

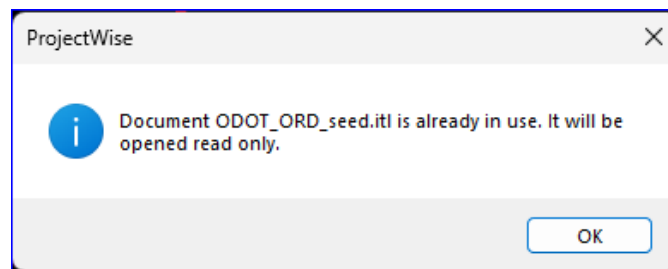
Working with the OpenX Template Library

ODOT_ORD_seed.itl is the ODOT Standard OpenX Template Library - used for both OpenSite Designer and OpenRoads Designer. The ODOT standard template library contains standard point names assigned to feature definitions and pre-built components in an organized folder structure that can be used in building templates. Fully functional sample templates are also included in a Templates folder for you to use and/or edit.

A template library (.itl) is always loaded when you launch ORD/OSD. By default, the read-only ODOT_ORD_seed.itl is loaded from the WorkSpace in C:\ODOT\v2023\Organization-Civil\ODOT_Standards\Template Library. This makes it easy to use the example templates or standard components in a quick corridor. Changes cannot be made to the ODOT_ORD_seed.itl. If custom templates are needed for modeling, use a discipline-specific (.itl) or create a project-specific (.itl) that auto-loads.

Discipline-Specific OITL Files

Each designer can use the ProjectWise Explorer to create a new document from the ODOT_ORD_seed.itl file in CAD_Resources\Seed. Different disciplines or designers may also use a discipline-specific (OITL) stored in the discipline folder, that is manually loaded from the Create Template dialog. When a template library is created from ODOT_ORD_seed.itl in the **discipline** folder (i.e. R_K#####_OITL_##.itl), it must be **manually loaded** into the ORD/OSD Create Template dialog. As stated above, the read-only ODOT_ORD_seed.itl is automatically loaded from the WorkSpace if there is no project-specific template library in the WorkSet. It is normal to see the ProjectWise information dialog stating that the ODOT_ORD_seed.itl is read-only.



Project-Specific (WorkSet) ITL File

If a template library file exists in the 9_WorkSet\Standards\Template Library sub-folder, and the name of the (.itl) file exactly matches the name of the project folder (for example, K#####.itl), this template library is identified as the ITL for the project. **The K#####.itl in the WorkSet Template Library sub-folder will automatically be loaded** when ORD is launched from any DGN in the K##### project folder structure. The first person to open the Create Template dialog will check out the K#####.itl file, meaning that all others using ORD/OSD in the same project will have a read-only copy of the K#####.itl file loaded. You can use templates in a corridor from a read-only (.itl) without a problem. But templates in the (.itl) may only be edited by the one who has the file checked out.

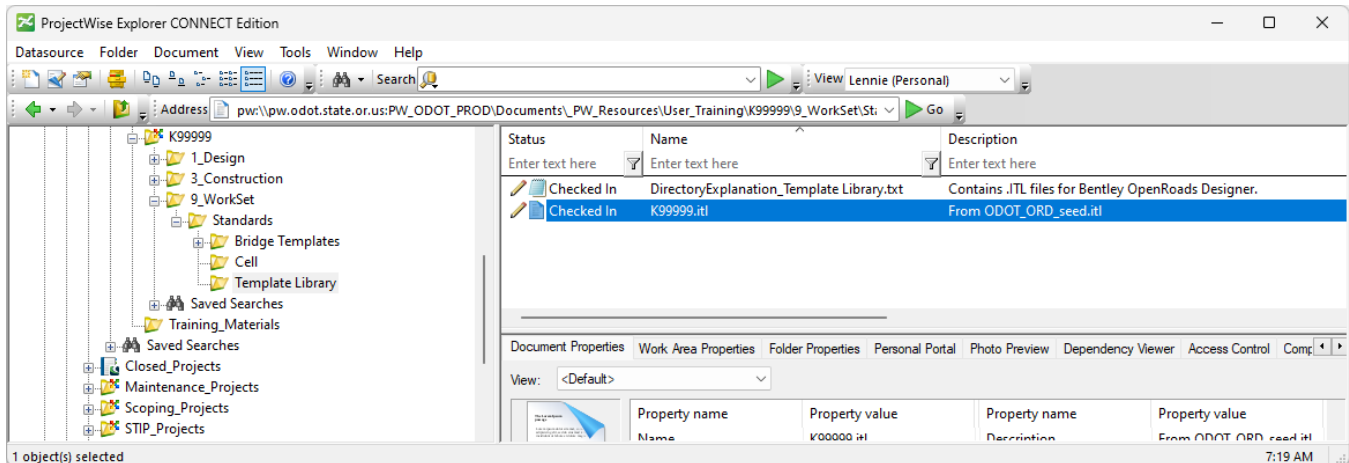
Different disciplines can create a sub-folder structure inside the K#####.itl file (Templates\Roadway or Templates\Hydraulics), or use a template naming convention in order to store all of the templates from different disciplines in the one project K#####.itl.

