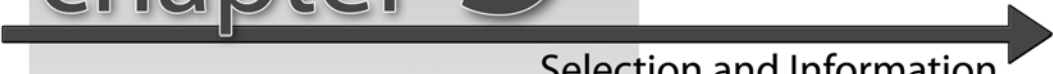


chapter 5

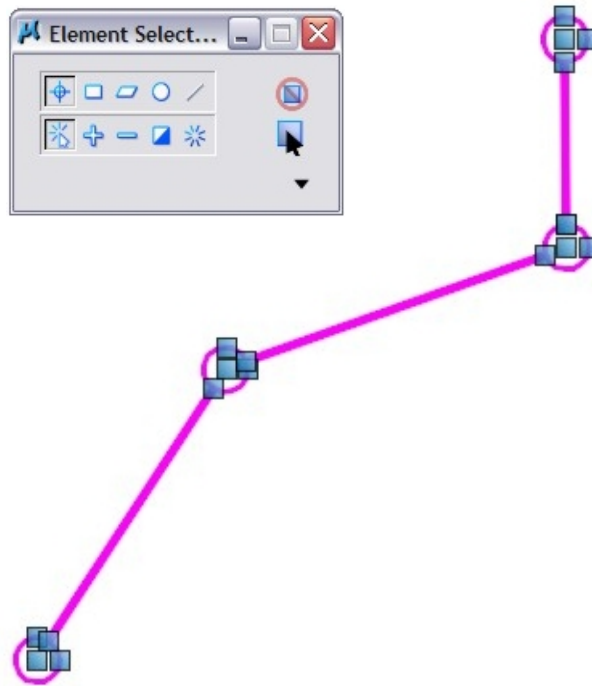
Selection and Information



5. Selection and Information

Element Selection

The Element Selection tool has been incorporated into Powerselector. Additional options include Disable Handles and Select Handles which allow multiple elements in a selection set to be modified by their handles.



- <D> nothing in the view will clear the selection set.
- **Ctrl + <D>** will add elements to a selection.
- <D> + **drag - Left to Right** will create an inside Block mode.
- <D> + **drag - Right to Left** will create an overlap Block mode.
- <D> + **drag + Shift** will toggle to overlap/inside Block mode.
- <D> + **drag + Alt** will toggle to Line mode.
- <D> <D> - **Left to Right** will switch to block mode inside.
- <D> <D> - **Right to Left** will switch to block mode overlap.
- Positional Keyboard mapping for Element selection Methods are
 - *Y - Individual*
 - *U - Block*
 - *I - Shape*
 - *O - Circle*
 - *P - Line*
- Positional Keyboard mapping for Element selection Modes are
 - *H - New*

Selection and Information

- *J - Add*
- *K - Subtract*
- *L - Invert*
- *;- Select All/None*

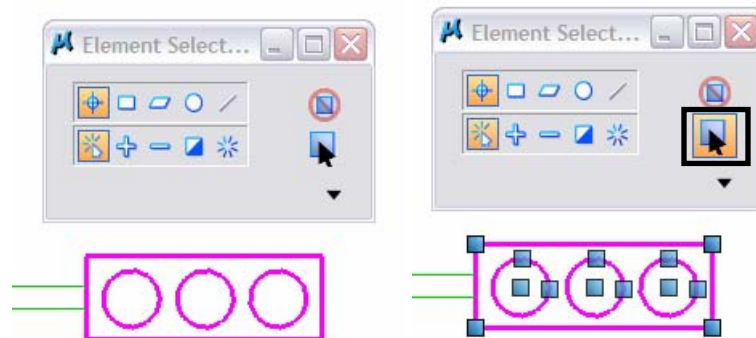


Handles

Handles have added functionality that help with editing a number of element types. In addition, handles can now also be used with references, reference clip boundaries, and named fences.

Handle Display

Toggling the display of element handles is done by selecting the button on the lower right side of the Element Selection Tool Settings dialog [M].



Alternate Handles

Alternate handles displayed as filled circles can be seen with certain elements such as Text. With the alternate handles modifications such as text wrapping can be accomplished.

