

Location Map for Book Jobs

Overview:

These instructions are for creating 8.5 x 11 location maps that display the project location; the maps are used in pavement contracts, aka “Book Jobs”.

- Find the project location in Maine DOT Map Viewer
- Save the view of the project area from Map Viewer as a raster file
- Reference the location map raster file into the dgn
- Label and populate location map dgn as needed

Step One: Prepare the Location Map dgn

Create a new dgn in the project folder to create the location map in.

Go to location of the templates of the Book Typical on your PC. The default location is here:

Y:\pin\BookTypicals\From Scratch

Find the file “Location Map starter.dgn” in the above folder and **save** a copy of it to your current project folder (WIN folder). Rename the file as you see fit. This is a starting point for creating the location map. The only thing in this dgn is a 8.5 x 11 border with title block and correct size True North Arrow.

Step Two: Find the Project Location in Map Viewer

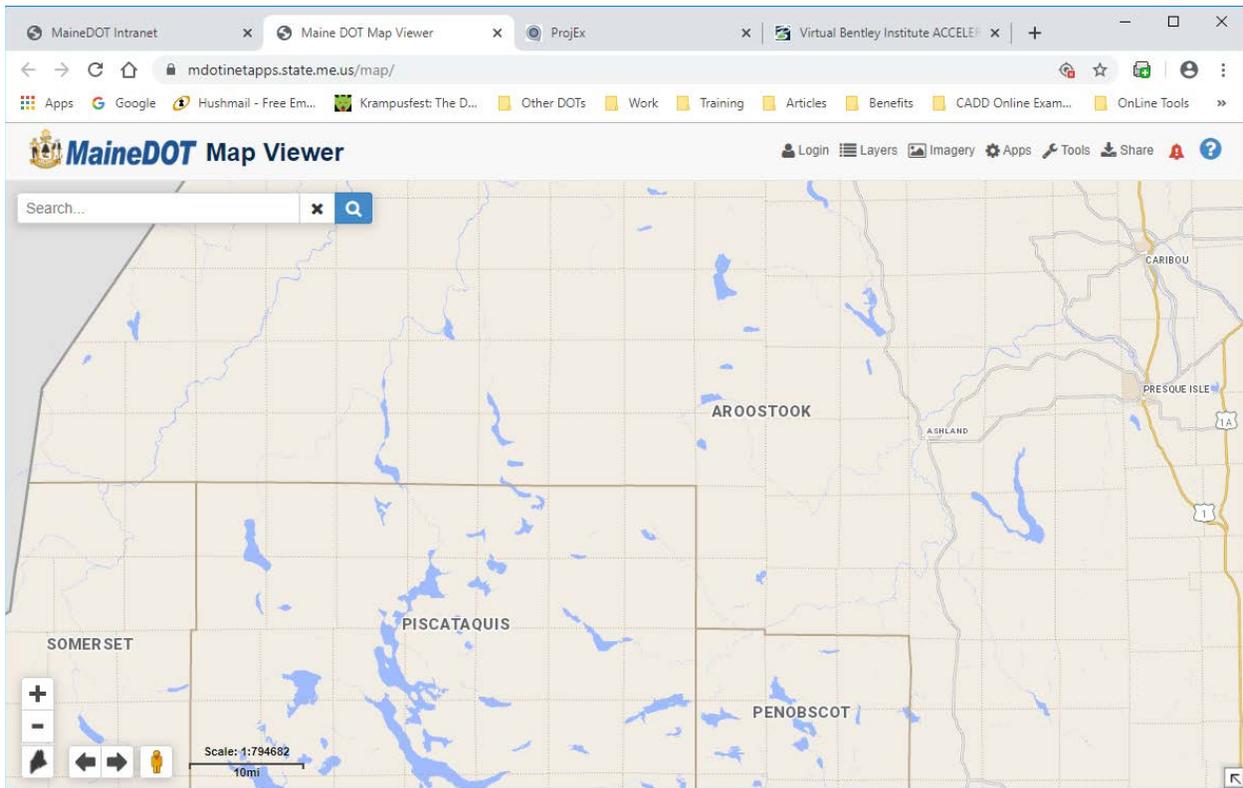
Use the Map Viewer application to zoom to your project’s location within the state and then use this view as a backdrop for your book job location map.

Start the “Map Viewer” application by opening any web browser and go to the MaineDOT intranet homepage.

<http://mdotweb.state.me.us/>

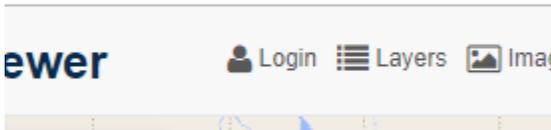


Clicking on the “MapViewer” icon (see red box above) will open the Map Viewer plug-in.

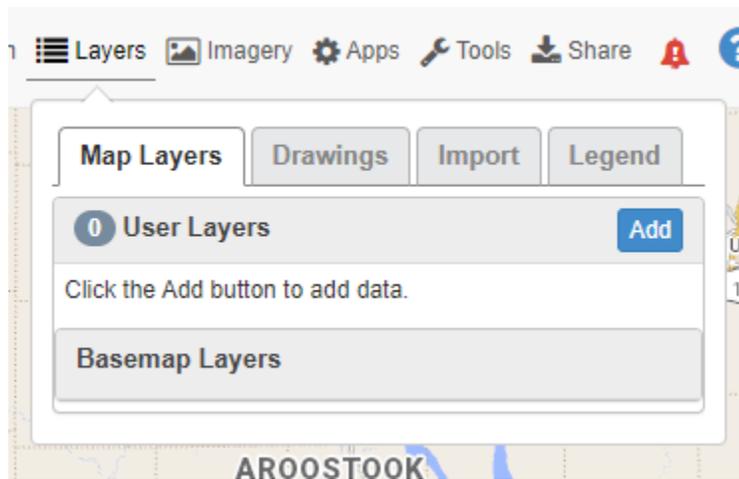


Once you have “Map Viewer” open, follow these steps to get a view of your project area that you can use for a backdrop in your location map.