How to Create a Template Library File that Auto-loads into OpenX

1. Use the ProjectWise Explorer,
2. Navigate into your project's 9_WorkSet\Standards\Template library folder and create a new document.
3. Use the Advanced Wizard and select the template from CAD_Resources\Seed\ODOT_ORD_seed.itl.

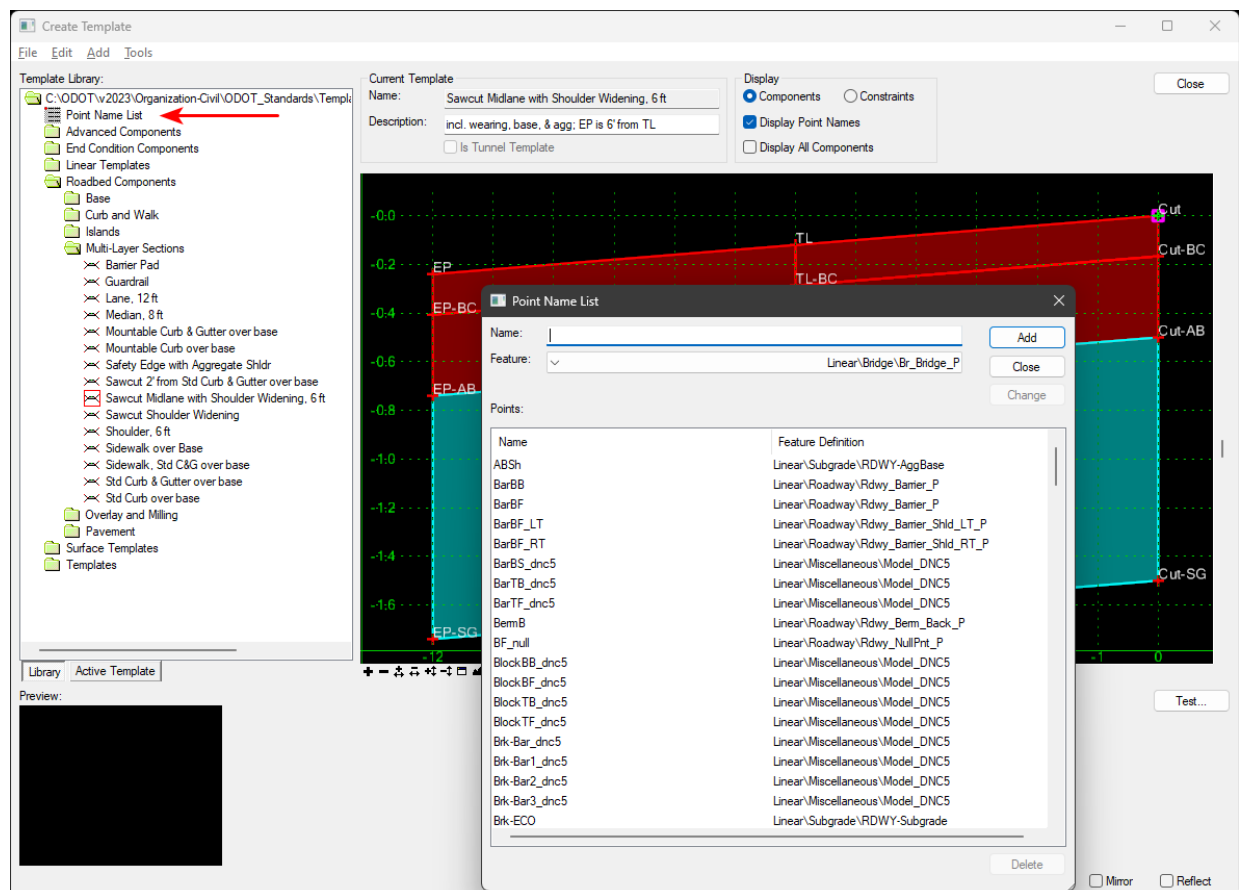
- There are no correct ProjectWise names for this file, so skip past the ODOT Naming Tool and finish.
- Once the document is in the Template Library folder, use the ProjectWise Rename... command and name the file to **match the exact name of your project**.