OVERHEAD SIGNAL MOUNTING STRUCTURE - 25' SPAN

OVERHEAD SIGNAL MOUNTING
STRUCTURE - 25' SPAN

Move with Handles

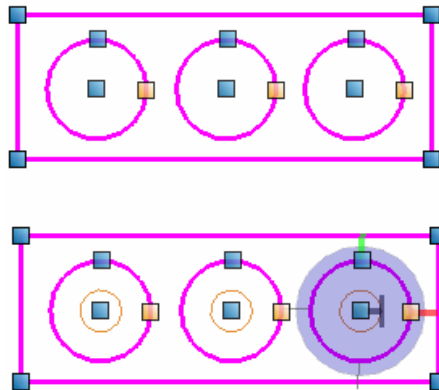
1. Select the elements.
2. Place the cursor over a selected element, not a handle.
3. <D> + **drag** the elements to the new location and let go.

Copy with Handles

1. Select the elements.
2. Place the cursor over a selected element, not a handle.
3. <D> + **drag** the elements to the new location.
4. As you drag press and hold the **Ctrl** key an icon plus sign will appear next to the cursor indicating the elements will be copied.
5. When you are at the location to place the copied elements let go.

Modify with Handles

When an element or elements are selected the handle or handles can be selected by holding the **Ctrl** key and when the elements are modified the geometric relationship is maintained.

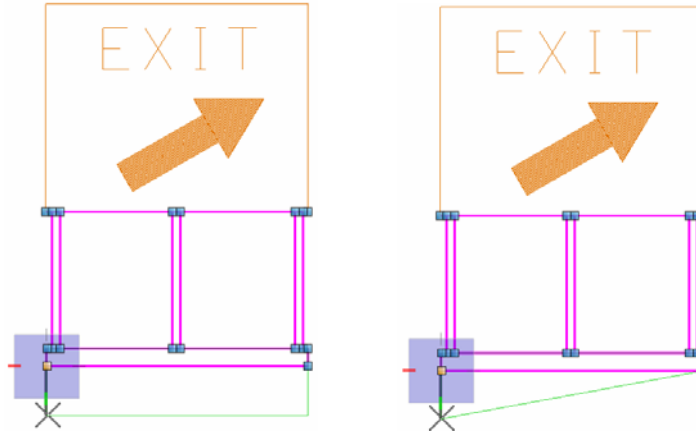


Drag Selection for Manipulate commands

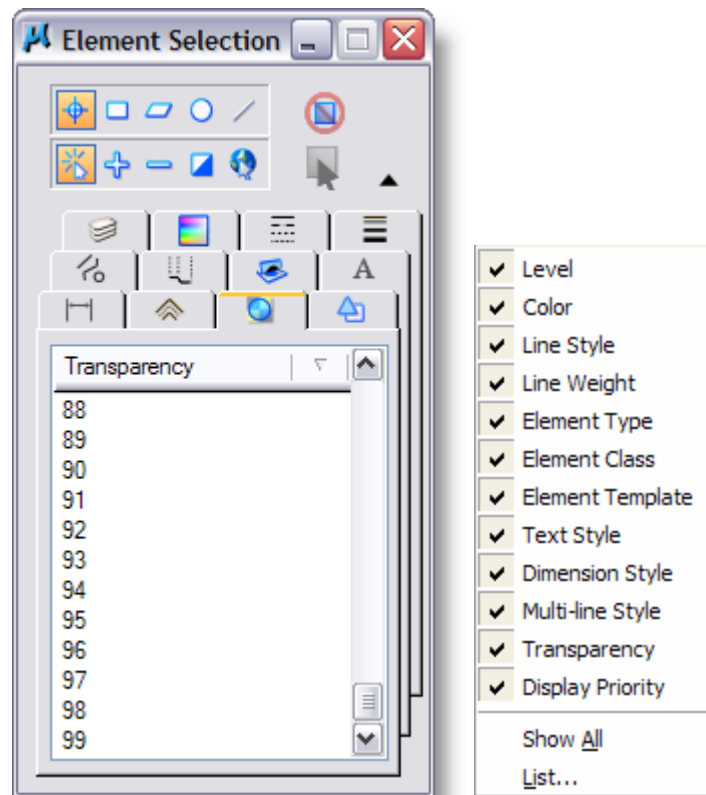
After selecting a manipulate tool multiple elements can be selected by dragging a selection window around them. Dragging left to right will create an inside area and dragging right to left will create an overlap area.

