

Template: Right of Way Cut Slope Override

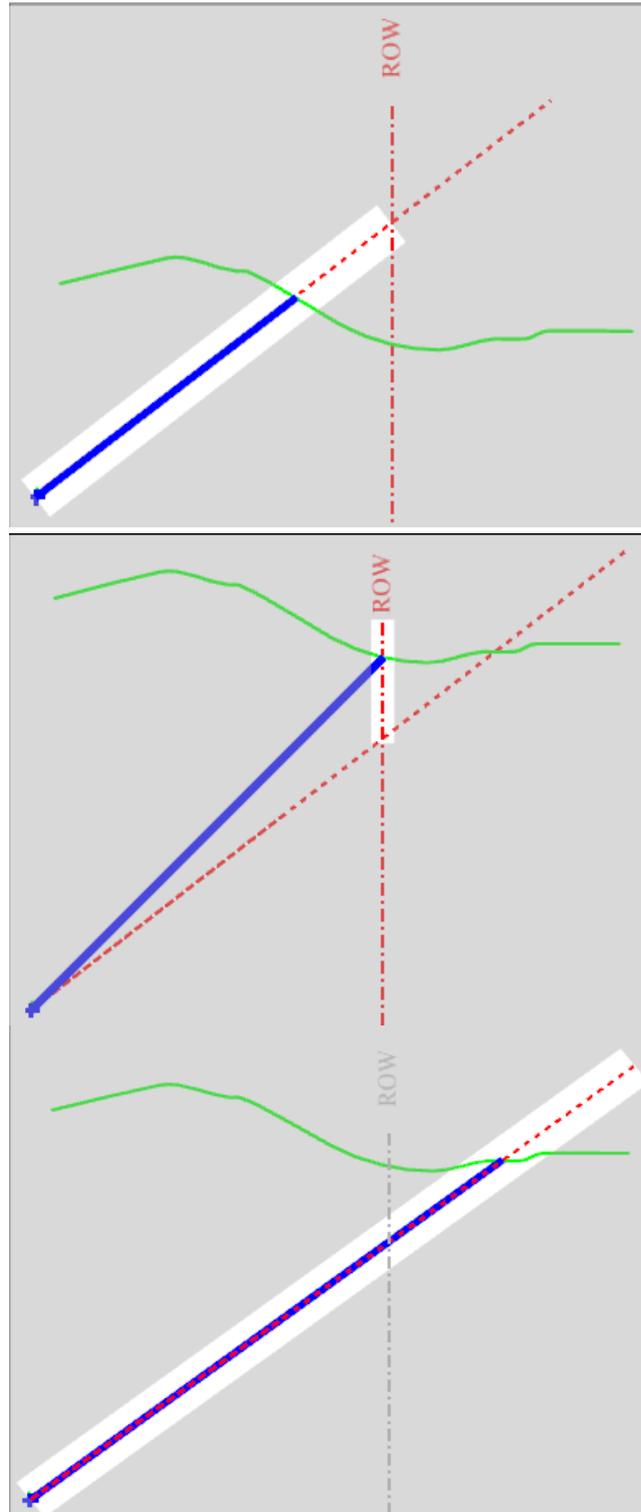
Engineering Goal: If the Daylight line extends beyond the roadway Right of Way, tie into the surface at the Right of Way line using whatever slope necessary.

We will assume that the horizontal ROW geometry for the project is stored in a surface as P_COGO_ROW features. When running the templates, this surface will have to be the active surface; the Existing Ground target will have to be defined by name, because the Active Surface will be the ROW feature surface.

There are three scenarios that need to be handled:

1. ROW exists, cut finds surface before ROW
2. ROW exists, ROW found before surface is found
3. ROW does not exist, cut slope to surface

The template should solve in that order (Priority).