In the picture below, the project is K99999, so the name of the template library file has been set to K99999.itl. This template library automatically loads when OpenRoads Designer or OpenSite Designer are used in the K99999 project.



Point Names from the Point Names List use the Correct Feature Definitions

ODOT's seed template library, ODOT_ORD_seed.itl, contains all the point names already assigned to the correct feature definition for ODOT standards. The standard point names reside in the Point Name List. The picture below shows a screenshot of the Create Template window with the ODOT_ORD_seed.itl loaded. A red arrow points at the location of the Point Name List in the hierarchy on the left side. The Point Name List has been opened, and the alphabetically sorted list sits in front of the active component selected from the Multi-Layer Sections folder, named Sawcut Midlane with shoulder Widening, 6 ft.



When points in a template are pushed along the alignment of a corridor, they create 3D linear elements that have the same feature definition as the point. Standard point names are assigned to a standard **Linear** feature definition and when used, will create graphics that are suitable for display on ODOT plans.

The ODOT standard point names have been used to create 10 Advanced Components, 18 End Condition Components, 34 Linear Templates, 6 sub-groups of Roadbed Components holding 69 components, 9 Surface Templates, and 10 full example templates and 2 templates for creating superelevation control lines in the Templates folder. That's a grand total of 152 components delivered in ODOT_ORD_seed.itl for you to begin project work with.

Create a Project Templates Folder

After copying ODOT_ORD_seed.itl to your project folders and naming it, you may create a new folder to hold your project templates. Right-click on the top-most folder icon and choose New>Folder. Rename the new folder. Folder names like zProject Templates are recommended for project folders that will sort to the bottom of the hierarchy and be easy to find.

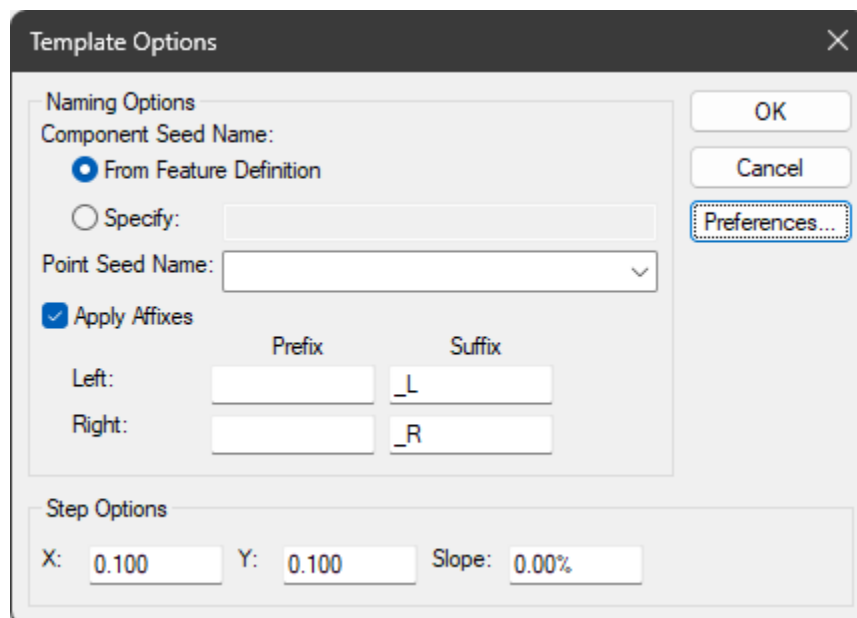
Example templates are provided in the Templates folder. These may be added as template drops in a corridor or copied, renamed and repurposed.

