

Annotate Menu Series

The following series of instructions will guide you through the more popular submenu options in the annotate menu. Before using any of the functions on this sheet, make sure the scale is properly set under “Settings” and the insertion units are “unitless”. Annotate is found in the {**Survey**} module and displayed as [**Annotate**] on the main menu.

Insert North Arrow: {**Survey**} → [**Annotate**] → <**Draw North Arrow**>

- 1) Selecting <**Draw North Arrow**> off the submenu prompts the “**Draw North Arrow**” dialog box appears on the screen.
- 2) To choose a North Arrow to use, click the “**Select**” button and pick from the list of North Arrows.
- 3) The following options are available for manipulation:
 - a. Specify Rotation On-Screen – by checking this option the user may specify the rotation of the arrow on screen by moving the cursor on the screen
 - b. Rotation Azimuth: **Enter the angle to north**
 - c. Specify Scale On-Screen – choosing this option will allow the user to use the mouse to change the scale of the arrow on the screen.
 - d. Symbol Size Scaler: **0.125 x desired horizontal scale for the drawing** (0.125 x 50 = 6.25)
 - e. Layer Name: **Leave the default layer name**
- 4) Click “**OK**” when done.
- 5) The command line prompts you for an insertion point. A **left click** on the mouse marks the insertion point in the drawing.
- 6) **Manually adjust** the rotation if the specify on screen option was selected

Insert Barscale: {**Survey**} → [**Annotate**] → <**Draw Barscale**>

- 1) The command line prompts for the horizontal scale. The default should already be what your drawing scale is set at from “Settings”. Key “**Enter**” to accept if correct.
- 2) Layer name: Press “**Enter**” to use the default of “Barscale”
- 3) Decimal places: Press “**Enter**” to use the default decimal places of 0.

- 4) **Select a location** for the barscale. The box shows a representation of the final barscale.

Submenu <Line Types>

The submenu offers functions to draw various line types. The six most common are included below and are: Change Polyline Linetype, Polyline to Special Line, Polyline to Tree Line, Add Zig to Polyline, Add Culvert to Polyline, Sketch Tree Line

Before running any of the Line Type functions make the following checks:

- 1) **{Any Carlson module} → [Settings] → <Drawing Setup>**
 - a. Check the “Horizontal Scale” is set to the desired viewport scale
 - b. Check that the “Line Type Scaler” is set to **0.5**, this value will make the line type scale $\frac{1}{2}$ the horizontal scale.

Change Polyline Linetype

{Survey} → [Annotate] → <Line Types> → <Change Polyline Linetype>

- 2) Choosing **<Change Polyline Linetype>** brings up the “**Select Linetype**” window.
- 3) Set the “Line Type Spacing”: **2.0**
 - a. This will generally space the symbol at 1” interval along the line. This is 2 times the LTSCALE variable, which is typically $\frac{1}{2}$ the horizontal scale (assuming the individual linetype scale is 1.0). Increase or decrease to change the spacing (0.5 – 4.0 recommended).
- 4) Set the “Line Type Text Scaler: **0.18 x scale / 10** (ex. $0.18 \times 20 / 10 = 0.36$)
 - a. This generally will create the linetype at slightly larger than regular text size. If you want regular text size, use 0.125 instead of 0.18.
- 5) Leave the “Turn ON Linetype Generation...” **checked**
- 6) Select “**Next**” or “**Previous**” to scroll through the choices. Select one by clicking on it.
- 7) The command line prompts you to select the polyline you want to change. **Click the lines** to be changed.

- 8) Press “**Enter**” when done selecting lines. Some of the linetypes will need their individual “linetype scale” changed in the properties manager to find the right size for the screen. The settings above are a guideline that will work for the majority of the linetypes.

Polyline to Special Line

{Survey} → [Annotate] → <Line Types> → <Polyline to Special Line>

- 1) The “**Polyline to Special Line**” works in a similar manner as the “Change Polyline Linetypes”. The biggest difference is that the “Change Polyline Linetype” creates an AutoCAD linetype that can be used as a line whereas this command physically breaks the line to add the symbols. For that reason, the “Change Polyline Linetypes” generally is the better function to use.
- 2) **Select the desired linetype** by clicking on its picture.
- 3) Press “**OK**” when done
- 4) **Select the lines** to change by clicking on them
- 5) Press “**Enter**” when done

Polyline to Tree Line

{Survey} → [Annotate] → <Line Types> → <Polyline to Tree Line>

- 1) When Choosing **<Polyline to Tree Line>** the command line prompts for which side of the line you want the arcs on. Choose by typing in “**R**” for right or “**L**” for left. Then key “**Enter**”.
 - a. This sets the side of the line that the arcs will be drawn on, starting at the first vertex and looking at the second vertex to define the direction.
- 2) Command line will then prompt for segment distances. Keep **default or change** to the desired value (you are specifying the diameter of the arcs). Then key “**Enter**” when done.
- 3) **Click the polyline** you want to change and press “**Enter**” when done.

