

ODOT Bubble Tools

The Bubble Tools are discipline-specific tools used to place bubble notes and legends on plan sheets according to the ODOT discipline-specific CAD Manuals. Typically the bubble tools are launched from an ODOT discipline ribbon workflow. Each discipline bubble tool may also be launched from the ODOT ribbon workflow from the Bubble Note Tools group on the Tools tab. The key-in dialog may also be used to launch each bubble tool using the key-in format: `place note [Discipline Name]`. Examples: `place note hydraulic` for Hydro, or `place note signing` for Traffic Signing.

The bubble tool places a cell containing specified text. The text can be a custom value entered by the user or selected from long lists. The bubble values are placed by selecting the bubble from the menu and entering values into fields. The bubble tool places the bubble cell and optionally places legend text or a leader line next to the bubble. The interior of the bubble is masked to hide the portion of the leader line that is snapped to the center of the bubble.

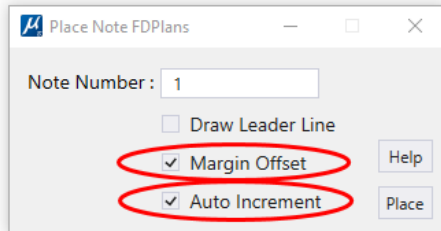
The bubbles are automatically scaled based on the annotation scale that is set in the model. Legend text and leader lines are separate from the cell, but are included in the same graphic group with the cell. Each tool has a [Help] button that links to this PDF. The [Place] button is available to reactivate the bubble tool if you no longer see the bubble cell following your cursor.

ODOT Bubble Tool Disciplines

Discipline	Additional Tool Features	Discipline Ribbon Workflow and Tab Location
Bridge (Provisional Release)	Enter Values Leaders & Legends Margin Offset	ODOT Bridge > Sheet Annotation > Text and Notes > Note Text > Bridge Bubble Note
Roadway (FDPlans)	Auto Increment Enter Values Margin Offset	ODOT Roadway > Notes > Bubble Notes > Bubble Note Tool
Illumination	Leaders & Legends	ODOT Traffic Illumination > Illumination > Text > Note & Bubble Text
ITS (Provisional Release)	Leaders & Legends	No discipline ribbon workflow at this time
Hydraulic	Leaders & Legends Skip to Next Menu Item	ODOT Hydro > OM Operational Plan > OM Operational Plan > Hydraulic Bubble Note Tool
Signals	Leaders & Legends	ODOT Traffic Signal > Sheet Tools > Text > Note & Bubble Tx
Signing	Enter Values Leader Lines	ODOT Traffic Signing > Signing > Notes > Hex Bubble Note
Striping	Callout Text Leaders & Legends	ODOT Traffic Striping > Striping > Striping Notes > Striping Note Tool

Bubble Tool Features and Settings

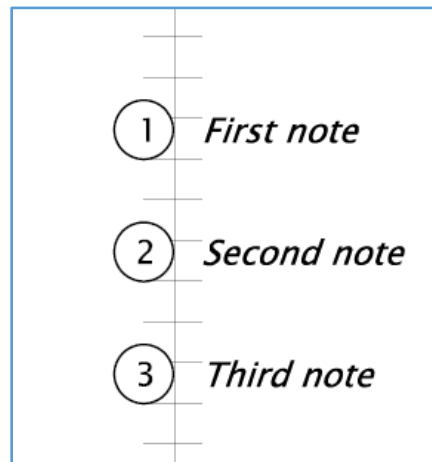
Auto Increment & Margin Offset - Roadway Plans Example



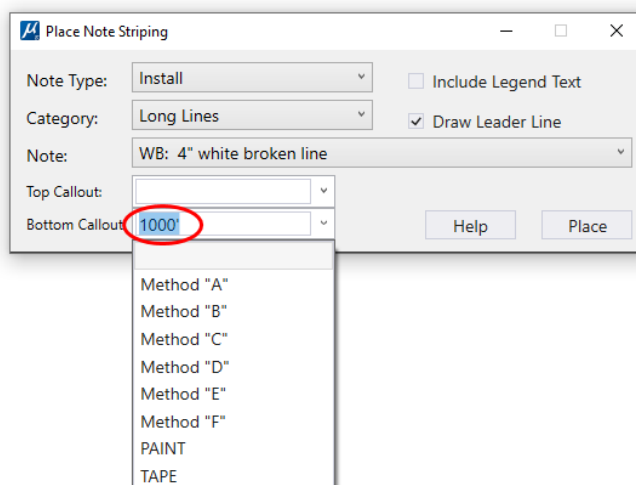
The Roadway bubble tool places numbered circular bubbles. When "Auto Increment" is checked the number will increase by one after a bubble is placed and is used to quickly place a series of sequentially numbered note bubbles.