Alternate Modify

To modify handles and not keep the geometric relationship hit the **Alt** key once to toggle off geometric relationship.

**Additional Selection Criteria**

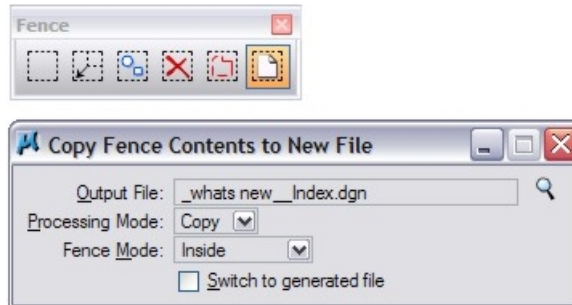
Expanding the Element Selection criteria of the dialog will display additional categories for selection such as Text Style, Dimension Style, Multi-Line Style, Transparency, and Display Priority. By default these new options are hidden. Right clicking in the tab strip in the expanded area will access the Show/Hide pop-up menu.



Fences

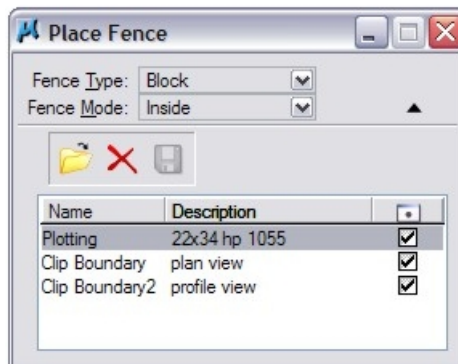
Copy/Move Fence Contents

Copy Fence Contents to New File tool was added to the Fence toolbar. This icon replaces the key-ins “Fence File” and “Fence Separate” which will copy and move contents of a fence to a new drawing.



Saved Fences

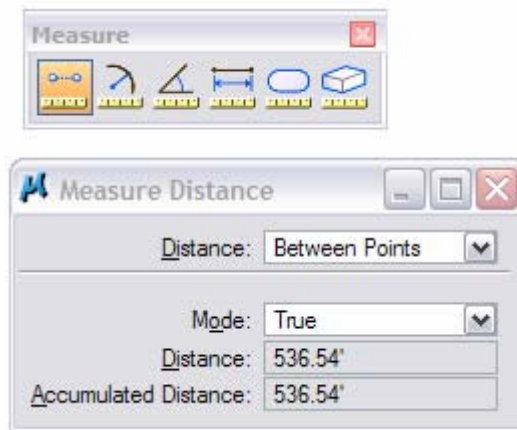
Saved Fences have been added to the expand section of Tool Settings window for the place fence tool. A saved fence allows the user to recall and managed different fences in one drawing.



Measuring

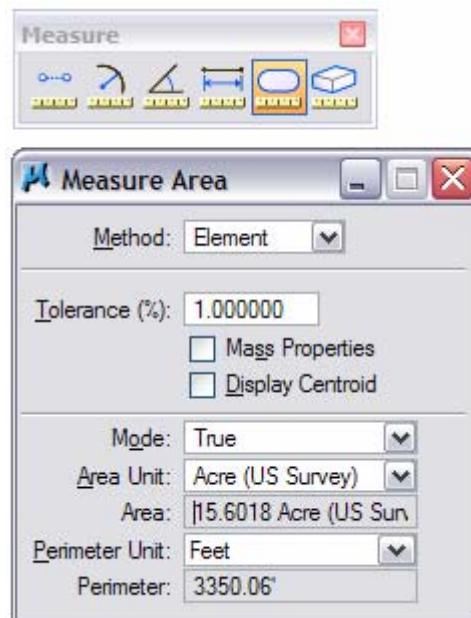
The measuring tool has added a new long awaited feature. The new Mode options now include True, View, and AccuDraw/ACS. These options will allow measurements to be View/Horizontal or True/Slope measurements.

