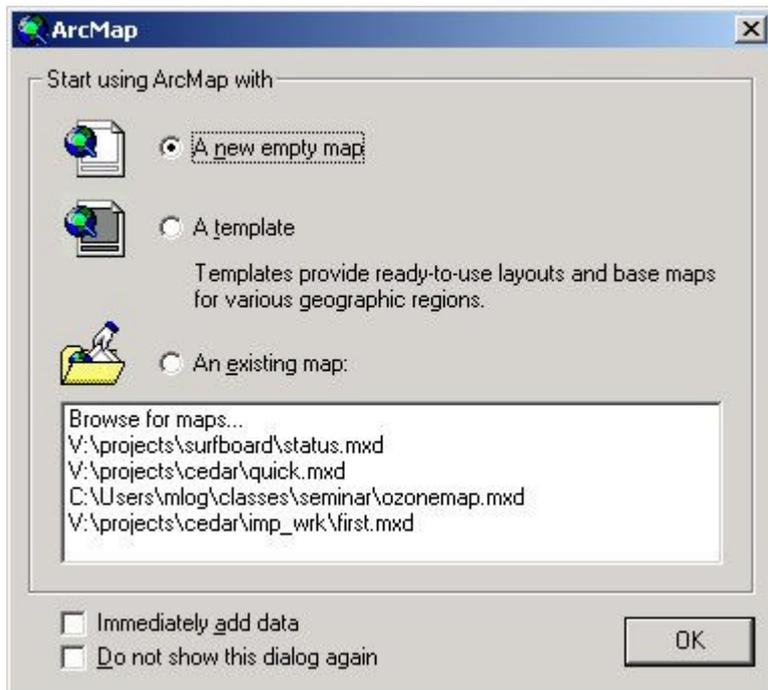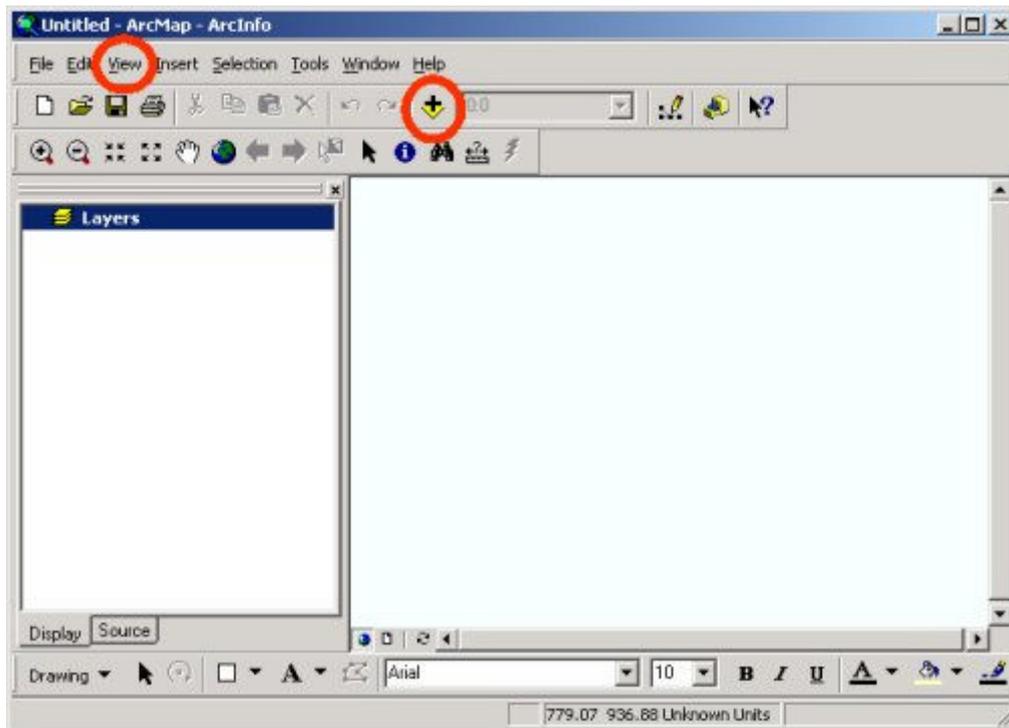ArcMap is the most common used interface to ArcGIS and the ArcInfo ver. 8.x. You'll see similar icons from ArcView but not much remains beyond that. Start ArcMap from the Programs list.
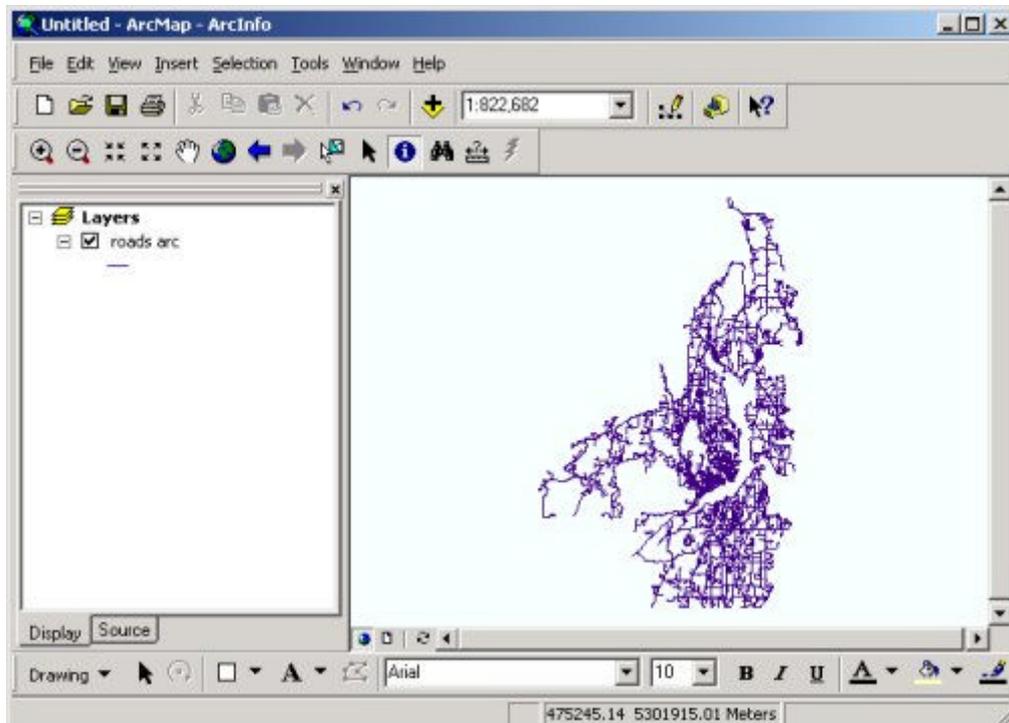
When ArcMap first opens it will ask what you want to do - create a map, open the last map you edited, etc. You may wish to skip this dialog in the future. If so, click on the check box in the lower left. Select the option to start with A NEW EMPTY MAP.

