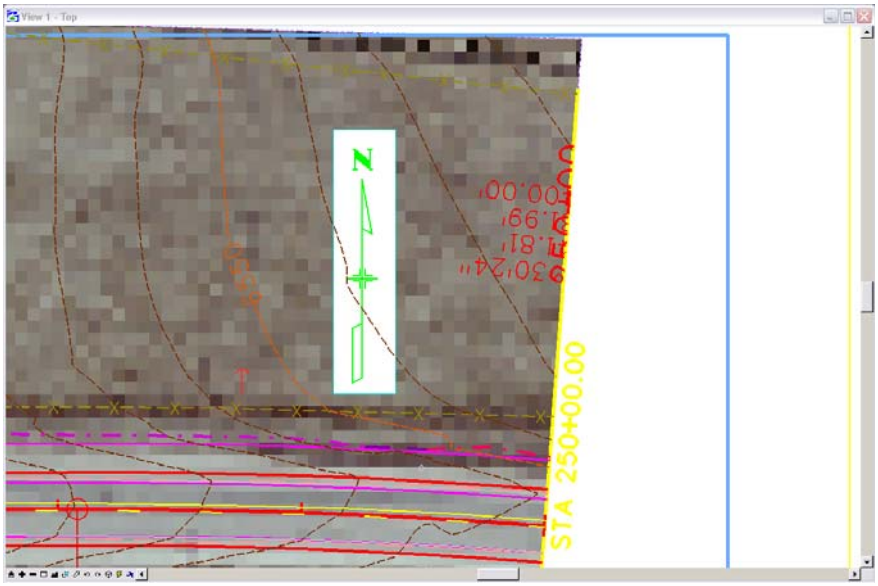
   Note: To use the ***Fence*** option, the fence must be in place before the ***Clip*** command is selected.

5. **<D>** to accept element selection.

6. **<D>** in the view to complete the command. The illustration below shows and example of a ***Clip Boundary***.



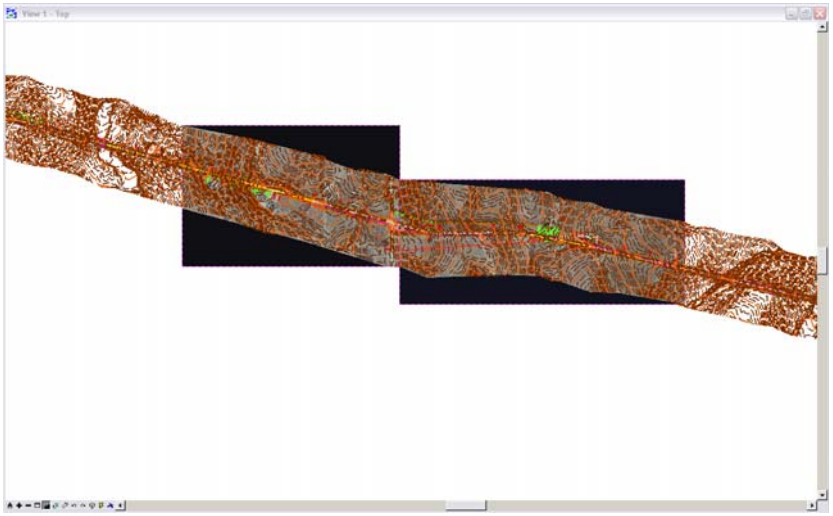
This illustration shows and example of a ***Clip Mask***.



Note: Once defined, Clip Boundaries can be modified by selecting **Edit > Modify Clip** from the **Raster Manager** menu. Clipping can be defined by the methods ***Blocks***, ***Elements***, and ***Fences***.