Measure Distance




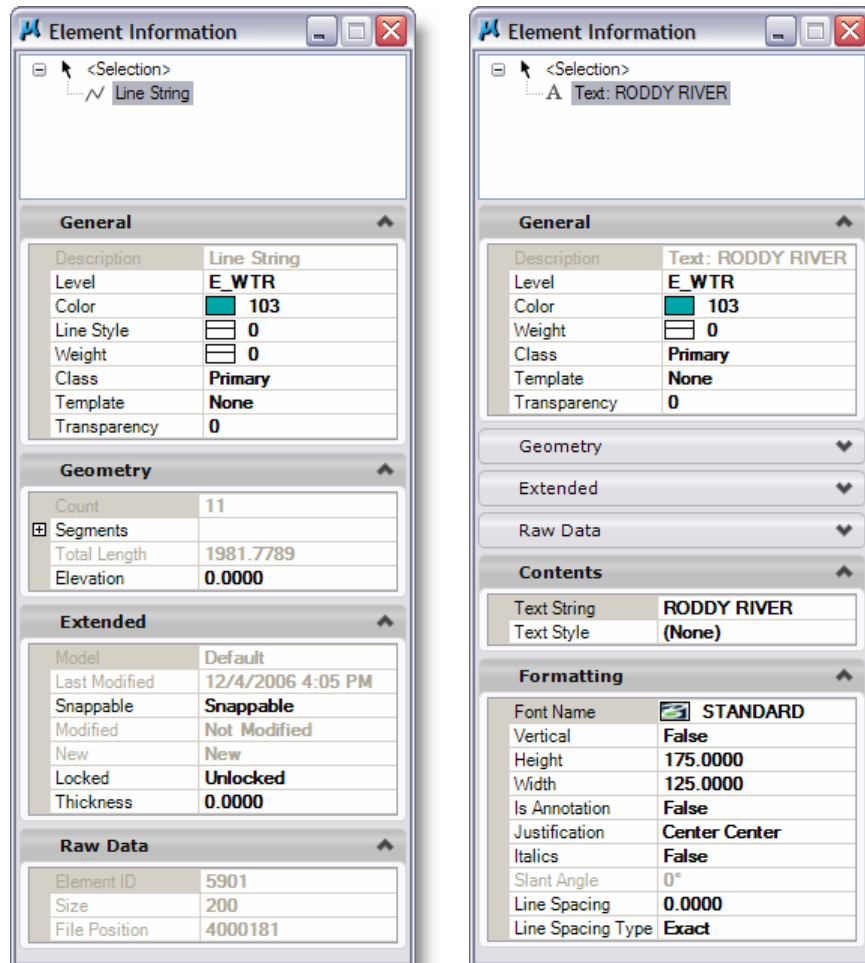
Measure Area

With newly added Mode settings for True, View, and AccuDraw ACS the areas can be measured as Slope or Planar areas. In addition display readout for Area Units and Area Perimeter are available in the tool settings dialog.



Element Information

The *Element Information*  dialog box has been redesigned and has additional ways for editing element information. Information displayed varies depending what type of elements are selected. If multiple elements are selected the elements will be listed in the top section Selection tree.



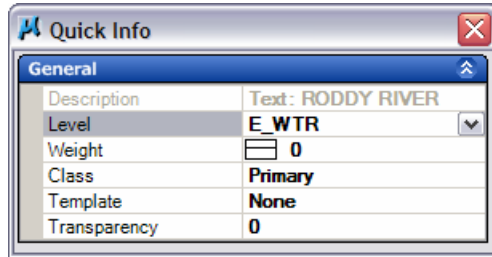
Element properties can be edited from this dialog by selecting the field and either keyin the new value or select from the drop down menu.

Right clicking in the dialog will bring up the Show/Hide shortcut menu to control the display of available tabs.

