

InRoads – Preparing a Surface for Staking

Overview

WSDOT CAE provides a staking report generator that outputs staking data from an InRoads XML file to an Excel spreadsheet. The process for generating a staking report is documented in the [WSDOT Staking Report Generator](#) Tech Note.

Regardless of which method is used to generate the staking data, it is important to take the time to prepare the surface features for an optimum report deliverable. This documentation describes how to prepare the surface for staking, including using feature name overrides and surface filters.

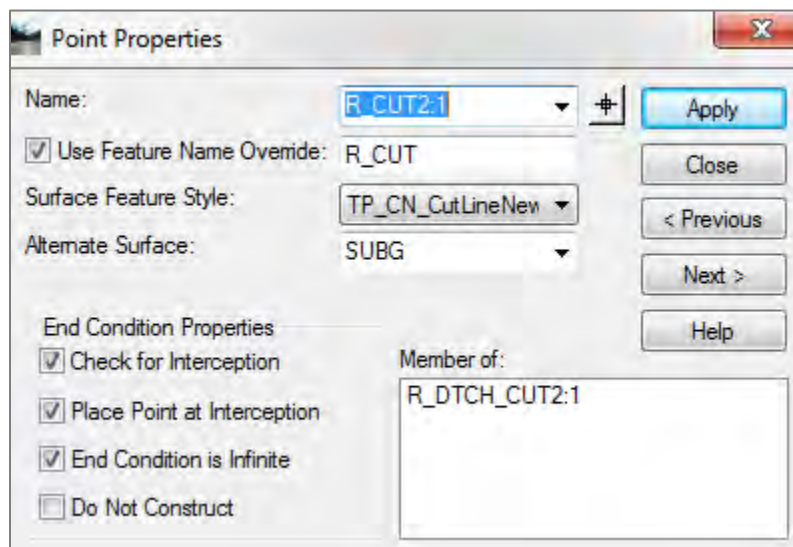
Prepare the Surface for the Staking Report

The staking report is based on an InRoads surface. This surface is typically generated using the Roadway Designer. It is important that the template points and corridor names are straightforward and easily recognizable, because these become the feature names that are used in the staking report.

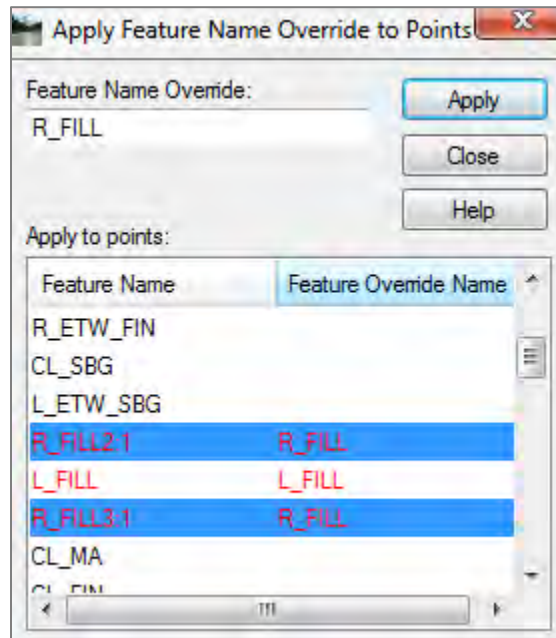
Each dataset is unique. Some corridors have standard left and right offsets from a centerline that is set at an offset of “0”, while others have offsets on only one side of the alignment as in the case of widening templates. When a centerline reference line is used, the best practice is to name that feature “centerline” or “CL”. This simplifies the operation of the WSDOT staking report generator.

Feature Name Override

An option for consolidating cut and fill features in the template is to use the *Feature Name Override* function in the [Point Properties](#) command in the Create Template interface. When the left and right side cut and fill lines are identified, the roadway modeler creates single left and right side cut and fill features in the design surface. This option makes it easier to select the outside catch features in the **Station Base** report.



You can set up feature name overrides in the batch mode by selecting the *Tools > Apply Feature Name Override* command in the Create Template interface.



The **Feature Name Override** tool is also useful for identifying a “centerline” feature. Use the override on the finished centerline feature on the roadway template.

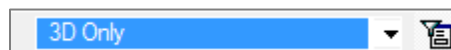
Feature Filters

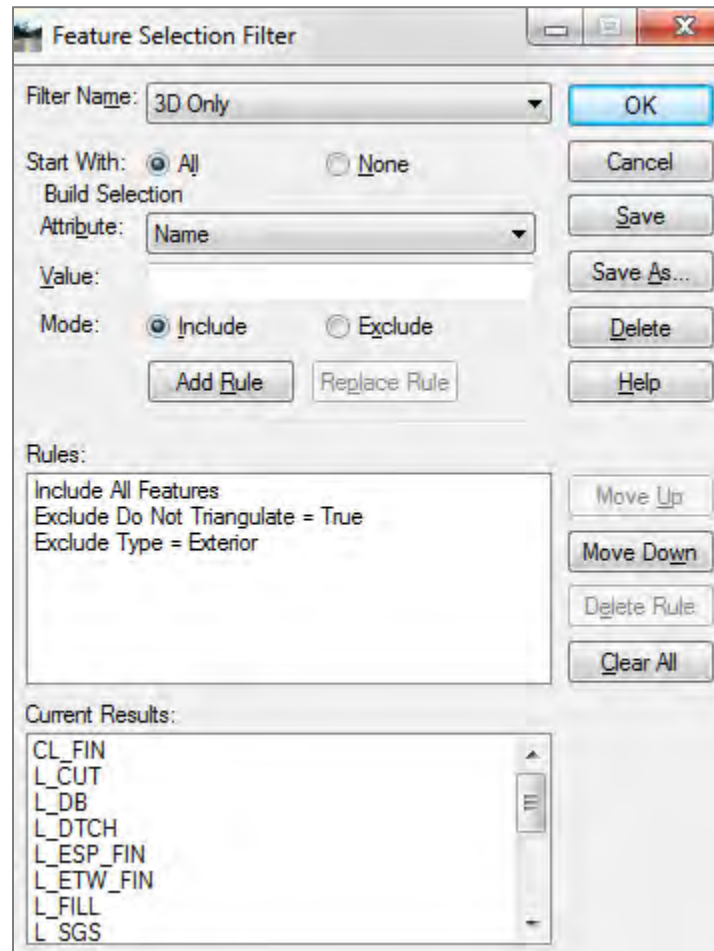
A filter is useful for selecting specific material layers. Set up a “**Fin**” filter that only displays the finished surface features in the Station Base report. To create this filter, use the *Surface > Feature > Feature Selection Filter* command.

There are a few approaches that you can take with the filter. You can select the **None** option to start with and build a filter based on the *Name* as the attribute and *Include* as the mode. Then select feature names that you know are on the finished surfaced. For example, type **FIN* in the *Value* field, click on **Add Rule**, and verify that the rule returns the correct results.

Another approach is to simply select the **Exclude from Triangulation** attribute and set the value to **False**. Set the mode to **Include**, and this will return values that are on the top, or finished surface only. Save the filter.

To enable a surface feature filter, turn on the **Feature Filter** lock on the InRoads toolbar, and select the appropriate filter from the drop-down list.





The work flow described above will prepare your data for the WSDOT Staking Report Generator.

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