Creating New Templates

Create new templates inside the project folder by right-clicking on the project folder icon and choosing New>Template. Rename the template. It is recommended to keep template names short and minimize the use of special characters. Populate your templates by dragging components from the folders in the template library to assemble your template backbone and add end conditions.

Template Options

Template options are delivered with the ODO_ORD_seed.itl. Open Tools>Template Options. The Default preferences are shown below. The Component Seed Name will come from the selected feature definition when creating components. When you choose to "Apply Affixes" in the dynamic settings, suffixes of _L or _R will be applied to component names and point names. The step options are also set at one-tenth of a foot horizontally and vertically with a 0% slope.



The screenshot shows the 'Template Options' dialog box with the following settings:

- Naming Options:**
 - Component Seed Name: ☒ From Feature Definition, ☐ Specify: []
 - Point Seed Name: []
 - ☒ Apply Affixes
 - Prefix: []
 - Suffix: Left: [_L], Right: [_R]
- Step Options:**
 - X: [0.100], Y: [0.100], Slope: [0.00%]

Buttons on the right: OK, Cancel, and Preferences... (highlighted with a dashed border).

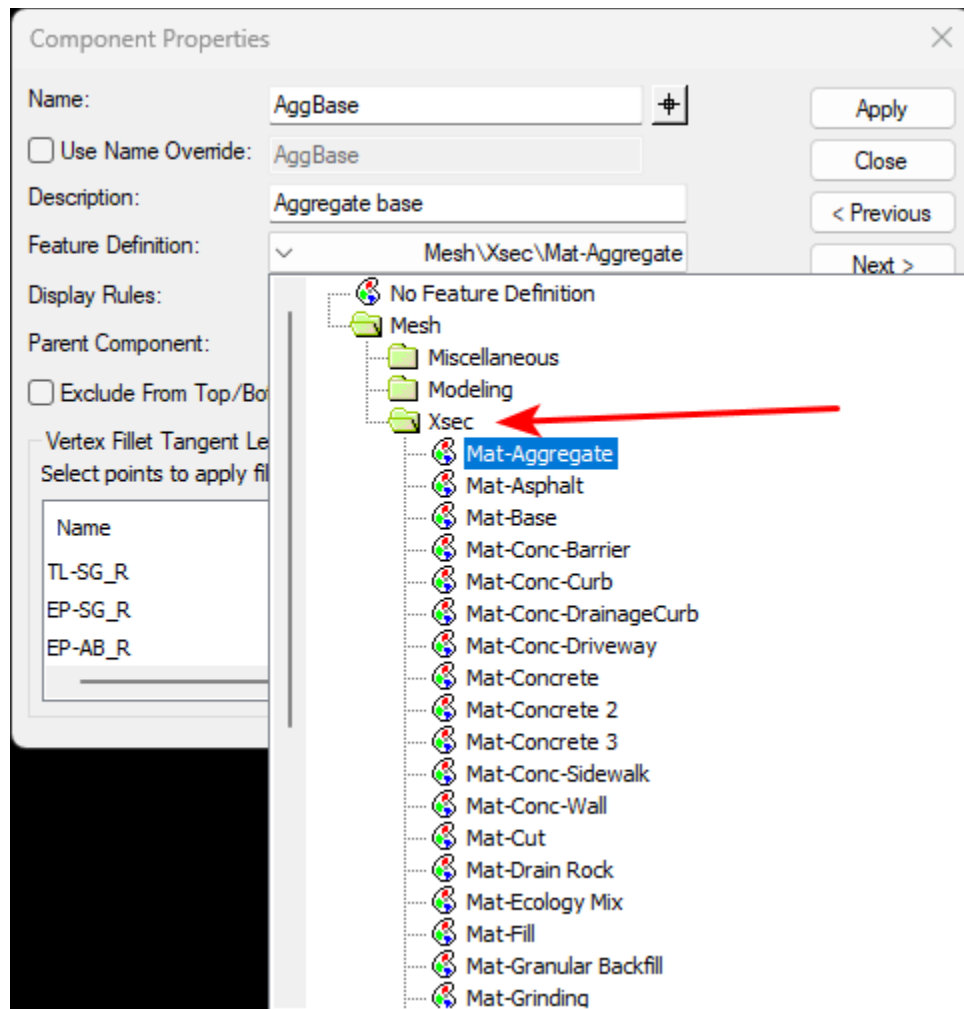
Component Names

When a new component is drawn – no matter which type – the component will be automatically named if you do not enter a name, from the seed name of the selected Current Component Feature Definition. The

Current Component window is displayed, as you are placing the component, at the bottom of the Create Template window. The default feature definition is the first one in the alphabetical list – take the time to select the Mesh\Xsec\Mat-*featuredefinitionname*. If you forget to set the component name in the Current Component window as you are placing the component, you may edit the component after it is placed and set the correct feature definition name and component name in the Component Properties dialog.

