

# Creating a Customized Map Key for MineSight® 3-D Plots

Some **Legend object** options, in particular the **Cutoff and Material** options, provide convenient methods for generating map keys for MineSight® 3-D (MS3D) plots. In this article, we explore the **Geometry** option to customize a map key. Using this option, you can display a collection of geometry elements, such as polylines and labels, in any format you like. Formatting or styles that might not be possible with other legend templates can be created using the **Geometry** option.

To create a custom map key in MS3D, use the following steps:

- 1 Create a new geometry object
- 2 Create a table to display the geometry elements
- 3 Add the geometry elements to the table and attribute them
- 4 Create a **Legend** using the **Geometry** option

## Step 1 Create a Geometry Object

In the viewer, specify a plane on which to work and switch to 2D mode. Create a geometry object. To use the **Legend | Geometry** option, all legend components (i.e., geometry elements) will need to be stored in the same geometry object. It is also helpful to switch the viewer background color to white since this is the plot background color.

## Step 2 Create a Table to Display the Geometry Elements

Next, create a table to display the geometry elements that will be used as the **Legend** components. Start by defining the table outline using **Polyline | Create | Rectangle** or any other **Polyline | Create** option.

If you want to include a title or comments, the outline can be divided into sections using **Line snapping** and **Polyline | Create | Polyline** to create a table like the one shown in Figure 1.



The outer box of the table should be attributed with the **Legend Boundary material** via the **Element | Attribute** function. This will ensure that all elements within the outer box are visible in the plotted **Legend**. Set **Polyline Visibility ON** for the **Legend Boundary material** to display the outer box.

## Step 3 Add Attributed Geometry Elements

The next step is to add the key information (i.e., geometry elements) to the table as shown in Figure 2. Use the MS3D CAD tools to create geometry elements and place them appropriately in the table. While all these elements must be stored in the same geometry object, the style can be varied by attributing the elements. Attribute each element with the material containing the appropriate style using **Element | Attribute**.

## Step 4 Create a Legend Object

Finally, create a new **Legend** object and open the **Properties** dialog. On the **Common** tab, under **Type** select **Geometry**. This will create a **Geometry** tab at the top of the **Legend Properties**. From this tab, select the **Geometry** object you just created. Click **Apply** and **Preview** to ensure that everything is displayed correctly. You now have a customized map key **Legend** that can be added to a Plot Layout as shown in Figure 3.