1. The screen layout has the "table of Contents" on the left and the map "canvas" (or view) on the right (I often forget what ESRI wants me to call the right hand side "canvas/view". I think canvas makes more sense. The first thing to do is to pick the "TOOLBARS" that you really need. Like most windows based software you can add special toolbars and customize your own to put the functions you use often "within reach". Go to VIEW > TOOLBARS and click on only the MAIN MENU, STANDARD, TOOLS, and DRAW tool bars.
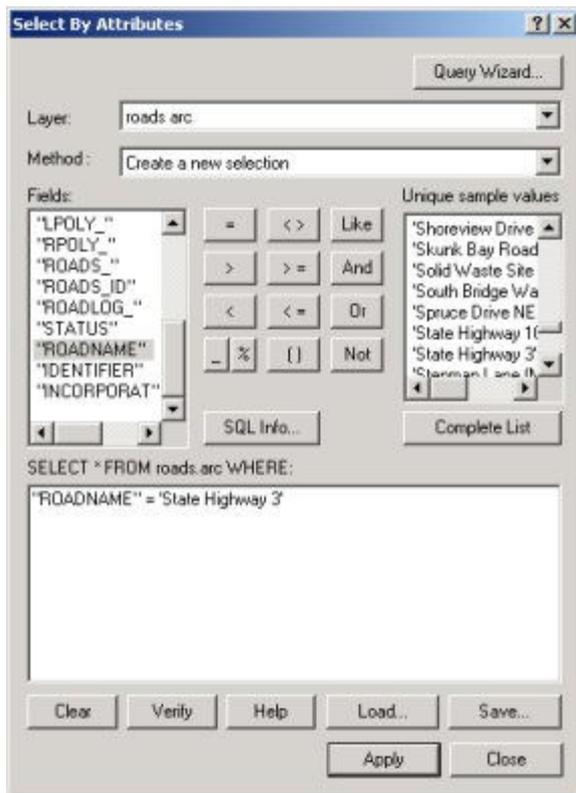
2. To add data click on the plus sign icon ("+", see above). and Navigate to our class data directory. Once there the ROADS layer is available along with a few raster datasets. Click on the ROADS layer to display the arc, lable, polygon, and tic, feature class coverages. Select the "arc" feature class to be added to the canvas.
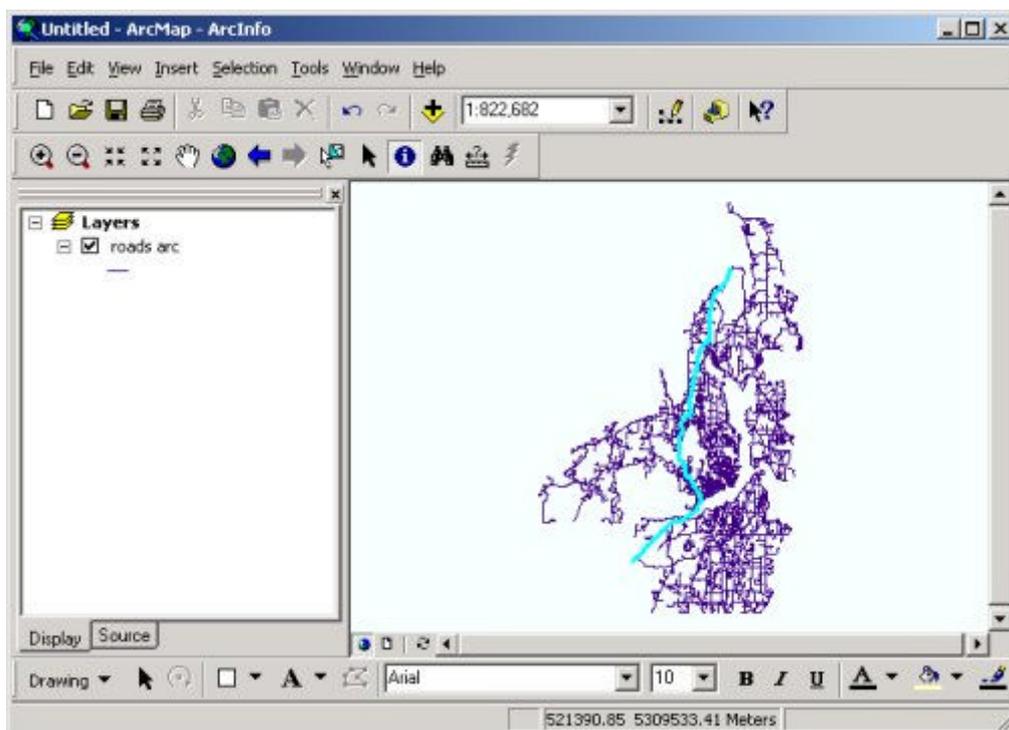

