

## InRoads – Updating Surface Features

### Overview

Sometimes it is sometimes necessary for WSDOT CAE to modify the names of standard data types in the CAE resource environment. These modifications may be due to changes in terminology, changing requirements with one of the CAE applications, or just to correct mistakes.

When a standard data types name is changed, all of the attributes of that data type are affected. For instance when **PM\_MN\_Mounument** was corrected to **PM\_MN\_Monument**, the survey definition, named symbology, feature style, level name and cell name all needed to be updated in the resources.

All data that has the old incorrect standard data type name needs to be updated to reflect the corrected name. So feature styles need to be re-assigned, MicroStation data needs to be moved to the corrected level and the old incorrect cell needs to be replaced with the new correct one. Most of this can be accomplished with a simple work flow.

This tech note explains the steps for updating surface feature styles when their standard names are changed. In addition, there are other design elements within InRoads such as template points and point lists, template point controls using styles, and point style constraints that may require an update to the feature style name.

Note that the basic integrity of the InRoads features remains intact. The only affect is how the features are displayed. Until they are updated, these features will display as solid white lines without their proper line styles, level, weight, and color. This includes random point features, which are displayed as connected white lines from each point in the feature if the feature contains more than one point.

### Workflow

#### Update Surface Feature Styles

1. Update the project resources:

Project specific XIN files must be synched with the latest WSDOT standard XIN.

Use the *Tools > Copy Preferences* command for this operation. Instructions are available in the **Updating Project XIN** Tech Note on the [WSDOT CAE](#) website.

2. Activate the surface containing features that may need to be edited.
3. Select the *Surface > Feature > Feature Properties* command.
4. Isolate all of the features that need to be updated by applying the **Updated Levels** filter.

Ensure that the **Feature Filter Lock** is on.



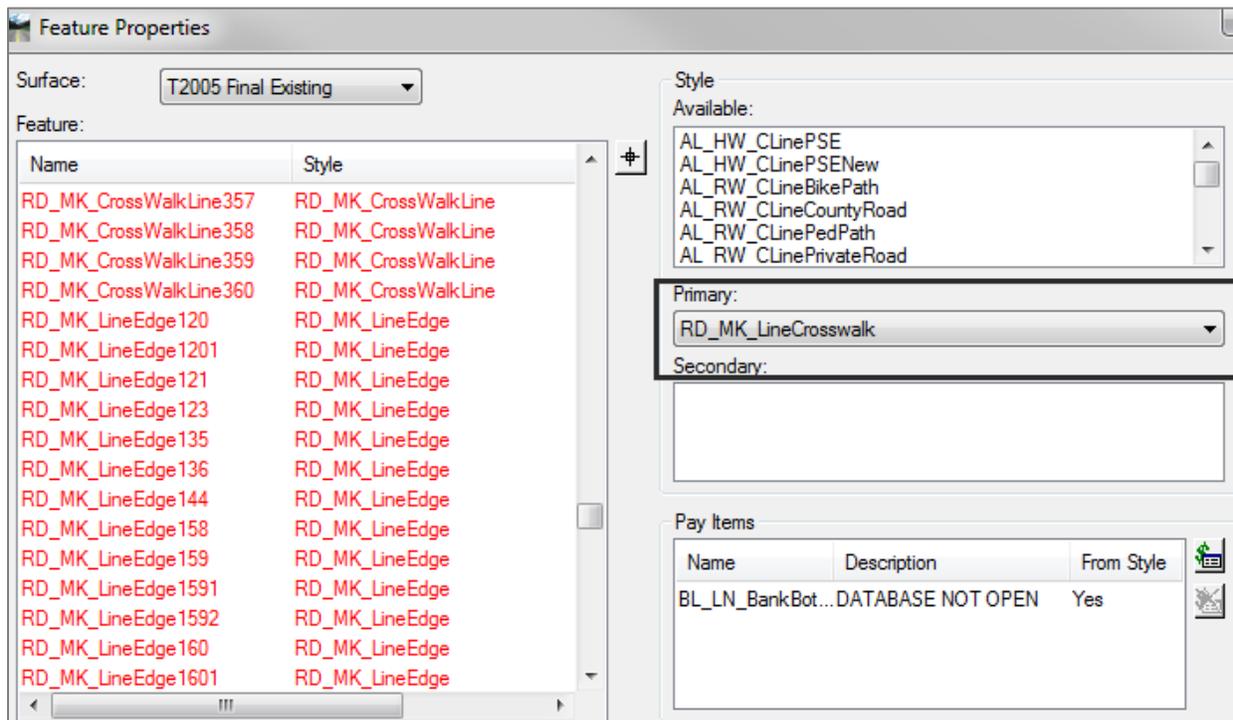
5. If no more information shows up when this filter is applied, then there are no features in your surface that require updating.

