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Express-TIP

On the Side

Q: **Do I need to use the** Project to Surface **constraint for points in my end conditions that are going to tie into my existing surface?**

A: No. The end condition will tie in to the existing surface by virtue of its target and having **Check for Interception** and **Place Point at Interception** toggled on. The **Project to Surface** constraint can be very powerful, but it is unnecessary for the sideslope tie-in point.

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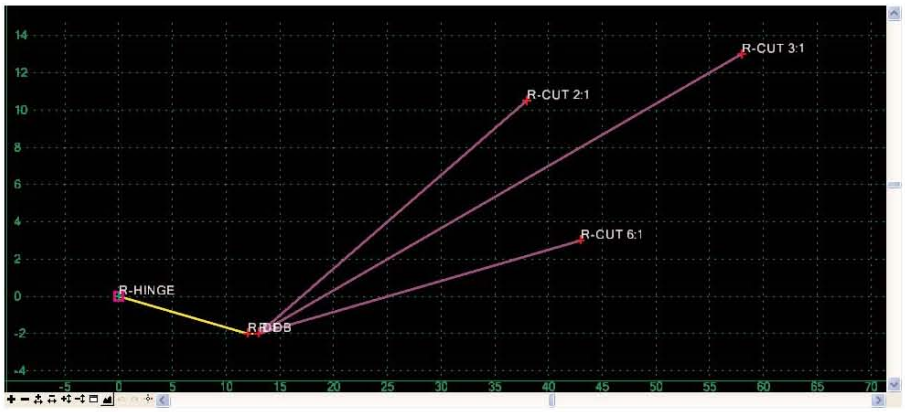
Efficient End Conditions

Success without interception

In many respects, **End Condition Components** work similar to **Target Blocks** from the Decision Tables of previous versions of InRoads. However, there are several differences, even beyond the fact End Conditions are created graphically rather than in a table.

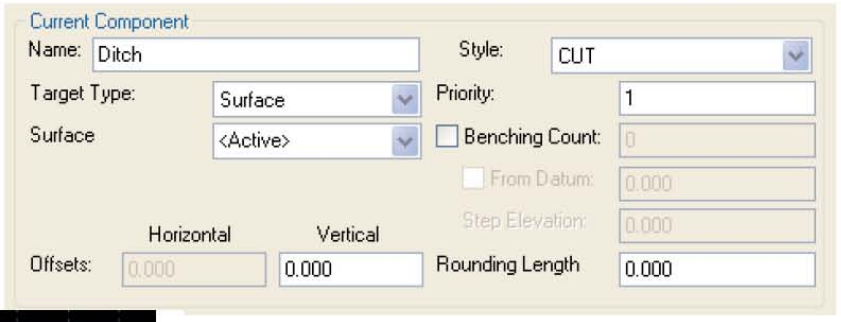
One difference is that end conditions do not have to hit a target in order to be constructed, as long as they are part of a successful sideslope. This can be useful when multiple end conditions share a common beginning, such as a cut ditch having the same foreslope and bottom, but different backslopes. In order to accomplish this without having to repeat the foreslope and bottom for each backslope, use the following steps.

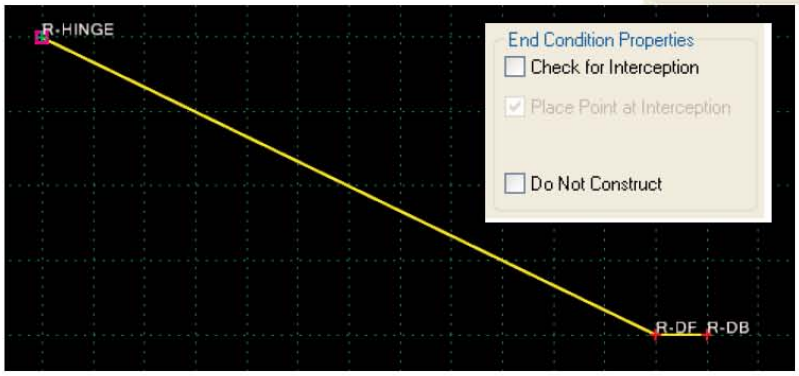


1 Create a new template.

2 Create a new End Condition component.

Name the component.
Assign an appropriate **Style**.
Don't worry about the **Target**.

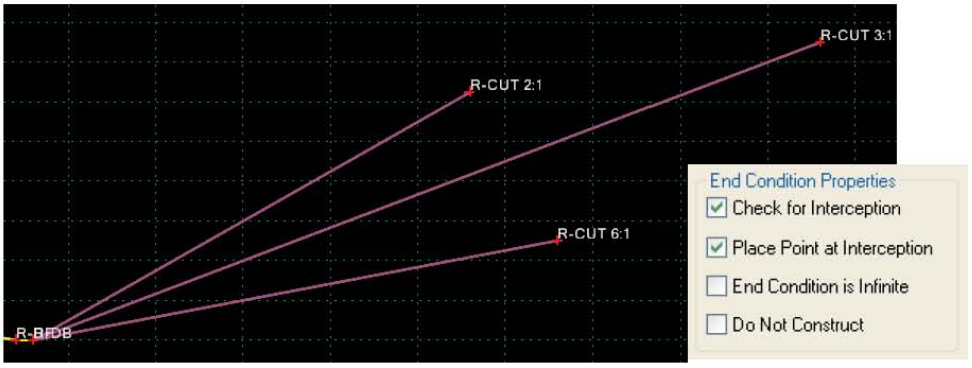




Create the desired foreslope and ditch bottom
Make certain **Check for Interception** is toggled ***off*** for points in the end condition.