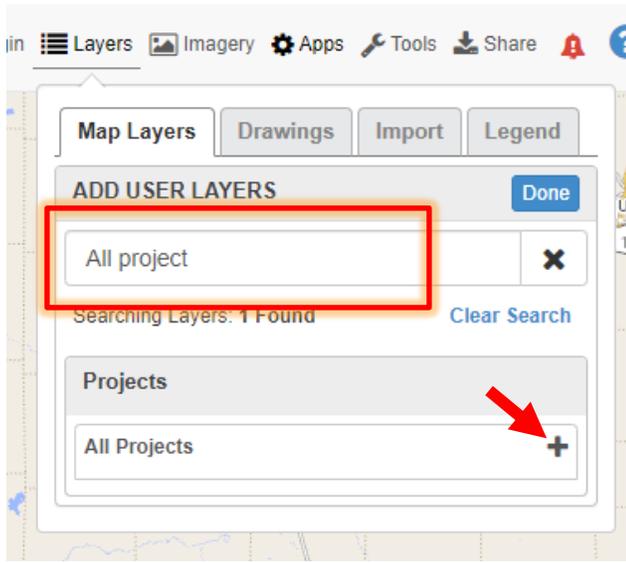
1. Click on “Layers” in the upper-right of the Map Viewer interface.



- a. Click on the blue “Add” icon.

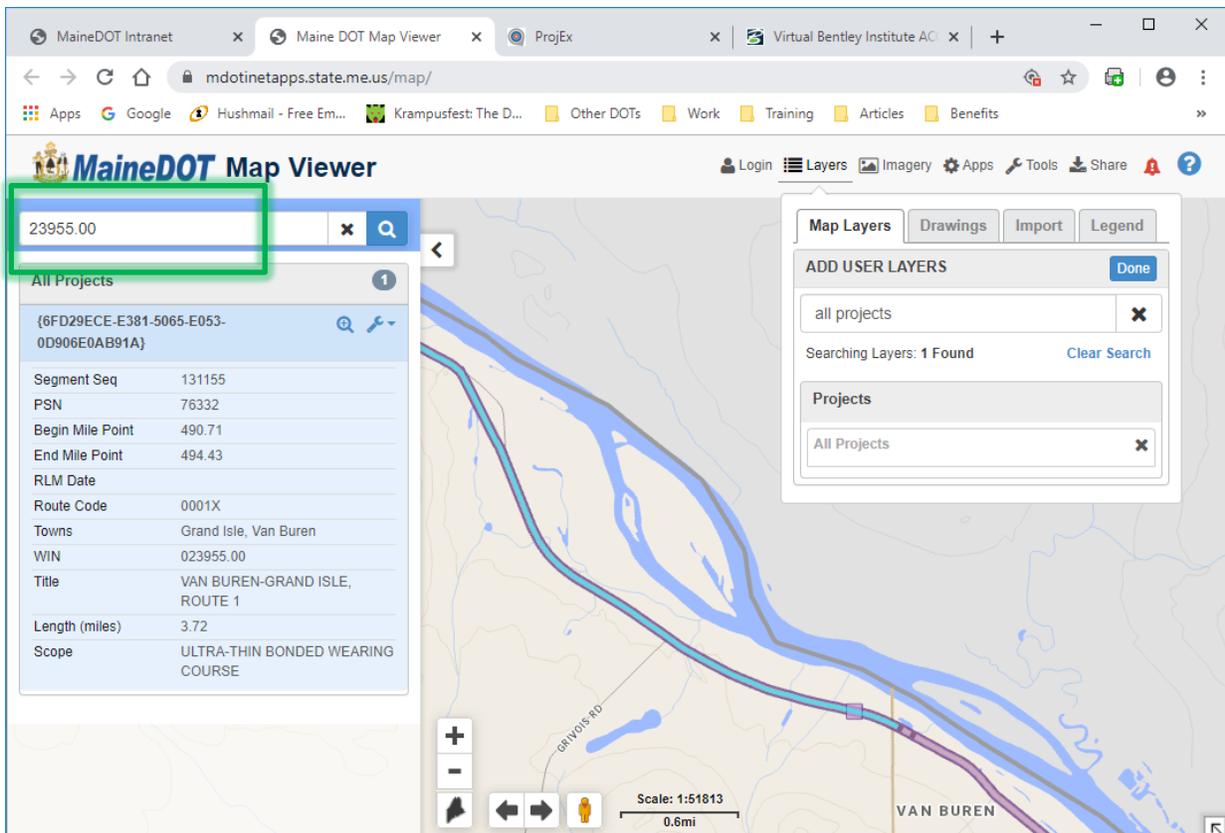


b. Type in “All Projects” in the “ADD USER LAYERS” field (see red box) like so:

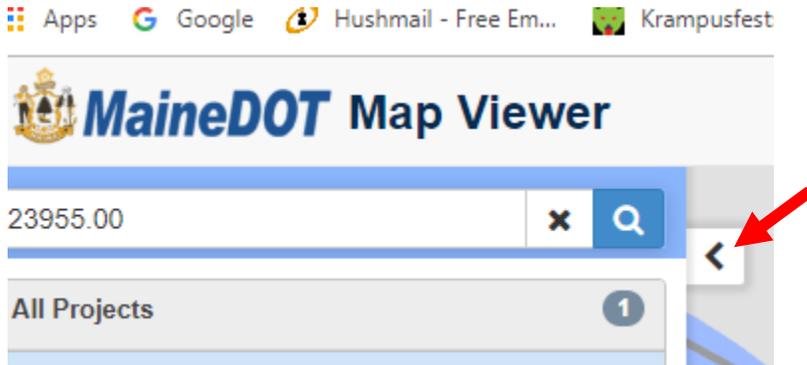


And Click on the plus sign to the right of “All Projects” shown above (see red arrow).