3. To find "State Highway 3" go to SELECTION > Select by Attribute. In the dialog box make sure the layer is set to ROADS ARC. To find State Highway 3, scroll in the Fields window until you find the ROADNAME field. Double click on it, and ROADNAME will be display in the selection criteria window below. Click on the "=" button. Scroll in the "unique
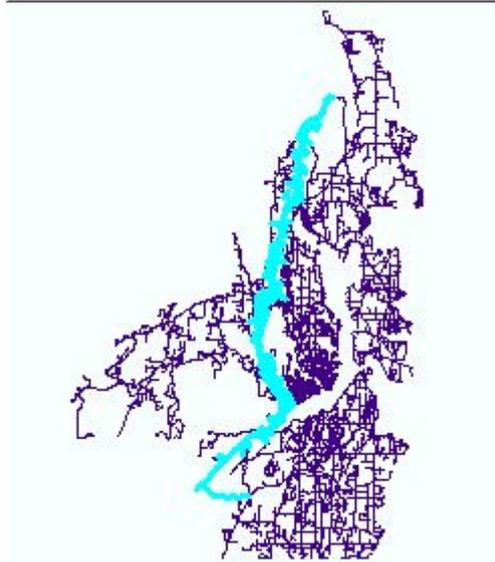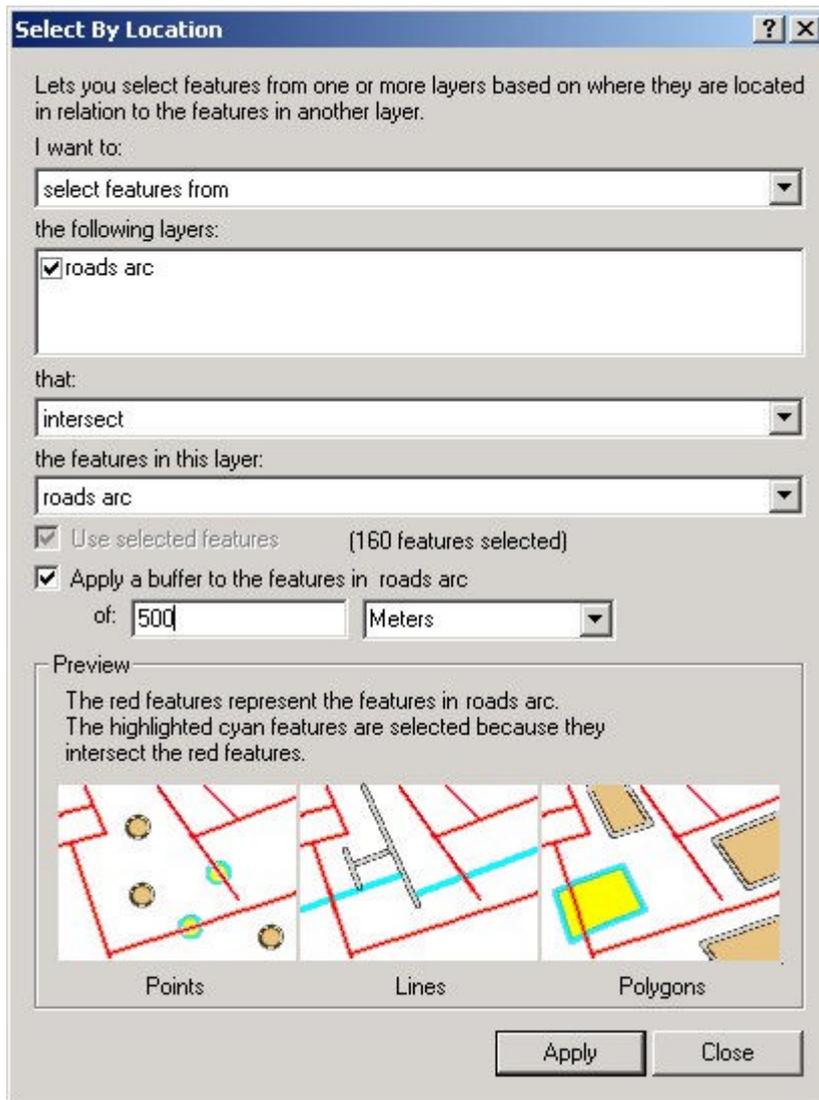
values" until you find "State Highway 3" and select it. It should look like this. If so click on APPLY.