When "Margin Offset" is checked, the bubble is placed aligned to the top center of the text instead of the center of the bubble. The Margin Offset is used when placing bubble notes on a sheet with the Notemargin cell. The bubble is

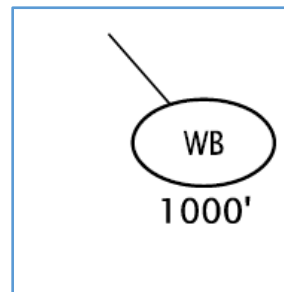
snapped to the left side of the horizontal lines in order to align with the construction notes on the right as shown below.



Callout Text - Striping Example

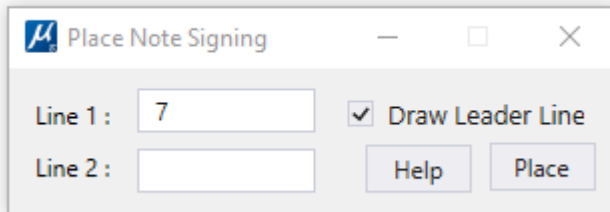


The Place Note Striping tool includes optional top and bottom callouts that can be placed with the bubbles. Predefined callouts can be selected from the callout drop down menus or custom values may be entered as illustrated in these images.

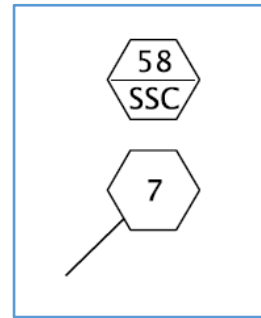


Enter Values - Signing Example

Some bubble tools, such as Roadway and Signing, allow entered values to be placed inside the bubbles. Single line Signing bubbles should have values entered in the Line 1 field only, leaving Line 2 blank, as shown in the dialog below.

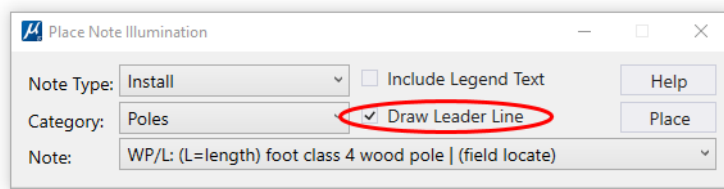


The "Place Note Signing" dialog box has a title bar with a logo, a minimize button, a maximize button, and a close button. It contains two input fields: "Line 1:" with the value "7" and "Line 2:" which is empty. To the right of these fields is a checked checkbox labeled "Draw Leader Line". At the bottom right are "Help" and "Place" buttons.

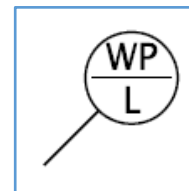


Leader Line - Illumination Example

Selecting the "Draw Leader Line" checkbox enables drawing a leader line *after* a bubble is placed. The origin of the leader is centered on the cell. A mask hides the portion of the leader line that is snapped to the center of the bubble.

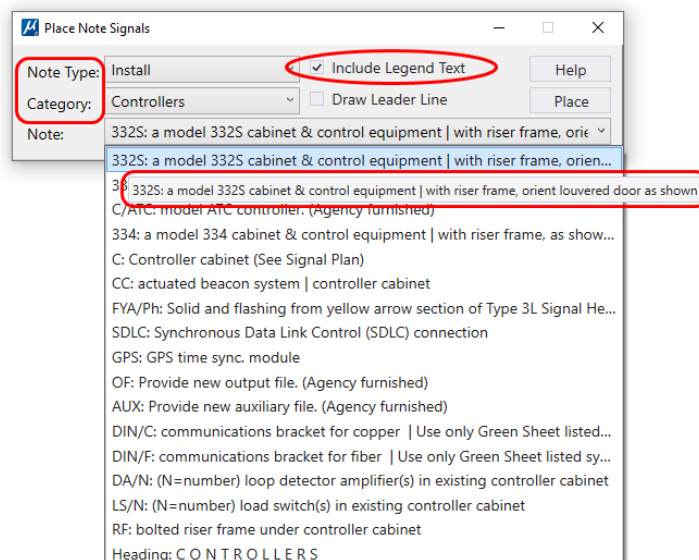


The "Place Note Illumination" dialog box has a title bar with a logo, a minimize button, a maximize button, and a close button. It contains a "Note Type:" dropdown menu set to "Install", a "Category:" dropdown menu set to "Poles", and a "Note:" text field containing "WP/L: (L=length) foot class 4 wood pole | (field locate)". To the right of these fields are two checkboxes: "Include Legend Text" (unchecked) and "Draw Leader Line" (checked and circled in red). At the bottom right are "Help" and "Place" buttons.



Legend with Filters - Signals Example

For some disciplines the bubble tool has long lists of note text available on drop down menus. The Note Type and Category menus are filters that shorten the Notes menu to a reasonable length. The Note menu displays the text in the bubble followed by the beginning of the legend text. To see the full legend text, hover the mouse over a menu item and the full legend text will display as a hint as shown below.