*Note: This is one of the main keys to ensuring this sideslope works. If either point has **Check for Interception** toggled on, the ditch will either not be fully formed if an interception is found, or not formed at all if an interception is not found.*

3 Create the backslopes as individual end condition components, each with **Check for Interception** toggled on as necessary.

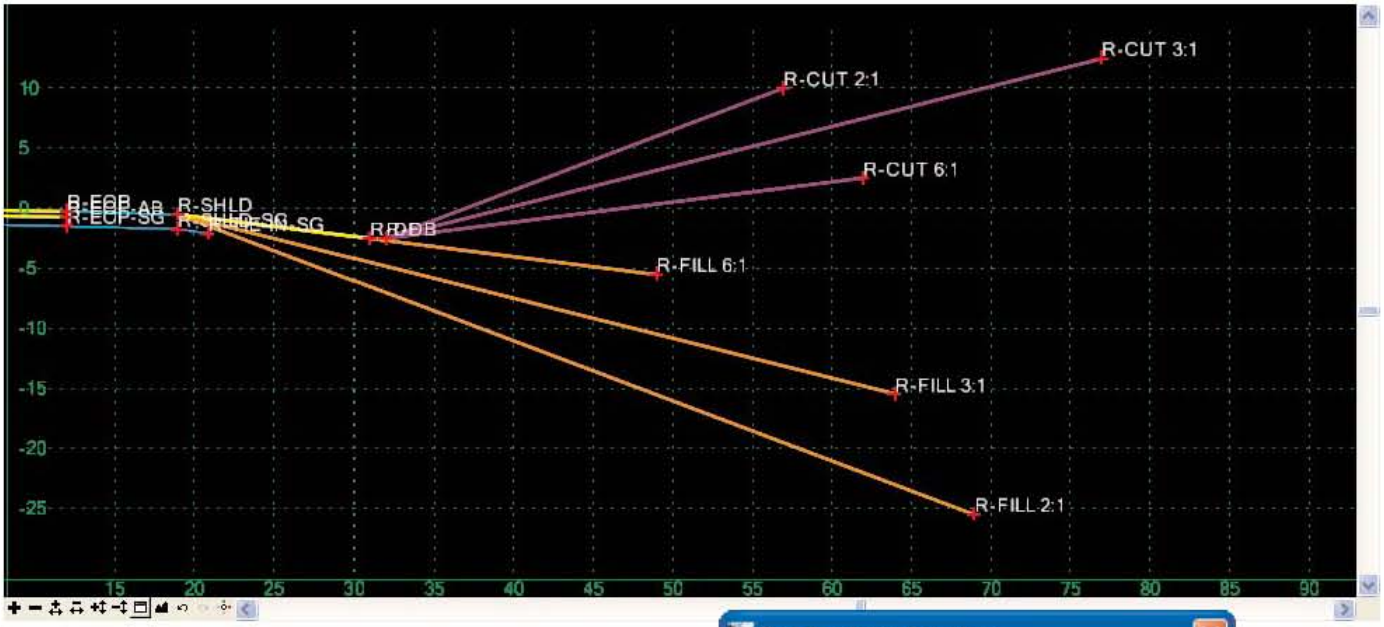


4 **Test** the ditch template.

Assign the priorities for the backslopes.

Note: The foreslope and bottom are formed when any of the backslopes intercept their target. If none does, the entire sideslope fails.

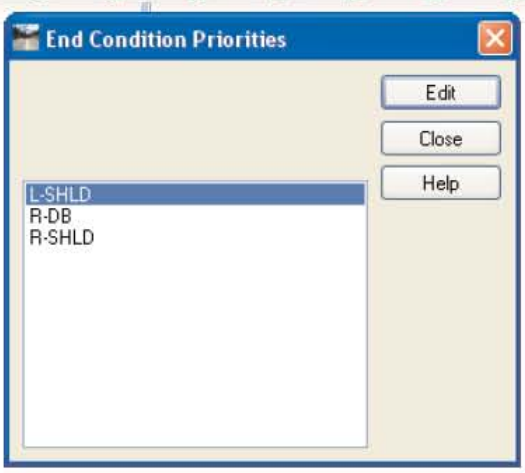
5 Add the ditch to your template.



6 **Test** the completed template.

Select **Check Priorities**.

Note: You now have the option to set priorities at more than one location on the ditch side. Anywhere multiple end conditions start at the same point, you will have the option to set their priorities.



As you can see, while the end conditions create sideslopes in a similar manner to decision tables, there are some significant differences in the rules that control their behavior. Stay tuned as we explore more of these differences in future **Express-TIPs**. You should also consider attending one of our ***Getting the Most from Templates and Roadway Designer*** seminars where we cover templates, including end conditions, in depth.