6. If there is data that needs to be updated, assign the new styles using the feature properties command.

Navigate to the *C:\Users\Public\CAE\Standards\WSDOT\Standards* folder and use the **Changed Levels - By Old Level.pdf** or **Changed Levels - By Update Date.pdf** documentation to determine the new feature style for each feature isolated by the filter.

These documents contain the same information; with one sorting alphabetically by **level** and the other sorting by **update date**.

Below is an example listing of features that passed the **Updated Levels** filter. The dialog shows out of date features in red.



The number of features returned by the filter will vary from project to project depending on size and complexity.

The example shows that a large number of **RD\_MK\_CrossWalkLine** features are using the same style. These can be updated one at a time or all at once by selecting the first one listed then selecting the last one while holding the Shift key down.

The new style name determined from the PDF documentation is **RD\_MK\_LineCrosswalk**.

7. Select the new line style of **RD\_MK\_LineCrosswalk** from the *Primary* field and click **Apply**.

When this is done, the features are no longer displayed in the dialog. Why? They are no longer displayed because they are now standard, and no longer pass the filter.

Continue updating features until no features show up in the listing.

8. Turn off the filter and save the surface.

### Template Point styles

Template points incorporate feature styles in several ways, and these can be affected when style names are changed. The template library contains a **Point Name List** which provides a way of defining point names with a standard surface feature style. Any style previously defined in this list needs to be updated if WSDOT CAE has changed the feature style name.

This is done by highlighting the point name and using the *Style* pull-down to select the updated style.

In addition, any updated style associated with a **template point** must be updated to the new feature style name. Edit the template points. Any point style that has changed will be blank and a new style should be selected from the *Surface Feature Style* pull-down.

Click **Apply** to save the changes.

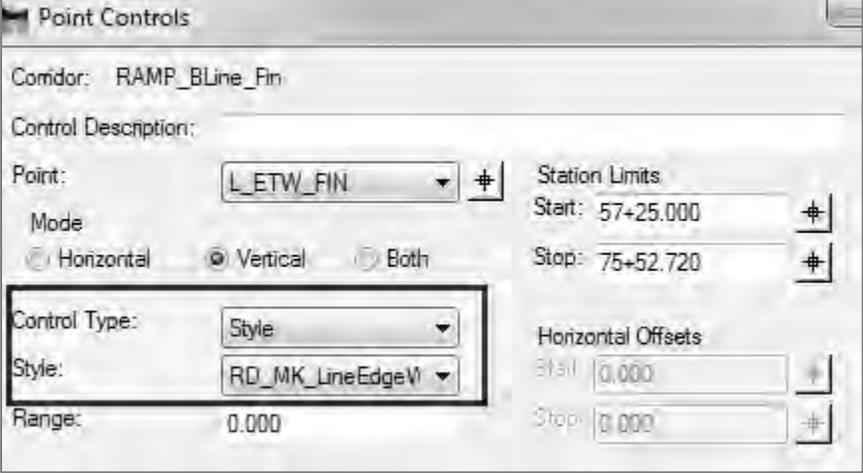
### Style Constraints

Any point constraints using a feature style may be affected by a feature style name change, and will require an update for the new style name.

The screenshot shows the 'Point Properties' dialog box. The 'Name' field is 'L\_ETW\_FIN'. The 'Use Feature Name Override' checkbox is checked, and the field contains 'L\_ETW\_FIN'. The 'Surface Feature Style' dropdown is set to 'RD\_MK\_LineEdgeW'. The 'Member of' list contains 'Lane\_FIN' and 'SHLD\_FIN'. Under 'Constraints', 'Constraint 1' has a 'Type' of 'Horizontal', 'Parent 1' of 'CL\_FIN', and a 'Value' of '-12.000'. 'Constraint 2' has a 'Type' of 'Slope', 'Parent 2' of 'CL\_FIN', and a 'Value' of '-2.000%'. The 'Label' section has a checked 'Style Constraint' dropdown set to 'RD\_MK\_LineEdgeWhite'. At the bottom, there are radio buttons for 'Horizontal', 'Vertical', and 'Both', and a 'range' field set to '0.000'.

### Point Controls in the Roadway Designer

Check for corridor point controls that use **Style** as the *Control Type*. If the defined style has been changed it will default to the first style in the list. Highlight the style control, select the appropriate style and click **Change**.



The screenshot shows the 'Point Controls' dialog box. The 'Corridor' is 'RAMP\_BLine\_Fin'. The 'Control Description' is empty. The 'Point' is 'L\_ETW\_FIN'. The 'Mode' is set to 'Vertical'. The 'Control Type' is 'Style', and the 'Style' is 'RD\_MK\_LineEdgeW'. The 'Range' is '0.000'. The 'Station Limits' are 'Start: 57+25.000' and 'Stop: 75+52.720'. The 'Horizontal Offsets' are 'Start: 0.000' and 'Stop: 0.000'. The 'Style' dropdown is highlighted with a red box.

For questions or comments on this tech note, contact your regional CAE Support Coordinator or the WSDOT CAE Help Desk at (360) 709-8013.