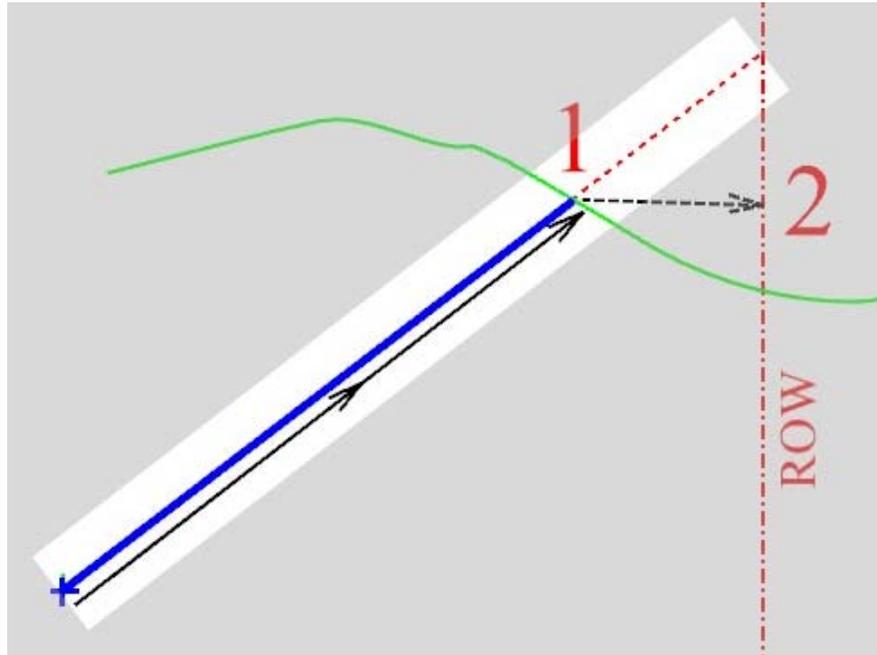


Scenario 1: ROW exists, cut finds surface before ROW

Seek the Surface, then seek the ROW to the right of the Surface intersection.

The ROW intercept point is not to be constructed.

If the surface is found and the ROW does not exist or is to the left of the surface intercept, this solution fails.

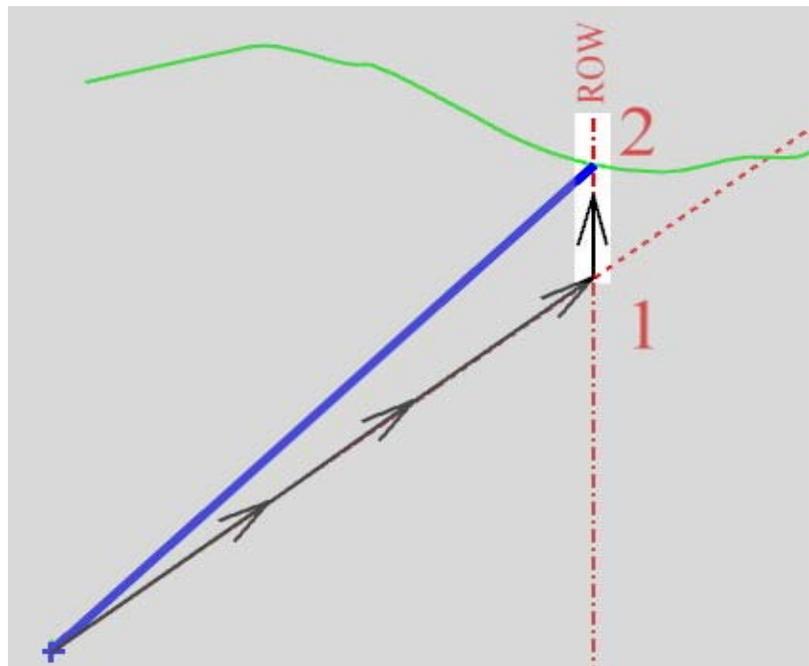


Scenario 2: ROW exists, ROW found before surface is found

If the ROW exists and the cut intercepted the surface inside the ROW the first scenario succeeded, this solution would never be attempted. If the cut does not intercept the surface inside the ROW, and the Hinge is in cut, this scenario MUST work.

Seek the ROW Style at the maximum cut slope, then seek the surface vertically above the first intercept point. This point should Not Construct.

An Unconstrained Cut Component snapping to Hinge and Daylight point can be drawn to represent the cut slope.



Scenario 3 is a standard cut slope that only seeks the surface if the right of way does not exist or the Right of Way exists but the Hinge is not in Cut.