Components Create Meshes

When a template is pushed along an alignment in a corridor, the components in the template create 3D meshes. When selecting a component feature definition, you will see a parent folder named Mesh. The feature definitions used by ODOT for template components are in the **Mesh\Xsec** sub-folder because the feature definitions control the display of the mesh in a cross section view. The component feature definition *names* all begin with **Mat-** to indicate that the component represents a **material** layer in the cross section view of the Create Template window.



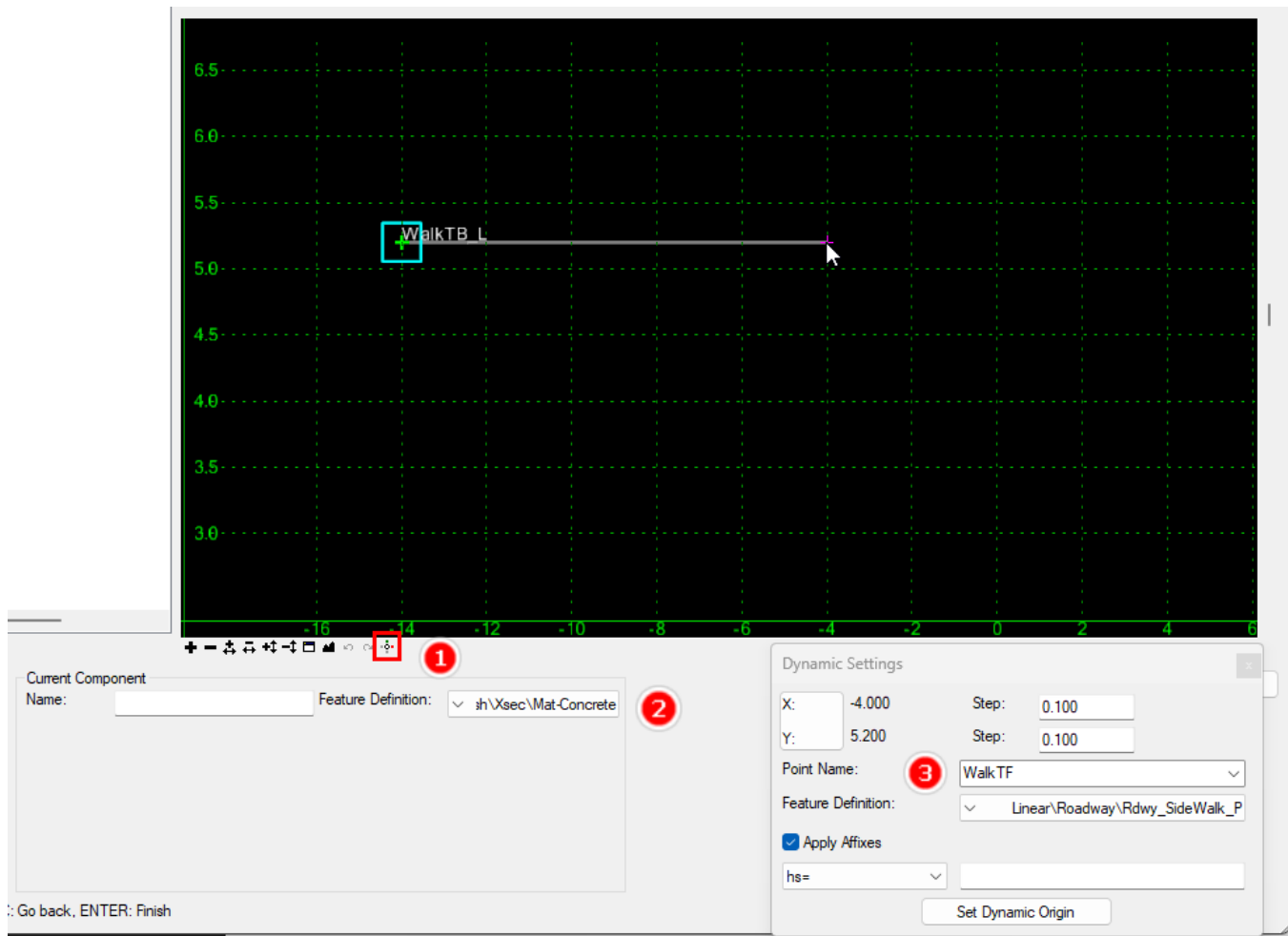
Dynamic Settings

Toggle on the Dynamic Settings dialog so you can select the point name from the Point Name List in the Dynamic Settings dialog – the Feature Definition will be set automatically and correctly. You can set the point name in the dynamic settings dialog just prior to placing the point, or you may edit the point after it is placed and assign the correct point name in the Point Properties dialog.

The picture below shows a screenshot of the Create Template dialog during the placement of a new component. The first point has already been placed.

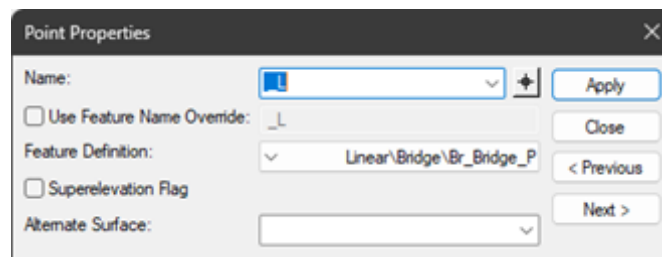
- 1) The Dynamic Settings dialog has been opened with an icon that is outlined by a red rectangle.
- 2) The Current Component Feature Definition has been set to Mesh\Xsec\Mat-Concrete.

3) The Point Name has been set to WalkTF for the placement of the 2nd point.