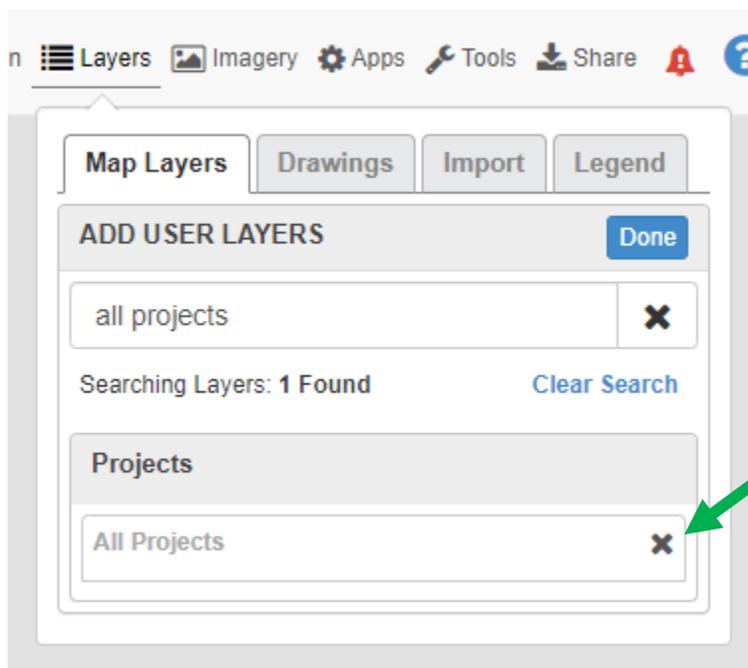
2. Now in the Search field to the left (see green box) type in the WIN number of your project and Click on the magnifying glass. This will highlight your specific project and zoom to its location.



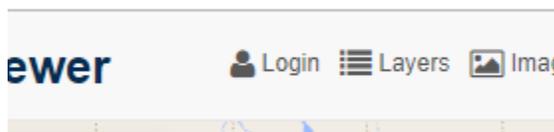
3. Click on the Less Than sign on the left of the screen to scroll the Search Taskbar out of the way (see red arrow).



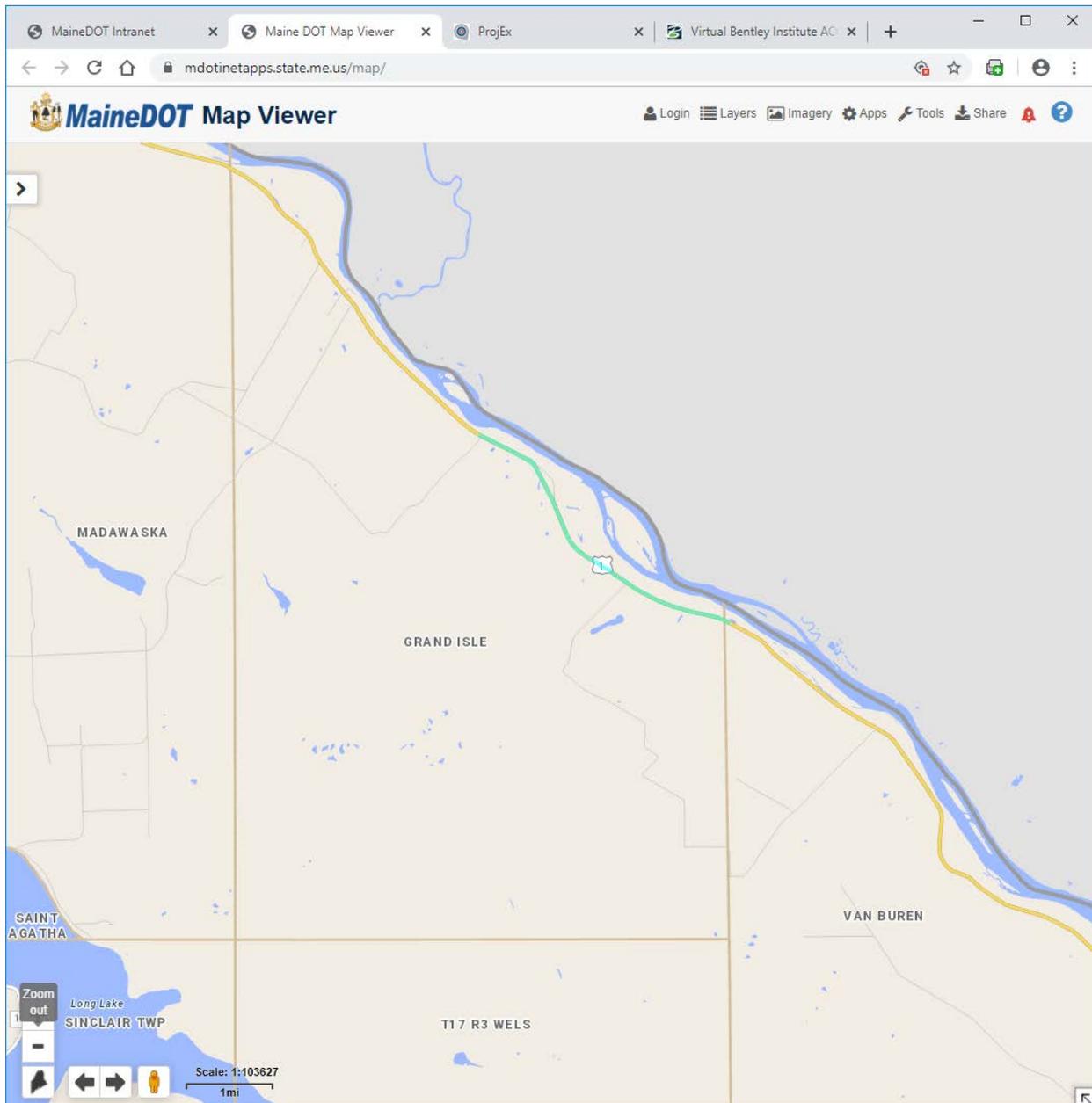
4. Click on the “X” to the right of “All Projects” layer to remove extraneous highlighted projects in the vicinity (see green arrow).



