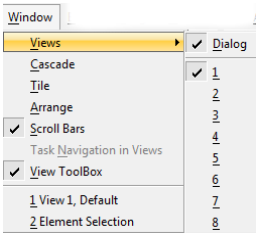
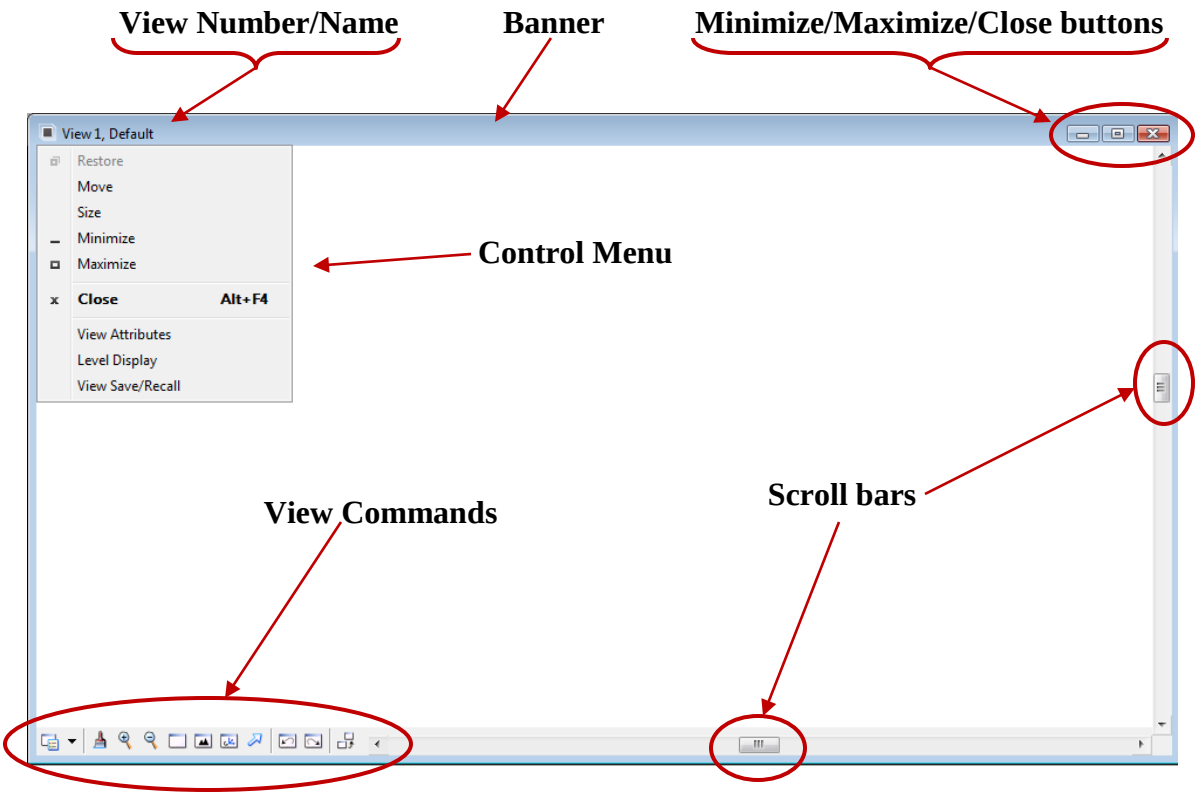
2.0 Windows/Views

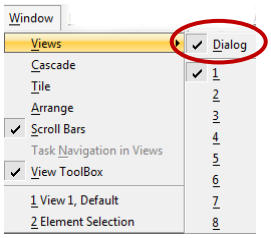
MicroStation uses the terms “windows” and “views” interchangeably. MicroStation gives you the option of having up to eight (8) view windows open at one time. Also, it lets you customize the arrangement of view windows within the application window.

From the Window menu’s Views sub-menu, choose the number of the view window you want to open. Check marks in the sub-menu indicates the numbers of open view windows.