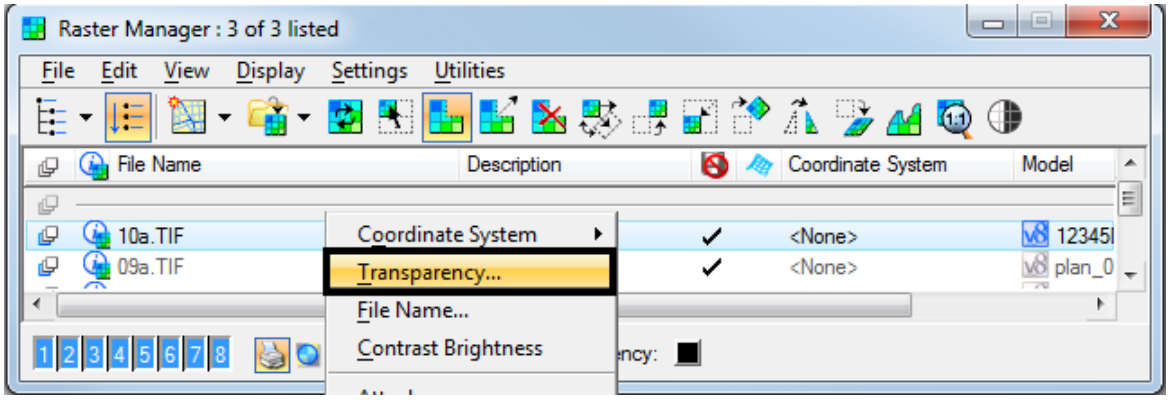
Setting Raster Transparency

The dark, unused portion of your raster image (see black image outlined below) can be set to transparent allowing the user an alternative to clipping that is easier. This is extremely useful when printing raster images as this portion of the drawing is omitted. (This workflow uses the file **C:\ \Project12345\Design\Drawing\ Reference_Files\12345DES_Model.dgn**)

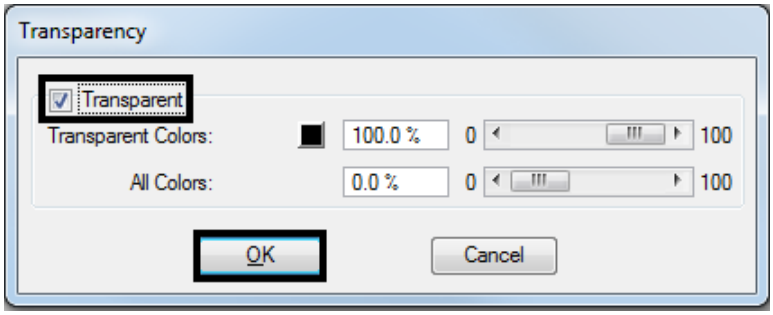


1. Open **Raster Manager**.

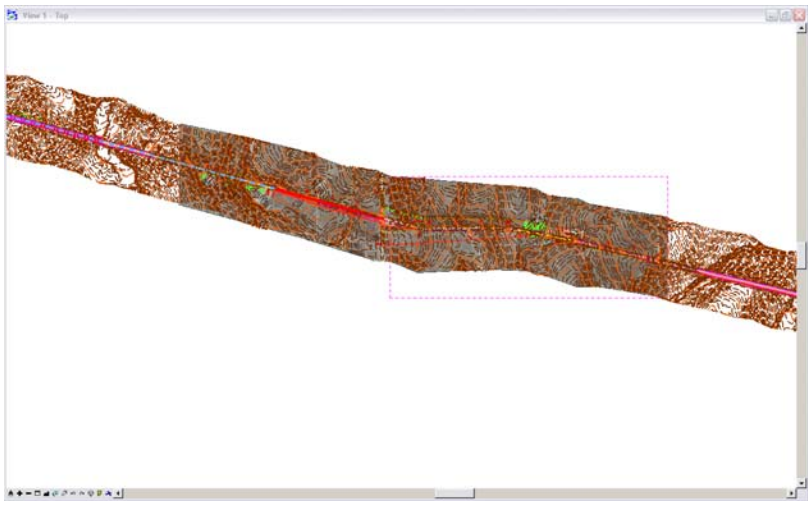
2. **<R>** on a raster attachment file and select **Transparency** from the fly-out menu.



3. In the **Attachment Settings** dialog box, place a check in the **Transparent** check box, make sure the **Transparent Color** is at ***100%***, **<D> OK**.



4. Repeats step 2 and 3 for any additional attachments.



Note: Transparent color can be set to any color, but is black by default (Red:0, Blue:0, Green:0). Use graphics programs such as Adobe Photoshop to determine the RGB settings of your raster images.