

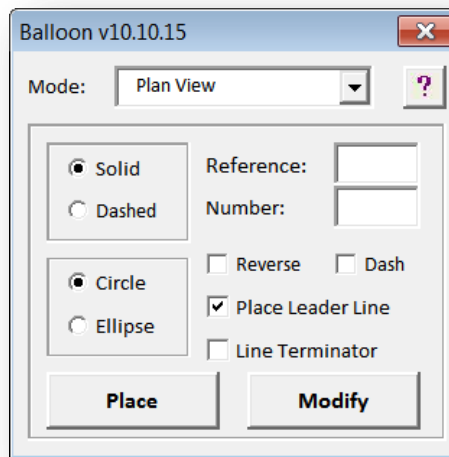
Application Name:	ODOT_Balloon.mvba
Current version:	v10.10.15
Required MicroStation Version:	MicroStation V8i
Required GEOPAK Version:	Not required

ODOT_Balloon.mvba is used to place plan callout reference balloons for Plan view or Typical Section sheets.

The application can be loaded from the ODOT pull down menu by selecting **ODOT > Drafting Apps > Balloon**, or by the following key-in command:

```
vba load ODOT_Balloon.mvba; vba run balloonMain
```

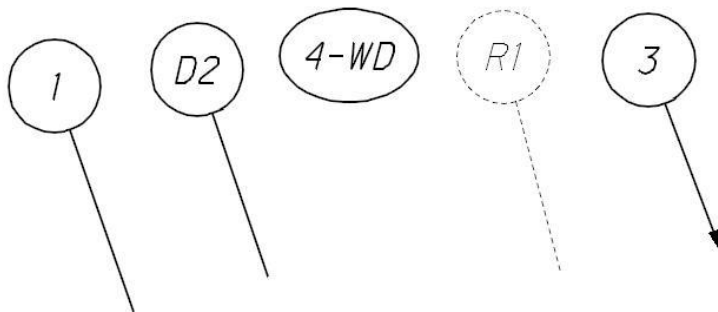
When the application is loaded, the dialog shown below is opened:



The application runs in two modes, as selected by the **Mode** list box:

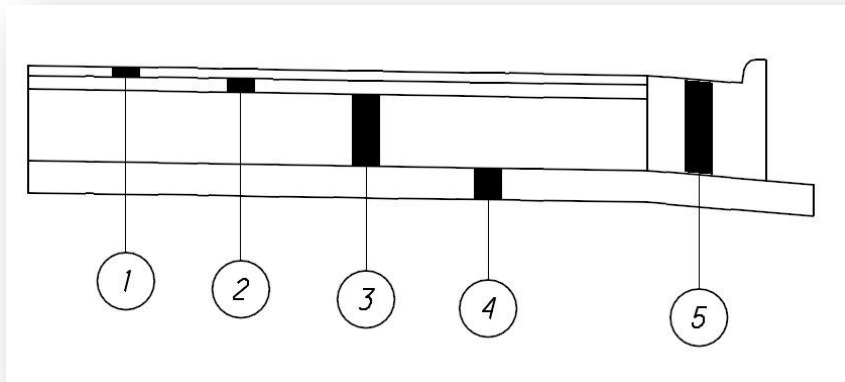
Plan View mode

Balloons are placed with or without a leader line at the user specified location. Several examples are shown below:



Typical Section mode

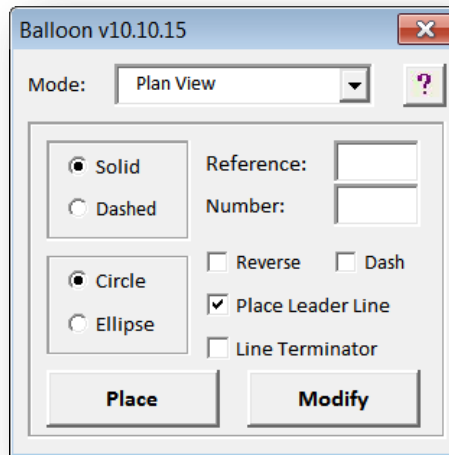
When this mode is selected, the application draws a pavement layer marker and a balloon as shown in the example below.



The operation of each mode is detailed below.

Plan View Mode

In plan view mode, the dialog appears as shown below:



The dialog has the following options:

Solid/Dashed - Balloons are placed with the symbology shown in the table below depending on whether the **Solid** or **Dashed** option is selected.

Option	Level	Color	Style	Weight
Solid	Active Level	0	0	1
Dashed	Active Level	0	2	0

Circle/Ellipse - Circular or elliptical balloons can be placed by use of the Circle or Ellipse options.

The **Reference** field is used to enter alphabetic characters, and the **Number** field is used to numbers that will be used to build the balloon. Balloons can be composed of only numbers, only letters, or both numbers and letters.