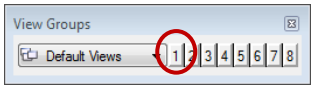
Also from the Window menu’s View sub-menu, choose **Dialog**. The View’s Groups window opens. By default, it is docked to the bottom of the window. Numbered buttons that are highlighted represent the open views.



To open a closed view window, click its numbered button.

To **close** an opened view window:

From the Window menu's Views sub-menu, choose the number of the view window you want to close.

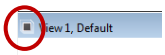


Or

In the view window's title bar, click the close window button at the far right.

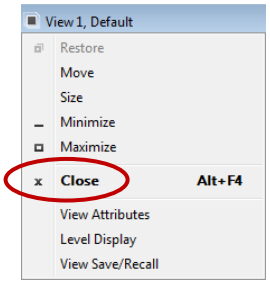
Or

Double-click the window menu button at the far left.



Or

From the view windows control menu (open by clicking the window menu button at the far left of the view window's title bar) choose Close.

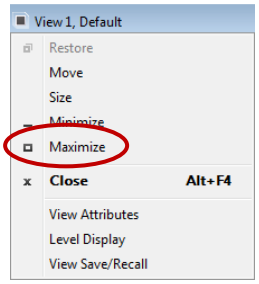


To **maximize** an open view window:

Click the view window's Maximize button.

Or

From the view window's control menu, choose Maximize.



Or

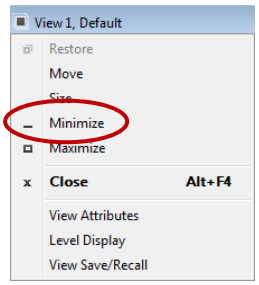
Double left-click on the view's window banner.

To **minimize** an open window:

Click the view window's Minimize button.

Or

From the view window's control menu, choose Minimize.



To **move** a view window with the pointer:

1) Position the pointer on the banner of the view window
2) Press and hold down the data button
3) Drag the view window to the desired location

Using the resize borders:

The four borders of a view window are called resize borders because dragging them resizes the view window. For example, by dragging the right or left resize border, you can change the width of the view window. Similarly, by dragging the top or bottom resize border, you can change the height of the view window. By dragging the corner of the resize border, you can change both the height and the width simultaneously. The pointer indicates the directions in which you can drag the border or corner.

To **resize** a view window with the pointer:

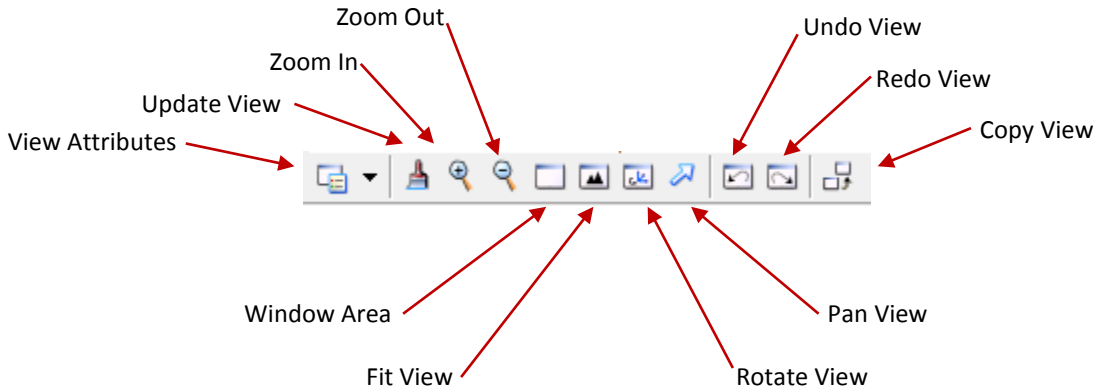
1) Position the pointer on one of the view window's resize borders or corners

To change	Position pointer on	The pointer becomes
Height	Top or bottom resize border	Vertical double arrow
Width	Right or left resize border	Horizontal double arrow
Height and width simultaneously	Any corner	Diagonal double arrow

2) Press and hold down the data button
3) Drag the border or corner to resize the view window as desired

2.1 View Commands (View Control Bar)

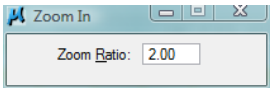
View controls are used to manipulate a view (the portion of the design displayed in a view window). The most commonly used view controls can be selected in the View Control Bar on the bottom border of each view window. The common tools are listed below.



