

2_54 LIMITING WALL HEIGHT ON RETAINING WALL TEMPLATES

Question:

How hard would it be to tweak a template to show a 4' ditch behind the wall then slope up 2:1 to existing ground? I would like to be able to limit the wall height and cut more of the hill out.

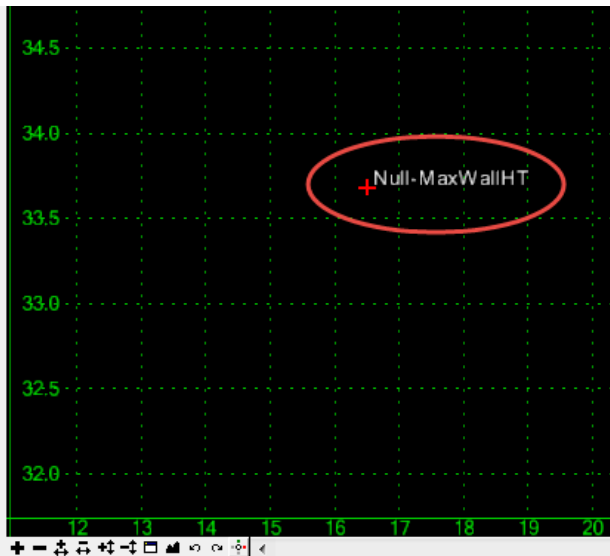
Answer:

Use component display rules since the wall cut slopes are not true end condition components, but regular components instead. Remember that it is not recommend to use display rules for end condition components.

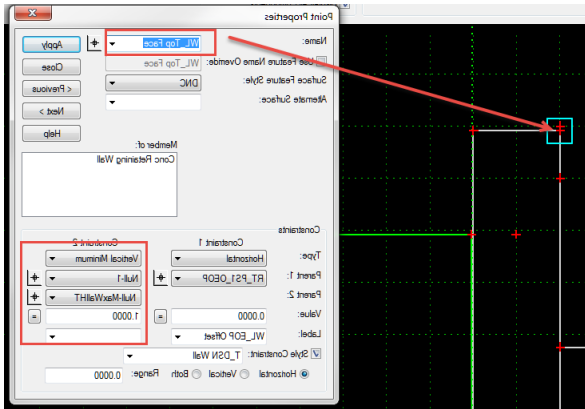
First draw the base of the ditch and create a null point at the same elevation as the ditch base (Null-1).



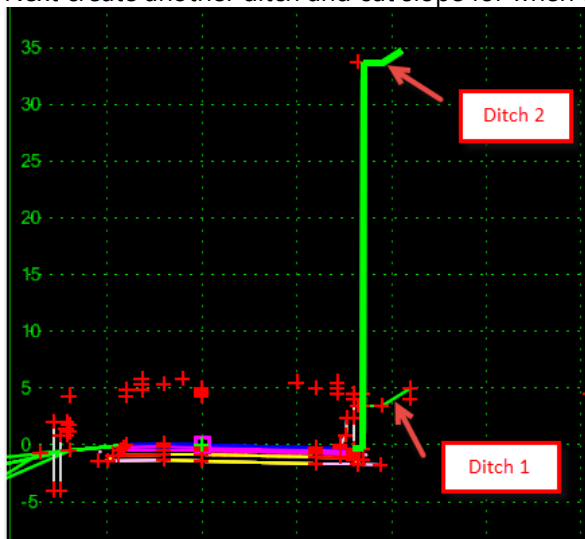
At a calculated value create another null point for the maximum wall height of the wall.



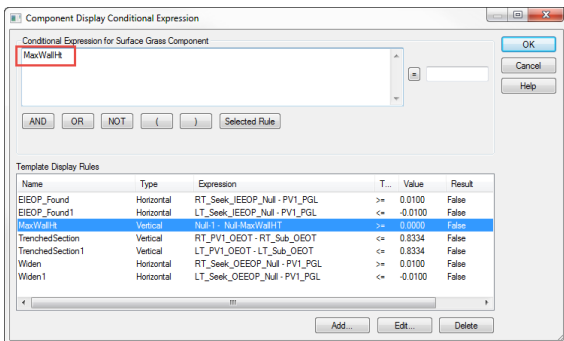
Constrain the wall top face point, which controls the wall height, with a "Minimum Vertical" constraint with an offset of 1'. The will allow for wall to vary in height up to the maximum height desired. Remember from our delta trainings that a "Vertical Minimum" constraints simply means the point will follow the lower of the two null points with a 1' offset.



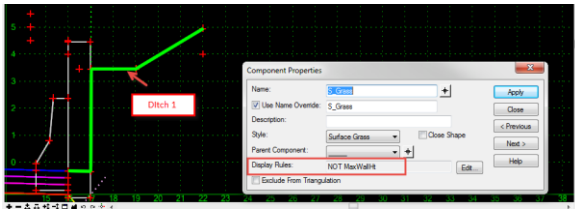
Next create another ditch and cut slope for when the wall has reach its maximum height (Ditch 2).



Create a component display rule for when the wall has reached its maximum height and apply to the Ditch 2 component.

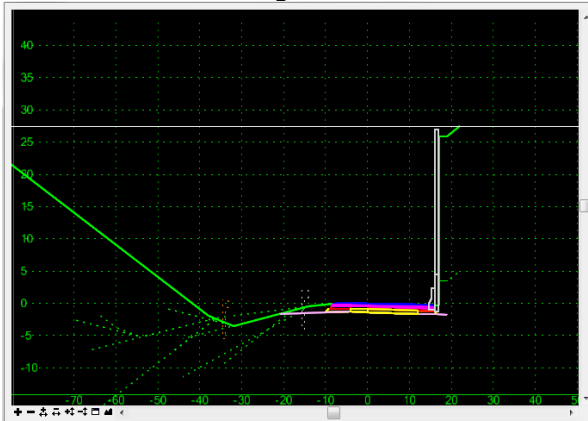


The same display rule can be applied to Ditch 1, but with a NOT operator since we want to work like a switch, e.g. when Ditch 1 is ON then Ditch 2 is OFF and vice versa.



Finally test the template.

Wall less than 35' in height.



Wall more than 35' in height.