5. Now Click on “Layers” again in the upper-right of the Map Viewer interface, to stop it from cluttering up the view in Map Viewer.



6. Zoom out so you can see your project WHICH SHOULD STILL BE HIGHLIGHTED (if Not go back to step 1 “Click on Layers...” to try again). Adjust the view of your project in Map Viewer as necessary.

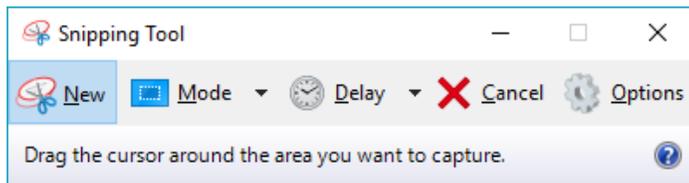


Step Three: Save the View as a Raster File

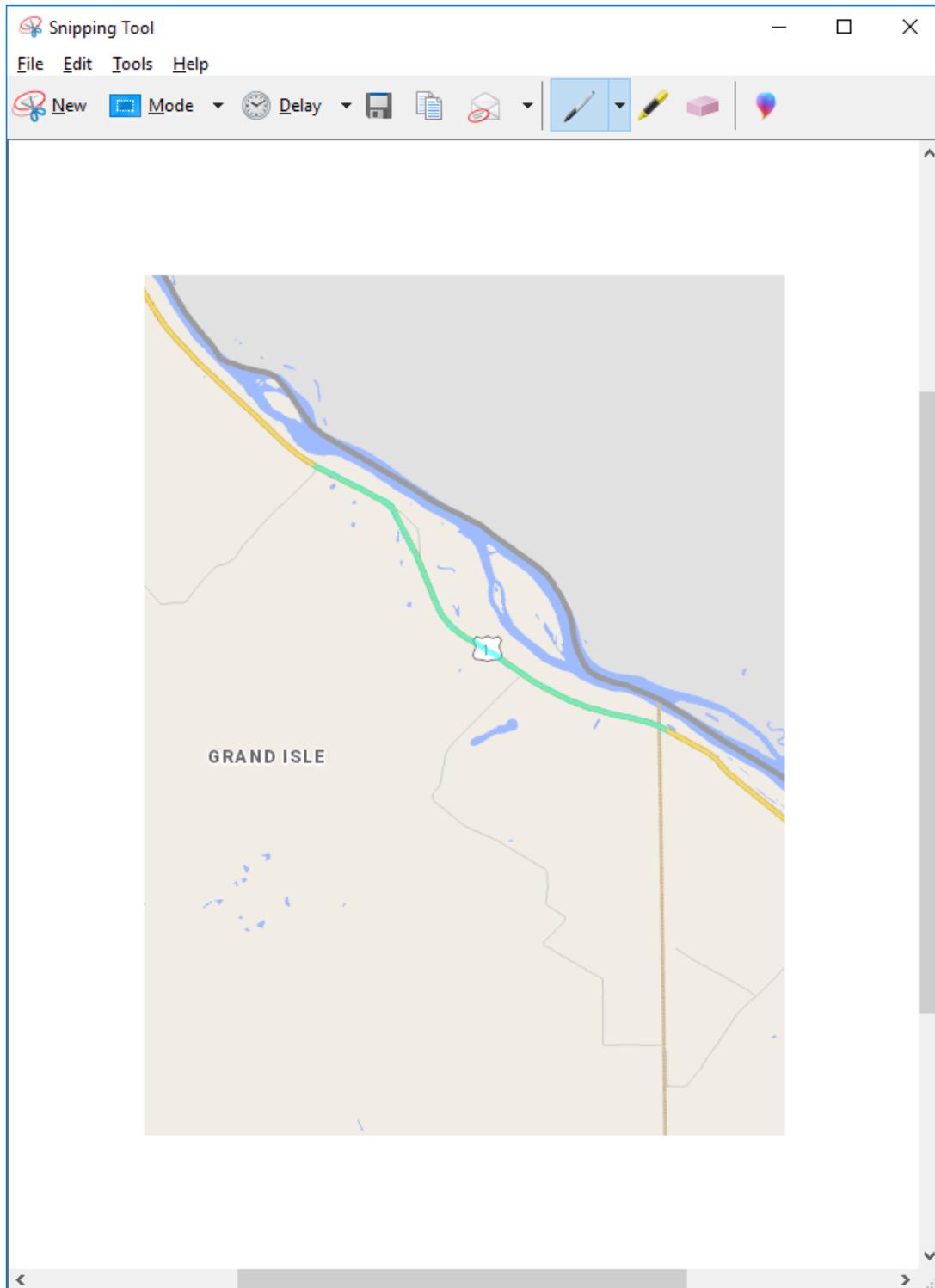
With Map Viewer open and displaying the area you want for your location map, use the Microsoft application “Snipping Tool” to save the view to a raster file.

1. Start the Snipping Tool. If you don't know where to find it, go to the Windows search bar and type in “Snipping Tool”.

2. The Snipping Tool toolbar will show up.



3. Click "New" and your screen will go cloudy and the cursor will turn into crosshairs.
4. With the Snipping Tool crosshairs, draw a 'rectangle' that represents the area you wish to use as a backdrop in your location map. To draw the 'rectangle' Press and Hold the left mouse button. The finished product will look something like this:



Guidance: To make it clear where the project is in the state, include in the raster image a landmark (intersection, bridge, river, etc.), then when annotating the drawing give a distance from the landmark to the project.