The **Reverse** option is used to change the order of the **Reference** letter and the **Number**.

The **Dash** option is used to insert a dash between the **Reference** and **Number**.

The **Place Leader Line** option is used to specify whether a leader line will be placed with the balloon.

If the **Line Terminator** option is toggled on, an ODOT arrow cell will be placed on the end of leader line, depending on whether the Solid or Dashed option is selected, as detailed in the table below.

Option	Terminator Cell Placed
Solid	TERMF
Dashed	TERMO

Select the **Place** option to initiate placement of the balloon. The first data point sets the location of the center of the balloon. If the **Place Leader Line** option is toggled on, a second data point is used to designate the terminating point of the leader line. The text size is determined by the active Annotation Scale value.

The **Modify** option is used to modify the location of a previously placed balloon while leaving the end of the line leader line at its current location. Select the **Modify** button, the select the circle or the ellipse of the balloon that you wish to move. The balloon will be dynamically displayed as you identify the new location for the balloon.

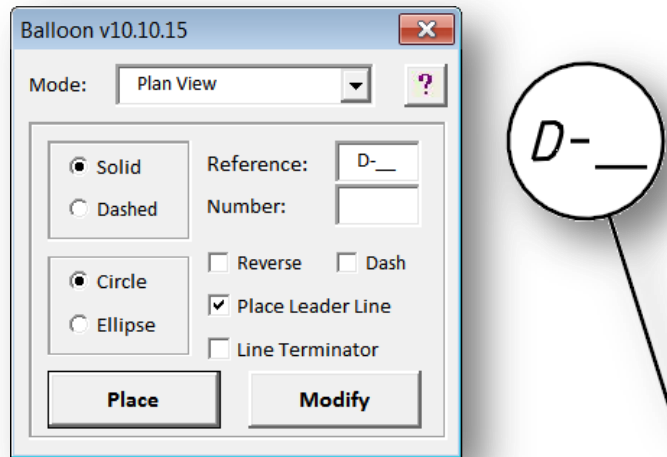
Additional Notes:

Using the Number Field

The **Number** field is optional and does not need to be used when placing balloon references. The advantage to using the Number field is that it is automatically incremented after a balloon is placed. If you do not wish to use the Number field, simply leave it blank when placing balloon references.

Enter Data Regions

Underscore characters can be used when placing text in MicroStation to designate an enter data region. Balloon.mvba will support one enter data region when entering underscore characters in the **Reference** field.

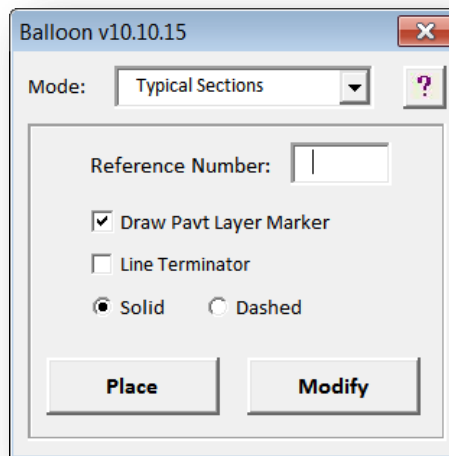


In the example above the Reference text was entered as D-__ to designate an enter data region two characters in length.

Multiple enter data regions are not supported. The first data region encountered is treated as an enter data region. Entering the following: _-__ will not result in two data entry regions separated by the dash character.

Typical Section Mode

When **Typical Section** mode is selected, the dialog appears as shown below:



The **Reference** field is used to enter alphabetic or numeric characters for the balloon reference.

Draw Pavt Layer Marker

- When this item is checked on, enter the first data point between the two lines that designate the pavement layer in the typical section. The pavement layer marker is draws as a filled shape on the active level. A second data point is used to designate the balloon location.
- When this item is checked off, the first data point designates the starting point for the leader line. The second data point designates the balloon location.

Solid/Dashed - Balloons are placed with the symbology shown in the table below depending on whether the **Solid** or **Dashed** option is selected.

Option	Level	Color	Style	Weight
Solid	Active Level	0	0	1
Dashed	Active Level	0	2	0

Select the **Place** option to initiate placement of the balloon.

The **Modify** option is used to modify the location of a previously placed balloon while leaving the end of the line leader line at its current location. Select the **Modify** button, the select the circle or the ellipse of the balloon that you wish to move. The balloon will be dynamically displayed as you identify the new location for the balloon.

Contacts

If you have any questions, suggestions, or problems please contact the ODOT Office of CADD and Mapping Services CADD Support team or use the following form on the ODOT web site at:

<http://www.dot.state.oh.us/Divisions/Engineering/CADDMapping/CADD/Pages/suggestions.aspx>