4. After you click APPLY the arcs (lines) that have been assigned the value State Highway 3 for the attribute ROADNAME will be selected and highlighted. You can close the SELECTION dialog box.
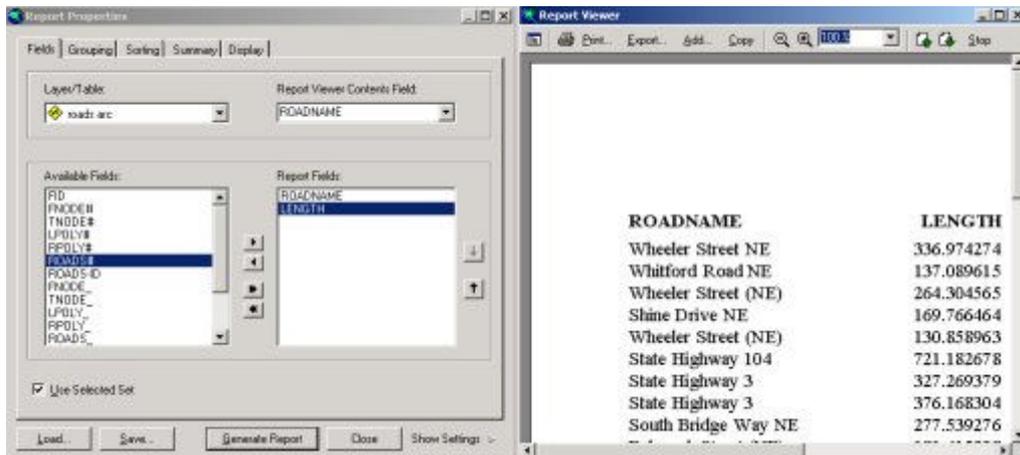
5. Now that State Highway 3 is selected find all the streets that are within 500 meeters of Highway 3 by using the SELECTION > Select by location option. The dialog options almost read like the statment you would want to say. Select feature from the ROADS ARC layer that intersect the features in the ROADS ARC layer when I apply a 500 meter buffer around the selected arcs which have the State Highway 3 value for the ROADNAME attribute. It should look like this. When you click APPLY, the additional roads should have been selected. (You'll see a visual difference).