Selection and Information

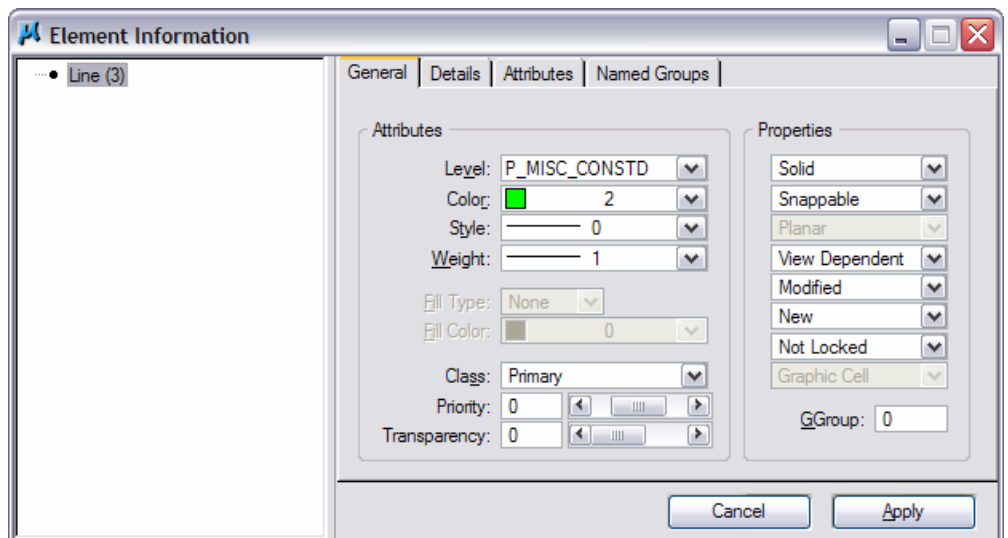
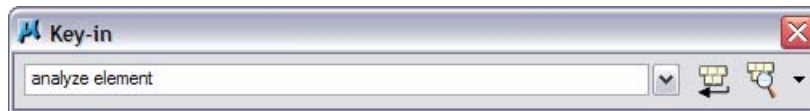
Quick Info

This dialog will display the element level and symbology. To access the dialog hover your cursor over the element, hold down the **Alt** key, then right click.



Analyze Element

The old Analyze Element dialog can be accessed using the keyin “analyze element”.



Lab 5 – Selection and Information

Objectives

The purpose of this lab will be to:

- To become familiar with editing with Handles
- Using measuring tools
- Editing elements using Element Information
- Saving Fences

Open the Design File

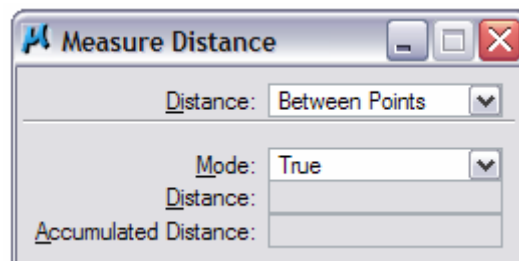
1. Launch MicroStation.
2. From the MicroStation Manager dialog set the directory to:
C:\Envision Group_Training\MS V8I Update\CIVIL
3. Select the file named:
Project_Roadway Interseccion.dgn
4. <D> the **Open** button.
5. Verify the *Geometry* is the active model.