The "Place Note Signals" dialog box has a title bar with a logo, a minimize button, a maximize button, and a close button. It contains a "Note Type:" dropdown menu set to "Install", a "Category:" dropdown menu set to "Controllers", and a "Note:" text field containing "332S: a model 332S cabinet & control equipment | with riser frame, orie...". To the right of these fields are two checkboxes: "Include Legend Text" (checked and circled in red) and "Draw Leader Line" (unchecked). At the bottom right are "Help" and "Place" buttons. A list of notes is displayed below the "Note:" field, with the first item highlighted in blue. A red box highlights the first item in the list, which is "332S: a model 332S cabinet & control equipment | with riser frame, orient louvered door as shown".

Note Type: Install ☒ Include Legend Text ☐ Draw Leader Line

Category: Controllers

Note: 332S: a model 332S cabinet & control equipment | with riser frame, orie...

332S: a model 332S cabinet & control equipment | with riser frame, orient louvered door as shown

332S: a model 332S cabinet & control equipment | with riser frame, orient louvered door as shown

C/ATC: model ATC controller. (Agency furnished)

334: a model 334 cabinet & control equipment | with riser frame, as show...

C: Controller cabinet (See Signal Plan)

CC: actuated beacon system | controller cabinet

FYA/Ph: Solid and flashing from yellow arrow section of Type 3L Signal He...

SDLC: Synchronous Data Link Control (SDLC) connection

GPS: GPS time sync. module

OF: Provide new output file. (Agency furnished)

AUX: Provide new auxiliary file. (Agency furnished)

DIN/C: communications bracket for copper | Use only Green Sheet listed...

DIN/F: communications bracket for fiber | Use only Green Sheet listed sy...

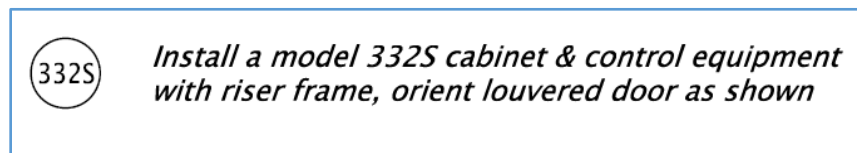
DA/N: (N=number) loop detector amplifier(s) in existing controller cabinet

LS/N: (N=number) load switch(s) in existing controller cabinet

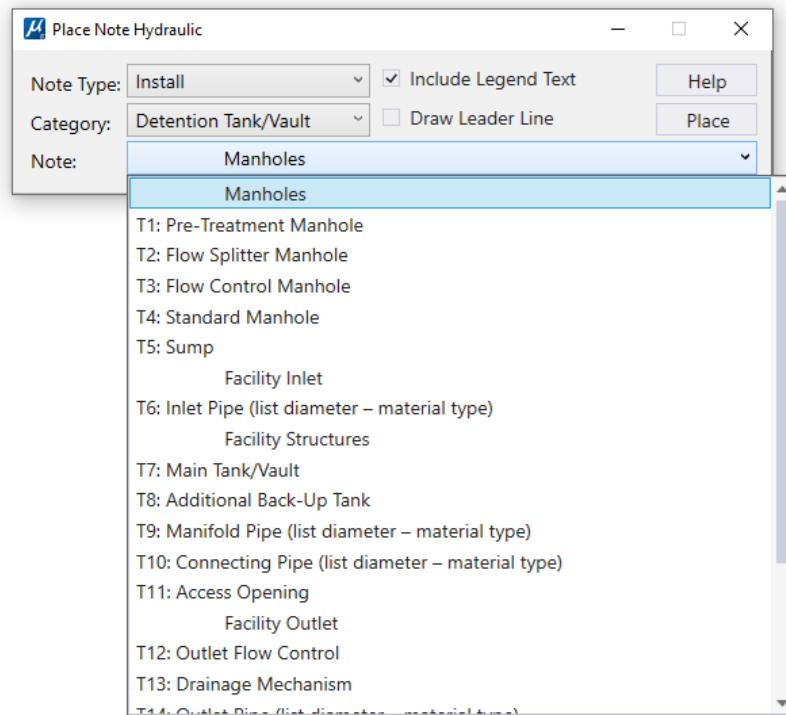
RF: bolted riser frame under controller cabinet

Heading: C O N T R O L L E R S

When the "Include Legend Text" checkbox is enabled, the legend text is placed to the right of the bubble as shown below.



Skip to Next Menu Item with Right Click - Hydraulic Example



The Hydraulic bubble tool Note menus are ordered, so this tool supports stepping to the next item in the menu with a right-click, or even multiple right-clicks to advance further down the menu.

The Hydraulic bubble tool has different behavior than the other bubble tools. If you wish to exit the Place Note Hydraulic tool, use the <ESC> key or select a different command from a toolbar or tab.