6. You can make a hardcopy report of those selected roads by going to TOOLS > REPORT > Create Report. The dialog box has a lot of options, the simple thing to do is click on the ROADNAME field and promote it to the Report field box with the arrow and do the same for

the attribute LENGTH. Then click on the GENERATE REPORT button. The report will pop-up in a text window and you can print it from there - HOWEVER - don't print this out.
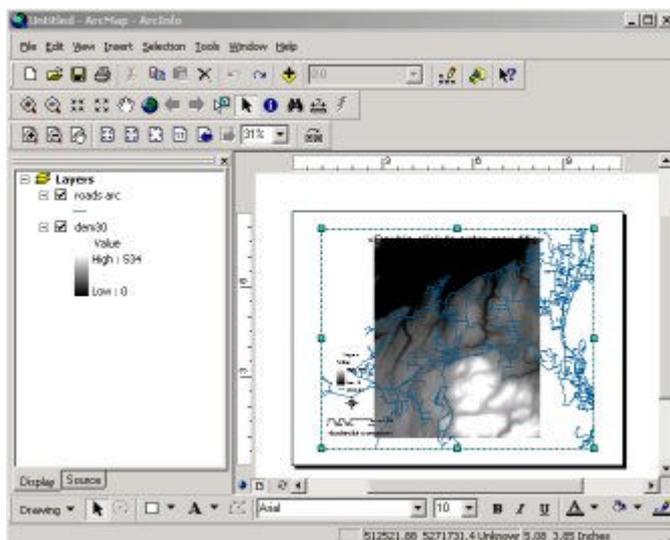