Measure

1. Select the Measure Distance tool [D,1]
2. Set the Tool Settings

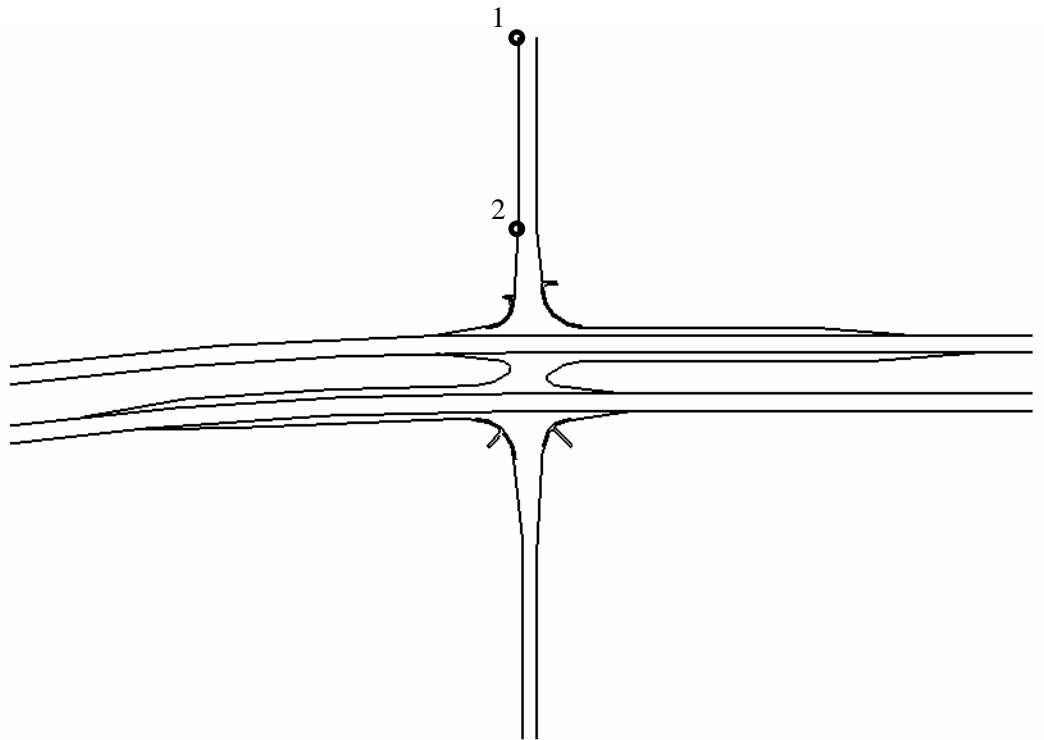
Distance: Between Points

Mode: True



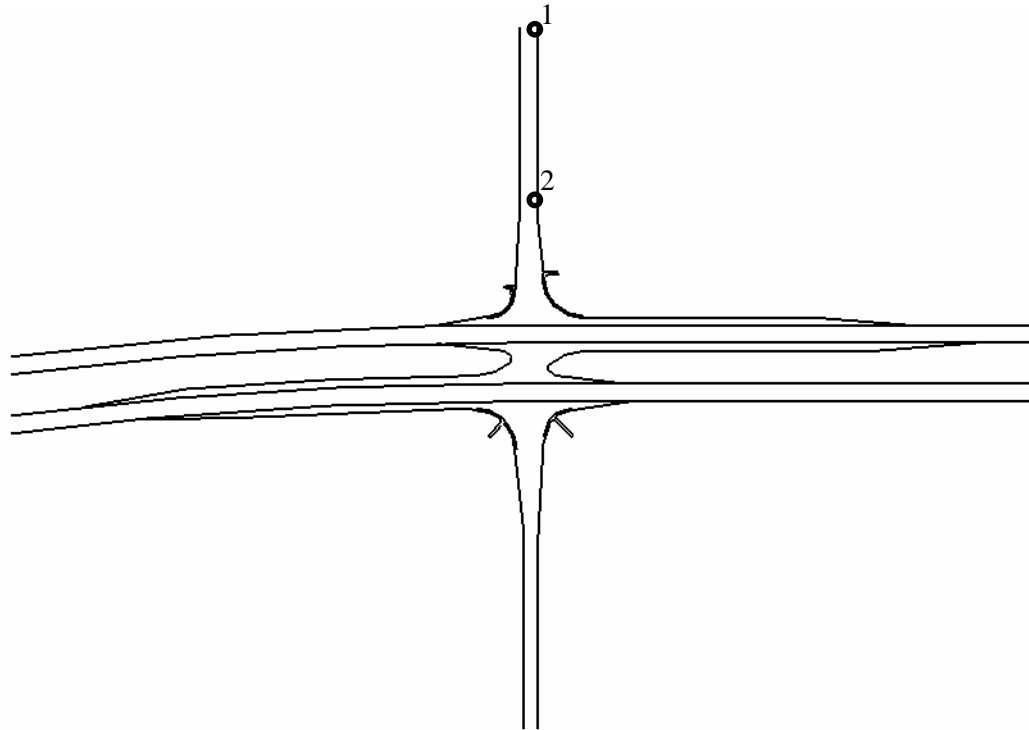
Selection and Information

3. Measure the line segment shown below.



The True distance measure should be **282.74'**.