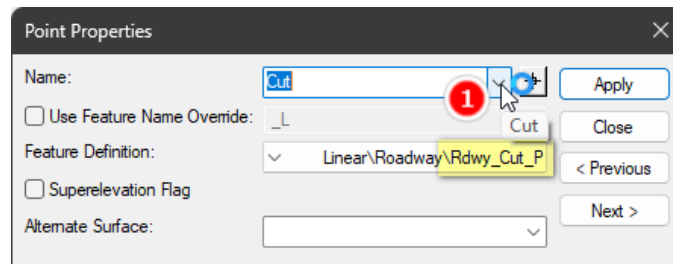


Editing Point Names in the Point Properties

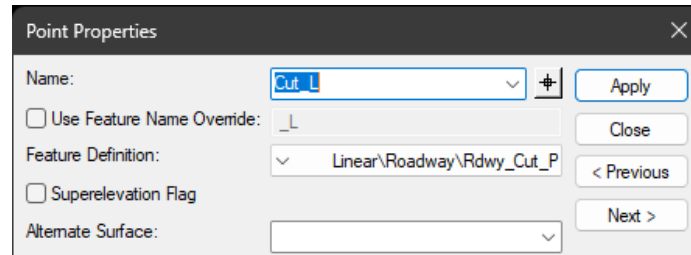
Whenever you are entering point names, it is important to select a Point Name from the Point Name List, which will apply the correct Feature Definition. After the new name has been selected from the list, the name may be edited to manually apply a number or other affix. The picture below shows just the top part of the Point Properties dialog of a point that was inserted without selecting a feature definition. The name is simply “_L” and the assigned feature definition is the first one in the alphabetical list, Bridge\Br_Bridge_P.



To edit a point name, first select the correct point name from the Point Name List (1) – see the picture below. That will also set the correct feature definition (highlighted yellow).



Then, place the mouse cursor into the Name: field and manually type the number or affix that is required. This method will retain the correct feature definition as shown below.



Editing Component Properties

Component Properties function differently than Point Properties. Right click on a component line and choose Edit Component... in the Create Template window to open the Component Properties dialog. The following steps are recommended:

- 1) Select a different feature definition from the **Mesh\Xsec** folder.
- 2) Manually edit the component name (required to be unique in the template).
- 3) Manually edit the component description (optional).