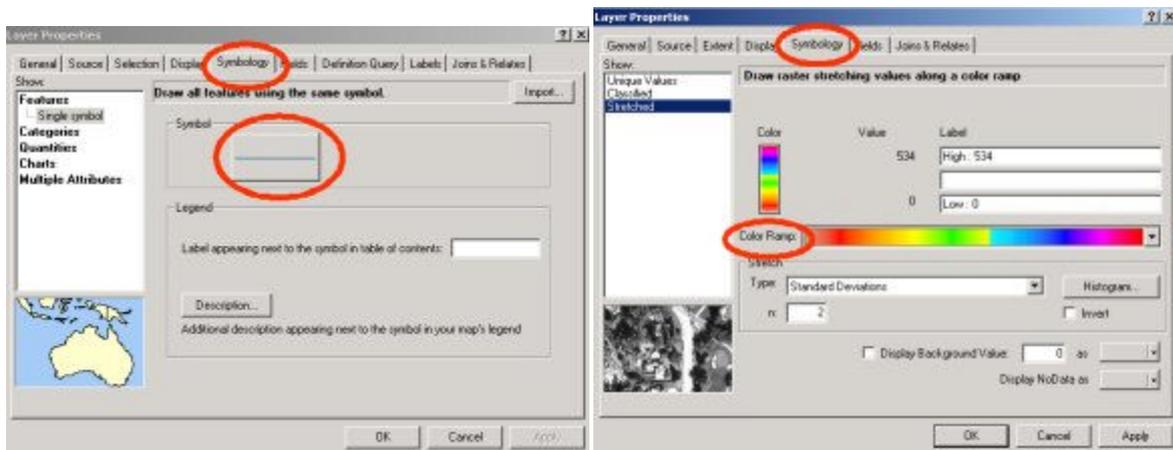7. Now clear the select set - SELCECTION > Clear Selected Features

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Creating Maps

1. We'll now make a quick map. Select the 'New" option from the FILE menu (FILE > New). The template list is displayed. Select the **LetterLandscape.mxt** and click OK. Add the raster (grid) dem30 dataset and the ROADS arc layers. Notice that the data viewframe may extend beyond the space that you want. This can be adjusted like most windows based drawing software by clicking once on the object and then draging the frame "boxes". Also, notice that the spatial extent of the DEM established the geographic extent of the view frame because it was loaded first (not all the roads are displayed, only those with in spatial common with the extent of the DEM - this is called the MAP EXTENT.
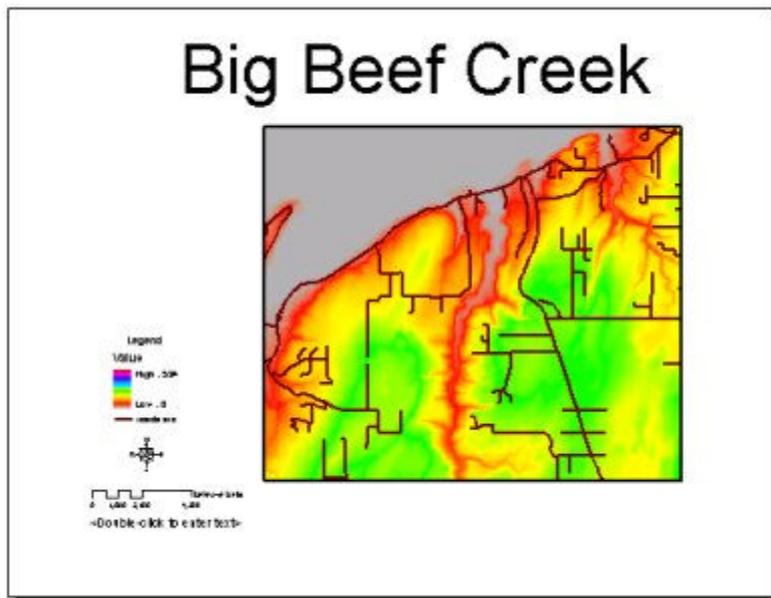

10. There are two sets of ZOOM tools on your menu bars. The second set zooms on the map page will the first set (that we've used before) still zooms the data. Zoom into someplace interesting and change the symbol and color for the roads and the DEM (double click on the

name of the data layer to access the layer properties and use the "Symboloby" tab to interact with the line symbols. Click on the line symbol and select the options you like. Don't forget to make the raster data look nice too.

12. To add a Title just double click on the <Double-click to enter map title>" Look over your options in the text property box when you add your title. You can also make changes using the DRAW tool bar along the bottom of the ArcMap window

13. You can save your map using the FILE > Save. We're finished for now. Close ArcMap and go home.