If you don't like the clipping, repeat the tool and try again.

- Once you have a clipping that you like, save it in the same place as the Location Map dgn under your project's WIN folder. To retain the best detail of the image save it as a "png" file by going to **File > Save As** and choose Portable Network Graphic File (PNG).

Guidance: The naming convention for these raster images are:

"WIN number" – Location Map Image.png

Ex. 23955.00 – Location Map Image.png

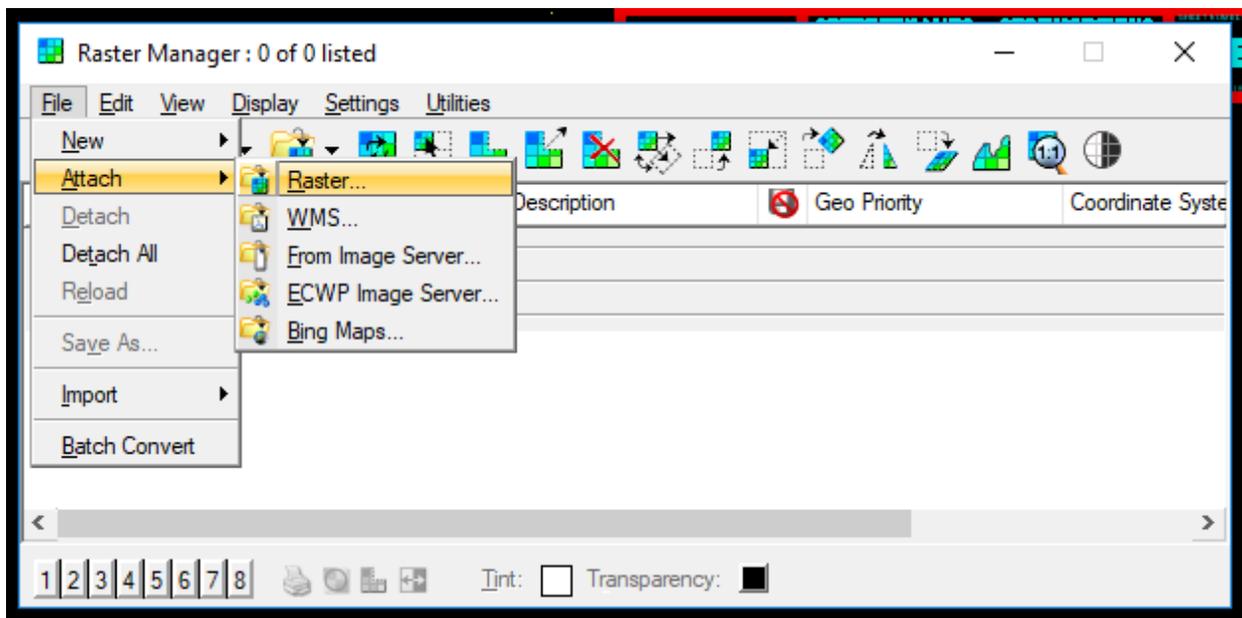
Step Four: Bring the Raster into the Location Map dgn

At this point you have two files, a Location Map dgn and a raster file that displays the general area of the project as displayed in Map Viewer. Now you need to bring the raster file into the MicroStation file so that it can be used as a backdrop for the project's Location Map.

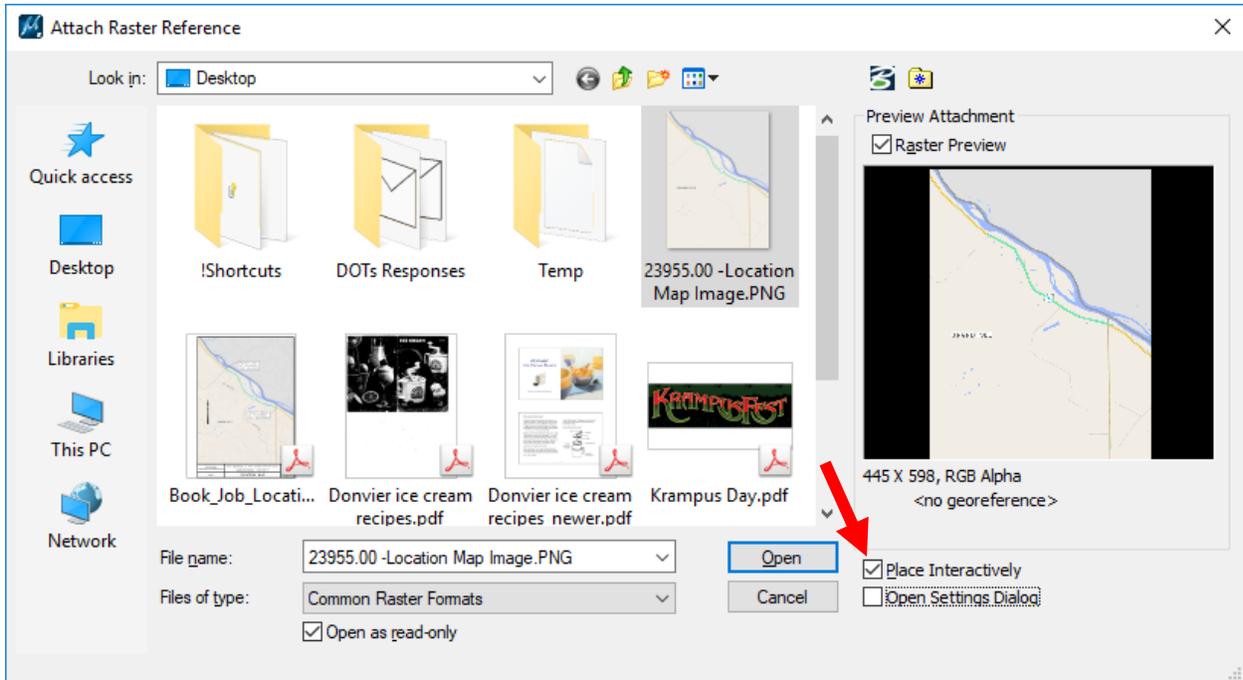
- Open the Location Map dgn in MicroStation.
- Start the "Raster Manager" command in MicroStation, you can do this various ways:
 - from the MenuBar choose **File > Raster Manager**

b. or Click on this icon .