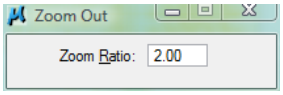
View Attributes - (See section 2.2 View Attributes)

Update View – is provided to redraw the display when an operation leaves a view with an incomplete display.

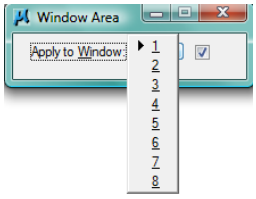
Zoom In – Increases a view window's magnification, making elements appear larger. Zoom ratio sets the factor by which the view is magnified. The range is 1-50.The default setting is 2.



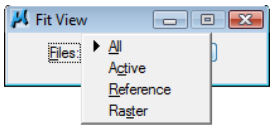
Zoom Out – Decreases a view window's magnification, making elements appear smaller. Zoom ratio sets the factor by which the view's magnification is decreased. The range is 1-50. The default setting is 2.



Window Area – Lets you see the boundaries of a rectangular area in the design to be displayed within a view. Apply to window option, if on, sets the destination view window. The chosen view window opens, if necessary.

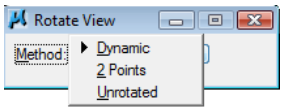


Fit View – Adjusts the view magnification so that the entire design file is visible in the view.



Tool Settings	Effect
Files	Sets the scope of the fit operation: • All — Display all displayable elements in the active model file and any attached references. • Active — Display all displayable elements in the active model file. • Reference — Display all displayable elements in attached references, if any. • Raster— Display all displayable elements in attached raster references, if any.
Expand Clipping Planes	If on, the view's Display Depth is adjusted, along with the view origin and magnification, so that all elements on levels that are on for the view are displayed.

Rotate View – Used to rotate a view.



Tool Settings	Effect
Method	Sets how the view is rotated. • Dynamic — Lets you rotate a view interactively about a defined point (default is the center of the view at the active depth). As you rotate the view, the elements rotate to let you see the result of the rotation. When you select Dynamic, a plus sign (+) appears in the center of the active view to define the center of rotation. Prior to starting any rotation, you can click on the plus sign and move it to redefine the center of rotation. • 2 Points — (2D only) Lets you rotate the view by placing two points to define the views X axis. • 3 Points — (3D only) Lets you rotate a view by placing three points to define the view's X and Y axes. • Unrotated — (2D only) Lets you set the view back to an unrotated state. • Top|Front|Right|Isometric|Bottom|Back|Left|Right Isometric — (3D only) Lets you set a view to one of the standard view orientations.

Pan View – Used to view a different part of the design without changing the view's magnification.

To pan:

1) Select the Pan View control
2) Enter a data point to select the view to pan and to define the origin for panning.
3) Enter a data point to define the position in the view where you want the origin to be displayed.

View Previous – Undoes the last viewing operation (view control operation or view attribute change)

NOTE: To undo a drawing operation, choose Undo (action) from the Edit pull down menu.

View Next – Redoes the last undone viewing operation.

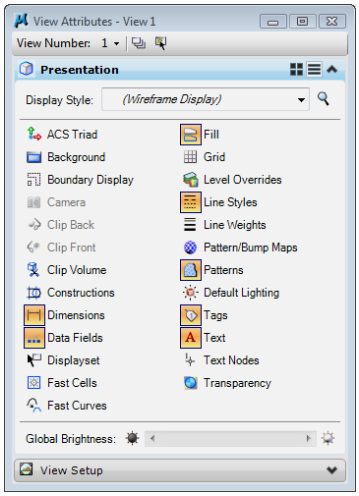
Copy View – The Copy View control copies the contents of an entire view and its corresponding attributes to other views.