- Keep the same Tool Settings and measure the line segment shown below.

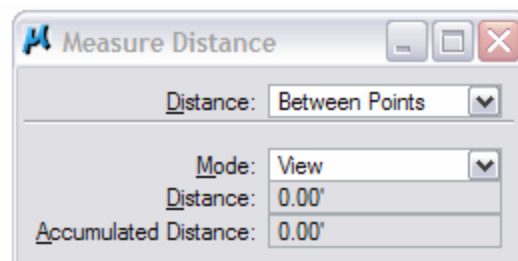


The True distance measured should be **536.54'**. This line has a bad elevation value and is measuring the slope or true distance.

- Set the Tool Settings for Measure Distance

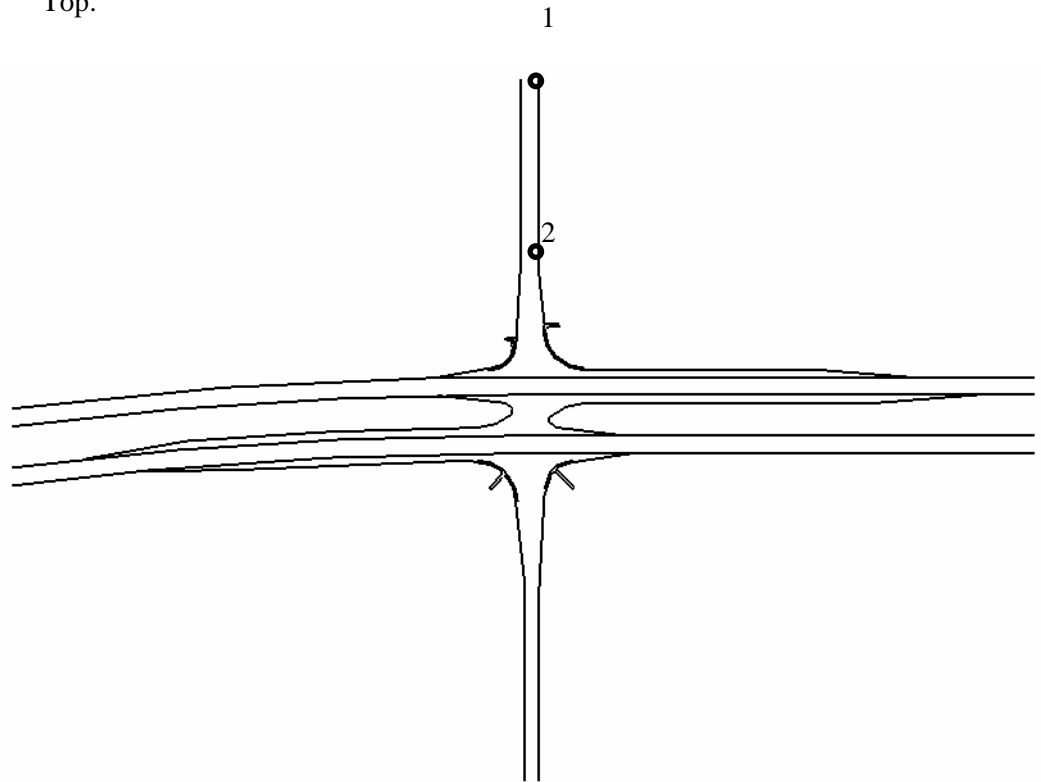
Distance: Between Points

Mode: View



Selection and Information

6. Measure the same line in View mode, notice your view is rotated to Top.



The View distance measured should be **282.74'**.