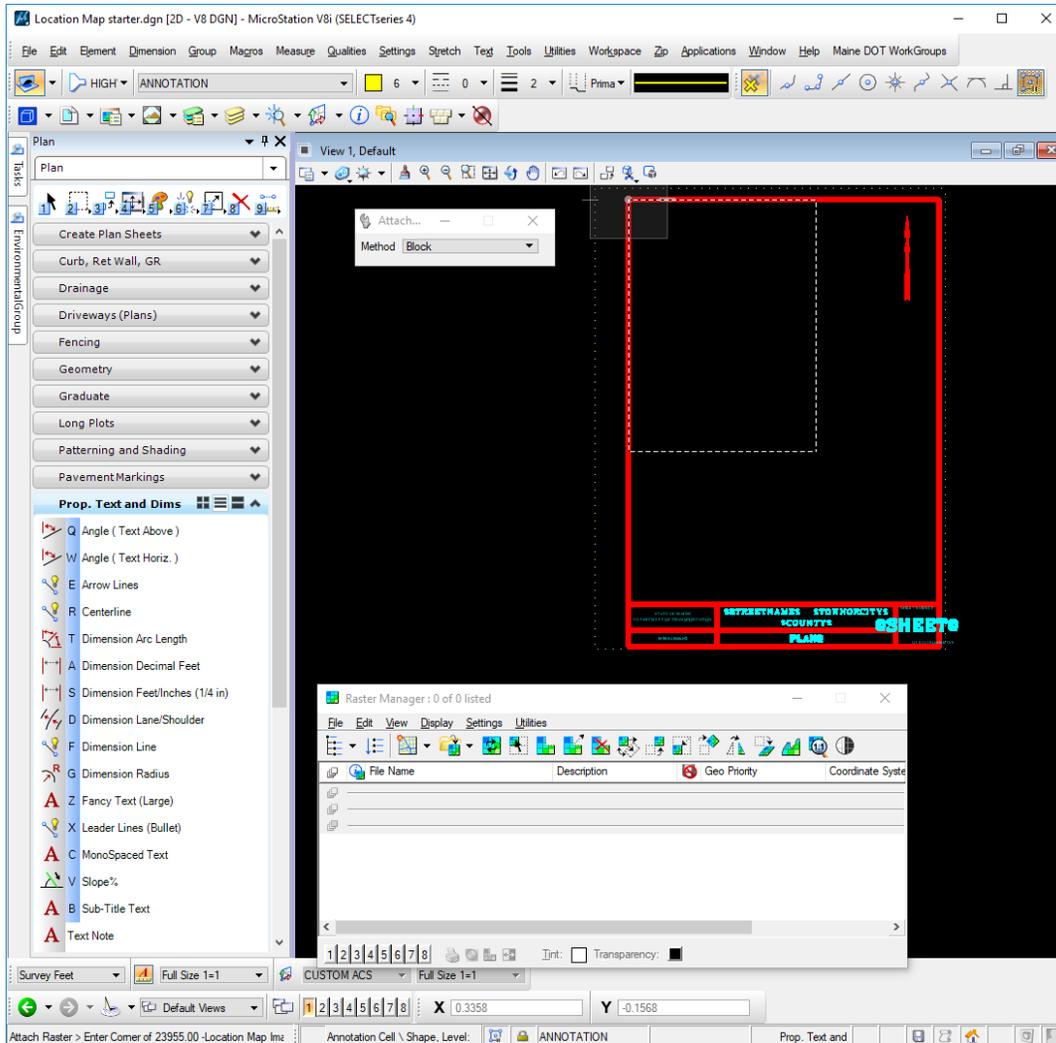
- When the "Raster Manager" opens:



Go to **File > Attach > Raster...** and attach the png file that is the clipping from "Map Viewer"