To copy a view:

1) Select the Copy View control.
2) Select the source view
3) Select the destination view to which to copy the source view.

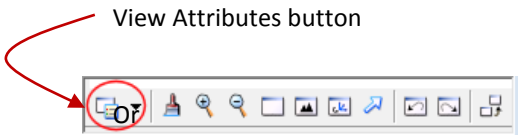
2.2 View Attributes

View Attributes other than level display are set in the View Attributes dialog box. Some determine whether parts of a model and drawing aids will be displayed. Others determine how the DGN file is displayed.



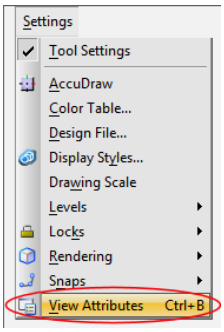
To turn View Attributes **ON** or **OFF**.

From the View Control tool bar, select the View Attributes button



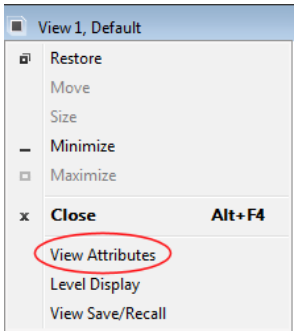
Or

From the Settings Menu, choose View Attributes (or use <CTRL-B>)



Or

From any view window's control menu, choose View Attributes. The View Attributes dialog box opens.

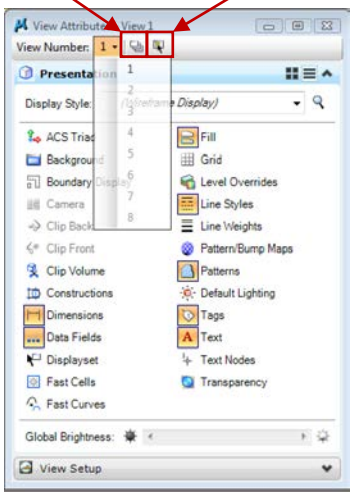


Parts of the View Attributes dialog box:

(Only the controls pertinent to MoDOT operations will be covered here. See the Help documentation in MicroStation for explanation of the others). Those denoted with "See MicroStation Help for explanation" should be off.

Applies to open views

Applies to selected views only



ACS Triad - See MicroStation Help for explanation

Background – See MicroStation Help for explanation

Boundary Display – Controls whether the boundaries of a clip volume are displayed for a given view, as well as reference clip boundaries.

Camera – See MicroStation Help for explanation

Clip Back – See MicroStation Help for explanation

Clip Front – See MicroStation Help for explanation

Clip Volume – See MicroStation Help for explanation

Constructions – If on, construction elements (those with the Class Attribute of Construction) will be displayed.

Dimensions – If on, dimension elements are displayed.

Data Fields – If on, Enter data fields are displayed.

Displayset – See MicroStation Help for explanation

Fast Cells – See MicroStation Help for explanation

Fast Curves – See MicroStation Help for explanation

Fill – If on, solid, closed elements with a fill type of opaque or outlined, and text characters with a filled font display with color fill (if the fill color is **B**, the fill will appear the same color as the background).

Grid – See MicroStation Help for explanation

Level Overrides – If on, Level Overrides (previously known as Level Symbology) – the color, line style, and line weight associated with each level – displays in the view, instead of the color, numbered line style, and line weight of each element.

Line Styles – If on, elements display with their custom line style. If off, all elements with custom line styles display as a MicroStation solid line style.

Line Weights – If on, elements display with their line weight. If off, elements will display with a line weight of zero. (By default, the MoDOT Plotting Routine will briefly turn line weights on to plot, and then turn them off automatically).

Pattern/Bump Maps – See MicroStation Help for explanation

Patterns – If on, patterned elements display**.**

Default Lighting – See MicroStation Help for explanation

Tags – See MicroStation Help for explanation

Text – If on, text elements display.

Text Nodes – If on, the text node number and a crosshair will be displayed.

Transparency – See MicroStation Help for explanation