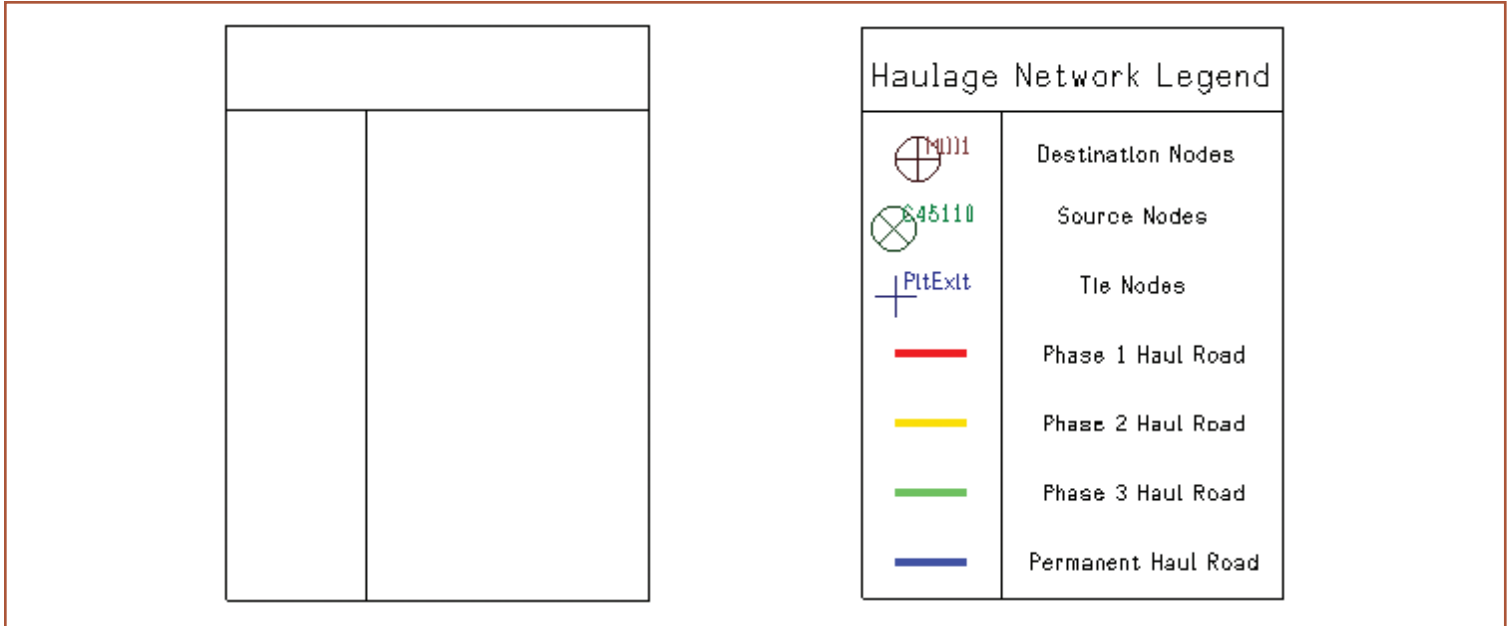


Figure 1: Using MS3D CAD tools, design a table to display the custom Legend. Attribute the outer box with the Legend Boundary material, making sure the material Polyline Visibility is ON

Figure 2: Geometry elements have been created and attributed with the proper style

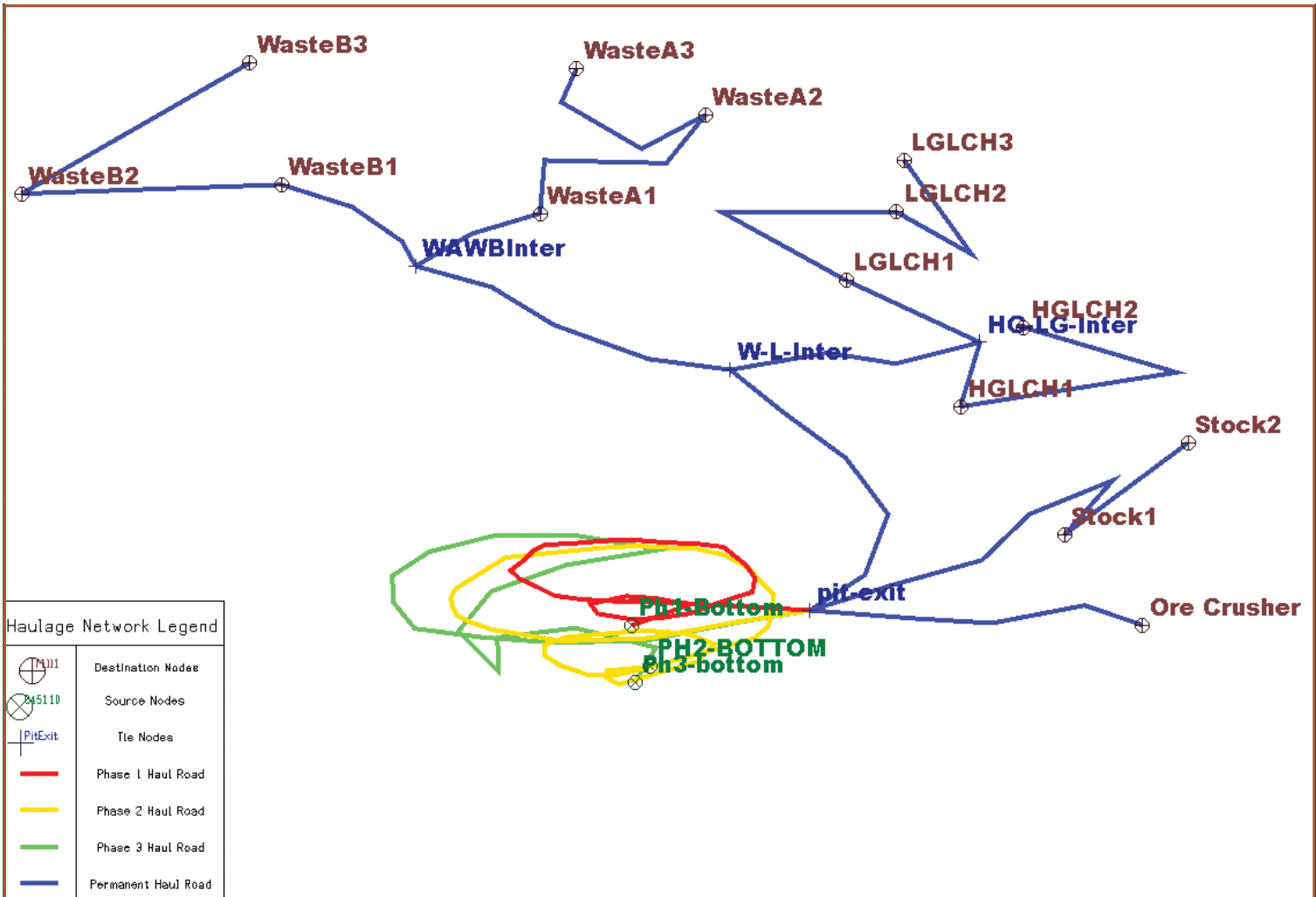


Figure 3: A Legend using a geometry object as a customized map key displayed on a plot