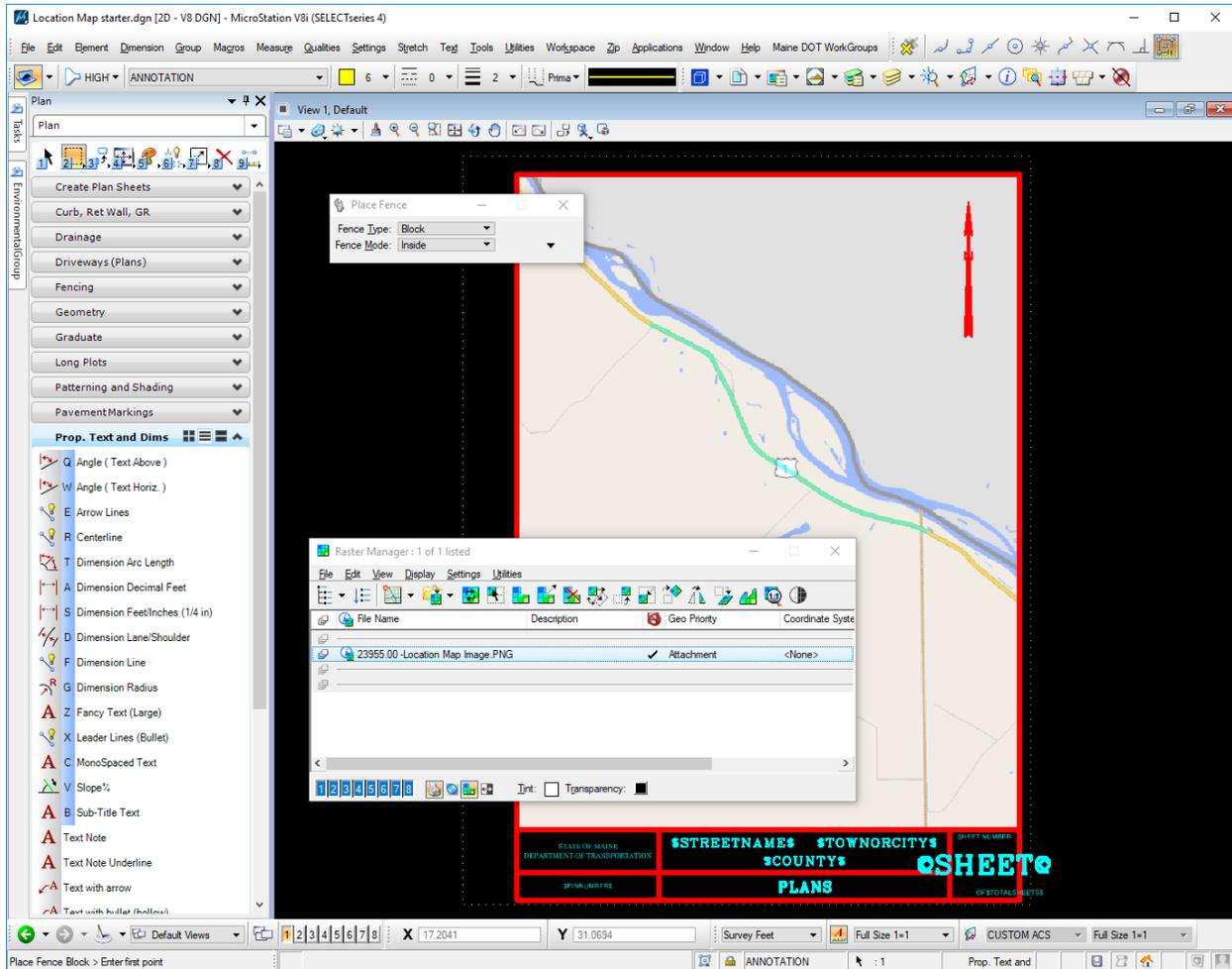


Select the PNG file, check the “Place Interactively” box (see red arrow), and click Open



Note: By checking “Place Interactively”, you can manipulate it like any other MicroStation Element.

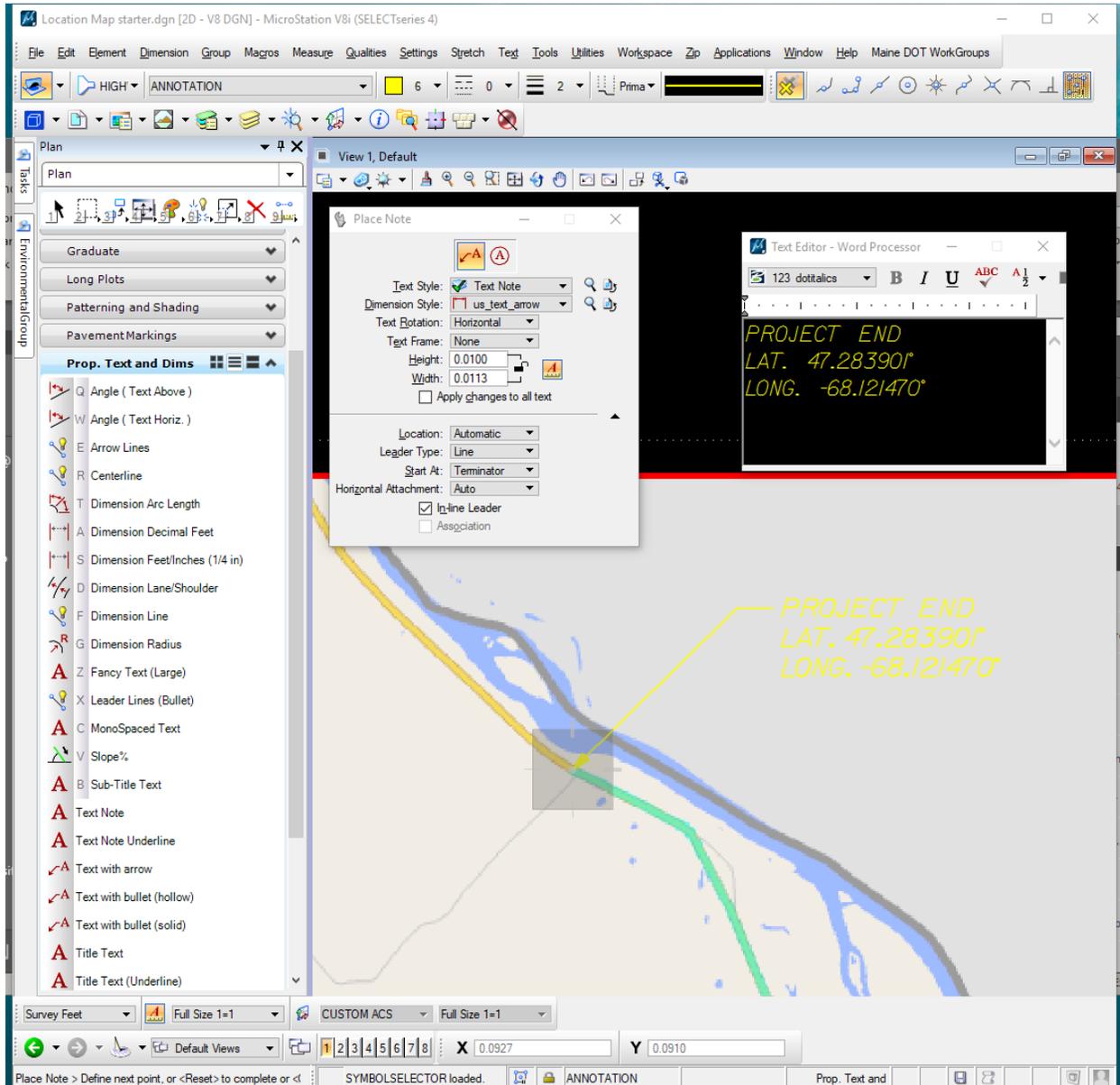
4. Place the raster one corner at a time within the view of MicroStation, as shown above.
5. With the raster file attached, you may need to clip it, move it, put it behind the 8.5 x 11 sheet border, so adjust it as necessary. Use the tools in the Raster Manager dialog box under the menu bar tab “**E**dit” (like Move, Scale, Clip, etc.).