Add Zig to Polyline

{Survey} → [Annotate] → <Line Types> → <Add Zig to Polyline>

- 1) When choosing “**Add Zig to Polyline**” the command line prompts for the zig size. Use default or change. Key in “**Enter**”.
- 2) **Select the polyline** with the cursor.
- 3) **Click a point** on the line in the desired location of the zig.
- 4) Press “**Enter**” when done adding zigs.

Add Culvert to Polyline

{Survey} → [Annotate] → <Line Types> → <Add Culvert to Polyline>

- 1) This function adds a culvert style end brackets to a line.
- 2) Choosing “**Add Culvert to Polyline**” prompts the command line for culvert symbol size. Keep the default or change. Key “**Enter**”.
- 3) **Select the polyline** with the cursor.
- 4) Press “**Enter**” when done.

Sketch Tree Line

{Survey} → [Annotate] → <Line Types> → <Sketch Tree Line>

- 1) This is a free hand method of creating a tree line. When choosing “**Sketch Tree Line**” the command line prompts you to pick where you want the line to start. Left click the mouse to start the line. The line is created with the movement of the mouse. Left click the mouse to end the line and generate the line change.

Submenu <Draw Legend>

- 1) Selecting <Draw Legend> brings up the “**Specify Legend Definition File**” window.
 - a. The default is for creating a new legend. You have the option of finding an existing legend.
- 2) Navigate to your drawing folder and save the legend file with a recognizable name
 - a. Do not worry about adding the LGD extension
- 3) The “**Legend Definitions**” window appears. Use one of the following options to add elements to the legend:
 - a. Select “**Add**” to bring up the “**Symbol Definition window**”.
 - i. Select “**Select Point Symbol**”, “**Select Linetype**”, or “**Select Hatch Pattern**” to add either a symbol, line or hatch, respectively.
 - ii. Select the one that fits what you want to place in the legend. Your selection brings up the appropriate window to select a linetype or symbol. Choose the one you want to place in the

- legend and close the window. This will automatically fill in the symbol name in the” **Symbol Definition Pattern**”.
- b. Select “**Add From Drawing**’ to specify objects currently in the drawing.
 - i. **Click** on all the **object** you want to add to the legend
 - ii. Press “**Enter**” when done
 - iii. **Double click** on one of the items added to the legend definition list
 - 4) Next **type in the description** you want attached to the symbol such as existing contour, proposed pipeline, benchmark, station etc.
 - 5) **Select the color button** to assign a color to you symbol.
 - 6) Select “**OK**” to close the window. You will see that it is recorded in the “**Legend Definitions**” window. To add another symbol, repeat the process.
 - 7) You can arrange the order of each symbol with the “**Move Up**’ or “**Move Down**” buttons. Once done adding to the legend, select the “**Save**” button.
 - 8) To have the legend appear on the drawing, select the “**Draw**” button.
 - 9) This prompts the “**Draw Legend**” window.
 - a. Text Size: **Set to 0.125 x scale** (default is from “Inq-Set”)
 - b. Symbol Size: **0.188 x scale** (1.5 x Text Size)
 - c. Hatch Size: **0.5 x scale** (4 x Text Size)
 - d. Line Size: **0.5 x scale** (4 x Text Size)
 - e. Draw Legend Title: **Checked**
 - f. Enter Text in two text boxes or clear out the default text so it is blank
 - g. Justification: **Right**
 - h. Select “**OK**” went ready.
 - 10) On screen, **pick the upper left corner** of were you want he legend to be on the drawing
 - 11) **Adjust the height** of the “LEGEND” title by changing the text height in the properties manager to make it: 0.25 x scale
 - 12) To make changes, select [**Annotate**], >**Draw Legend**> and choose the tab labeled “**Existing**” and select “**Open**”.

Submenu <**Label Coordinates/Elevation**>

- 1) Choosing the <**Label Coordinates/Elevation**> will bring up the “**Label Coordinate/Elevation**” window.
- 2) To label elevations, pick the following options:
 - a. Symbol: Use **SPT10**

- b. Layer: **PLN – Spots**
 - c. Box Coordinate Labels: **Checked**
 - d. Prompt for Elevation: **Checked**
 - e. Fields to Label: **Elevation Only**
 - f. Elv. Label Prefix: **EL.** or **Z:**
 - g. Decimals: **Set to desired decimals**
 - h. Click **“OK”** when done
- 3) The command line prompts you to **pick a point** by typing in the point number or selecting it with the mouse.
 - 4) If the object/point selected has an elevation it will be displayed. **Enter the desired elevation** if a change is needed.
 - 5) Press **“Enter”** when done

Submenu <**Special Leader**>

- 1) Command line prompts for arrow location. **Select a point**, left click.
- 2) Left **click to end line**.
- 3) Command line prompts for text. **Type desired text** and hit **“Enter”** twice.