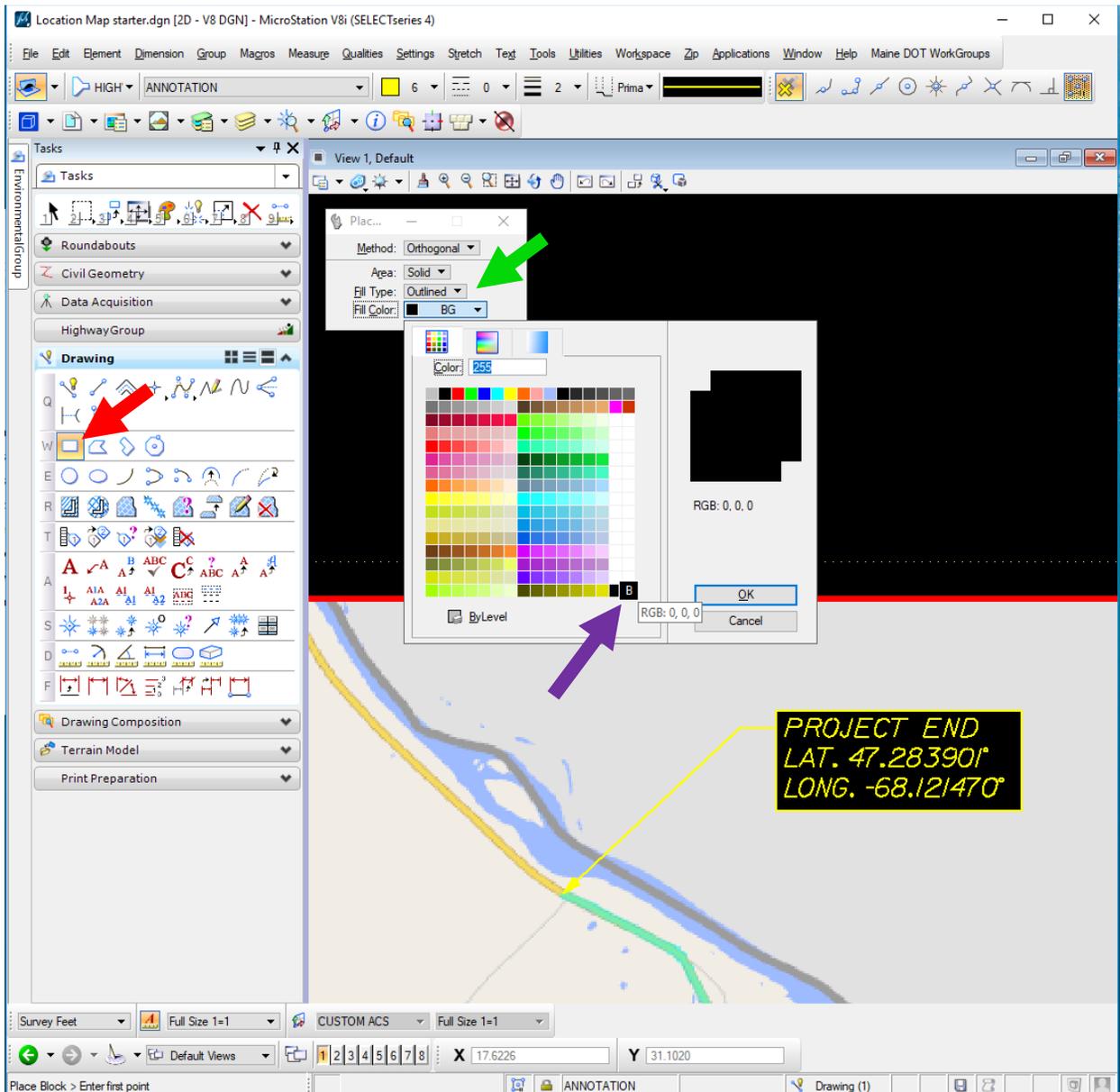
- After the raster is displayed the way you want, place appropriate linework and annotation, which MUST include:

Before preceding ask the Project Manager if the Coordinates listed in ProjEx are good for showing on the Location Map.

- PROJECT BEGIN with GPS coordinates in decimal degree format to the sixth place
- PROJECT END with GPS coordinates in decimal degree format to the sixth place.
- Label the road's name and if applicable, route number (i.e. US ROUTE 1)
- A True North arrow at ½ the size it is inserted as (this should already exist in the drawing).



7. Because the raster image has a lot of colors and features, the annotation that you add from MicroStation isn't as distinct as it should be, to make it stand out put a masking block around it. To create mask around the text follow these steps.
 - a. Start the "Place Block" command (see red arrow)
 - b. In the "Place Block" dialog box Click on the "Fill Type" drop down and choose "Outlined" (see green arrow)
 - c. In the "Place Block" dialog box Click on the "Fill Color" drop down and pick the "B" in the lower righthand corner, then "OK", this creates a masking block (see purple arrow)
 - d. Now position this Block around the text
 - e. You may need the "Bring to the Front" command found by holding do the right mouse button and scroll down the popup menu.



8. Once you're done with the drawing, save it.
9. End of workflow.