

This subassembly creates a cross-sectional representation of a generic Curb and Gutter with a Base and SubBase. This Assembly also includes the ability to add a sidewalk. The width and elevations of the inside boulevard, sidewalk, and outside boulevard can be set using the parameters or by using the Horizontal and Vertical Targets within the Corridor properties. This subassembly will allow the user to calculate the volume of Topsoil required if a depth is applied to the boulevards. Both the inside and outside boulevard slope along with the sidewalks slope can be controlled independently from the others.

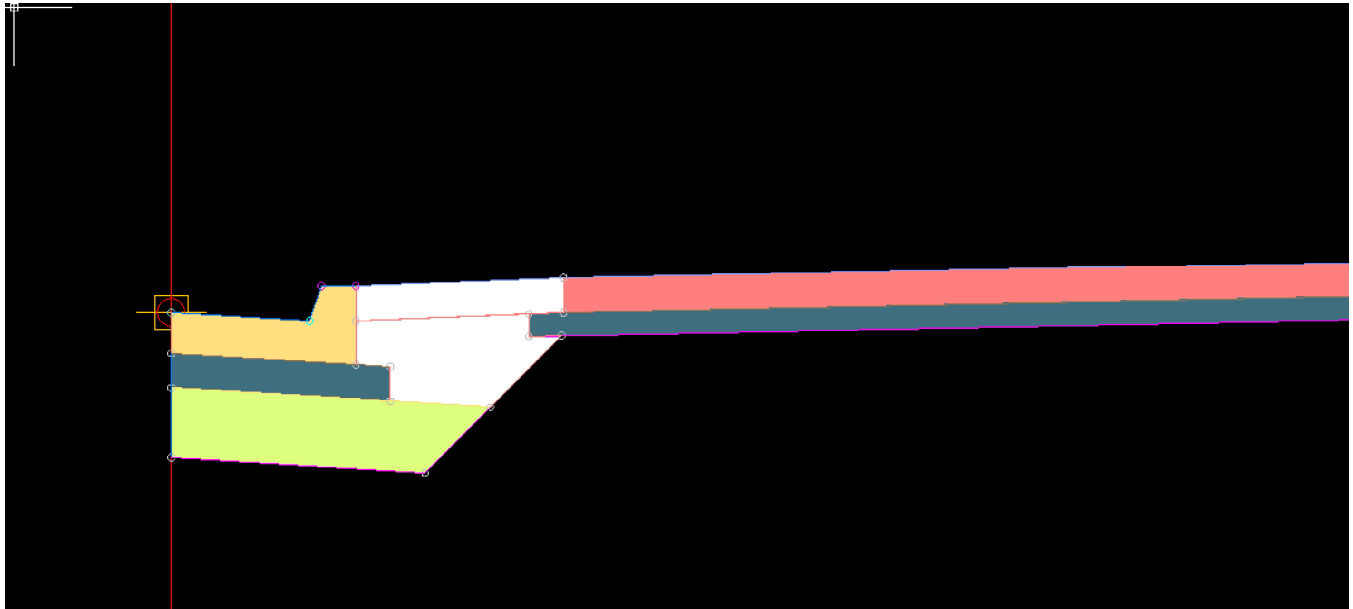


Figure 1: Boulevard - Sidewalk - Boulevard with Common

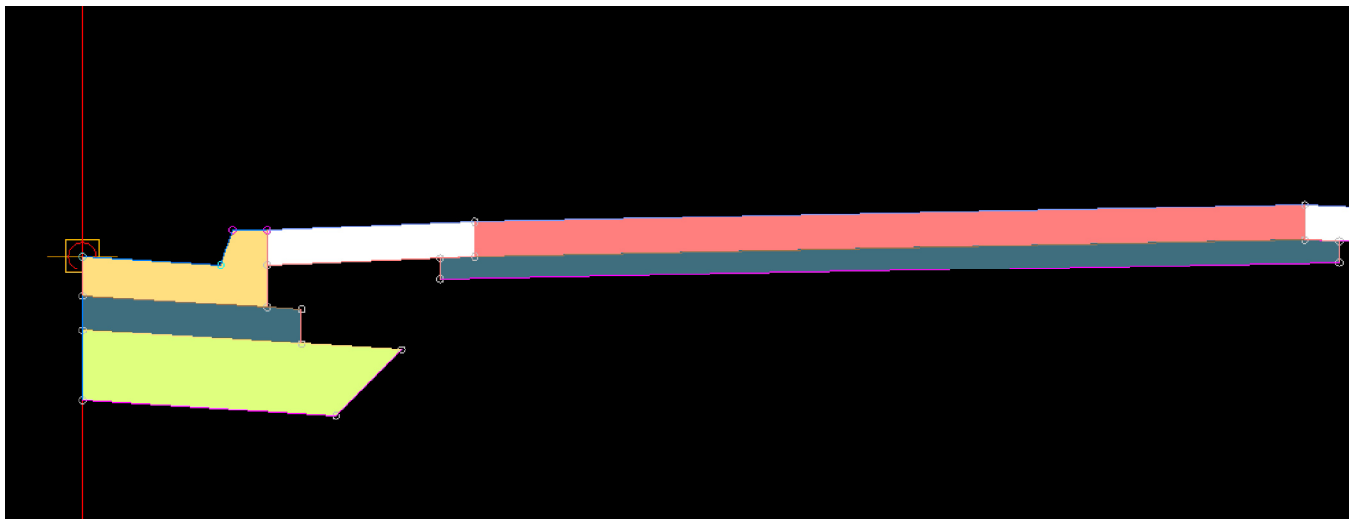


Figure 2: Boulevard - Sidewalk - Boulevard no Common

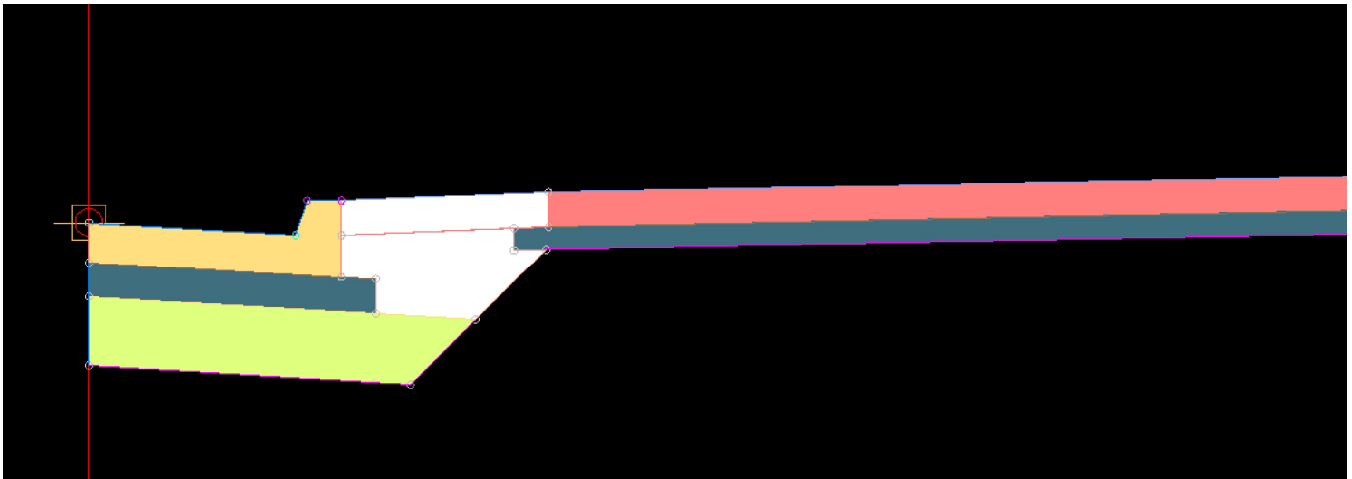


Figure 3: Boulevard - Sidewalk with Common

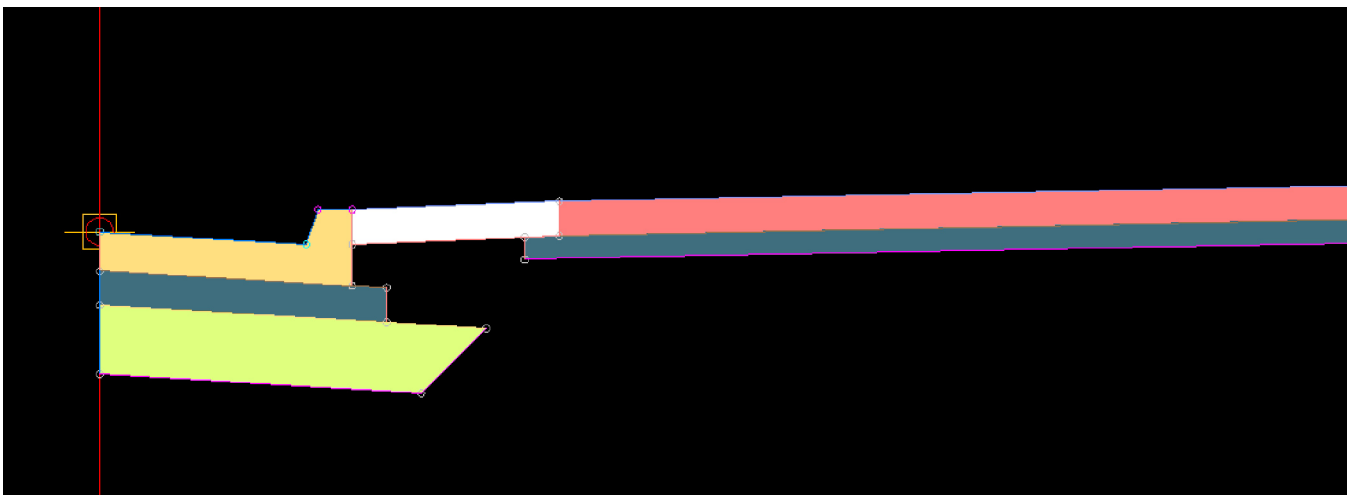


Figure 4: Boulevard - Sidewalk no Common

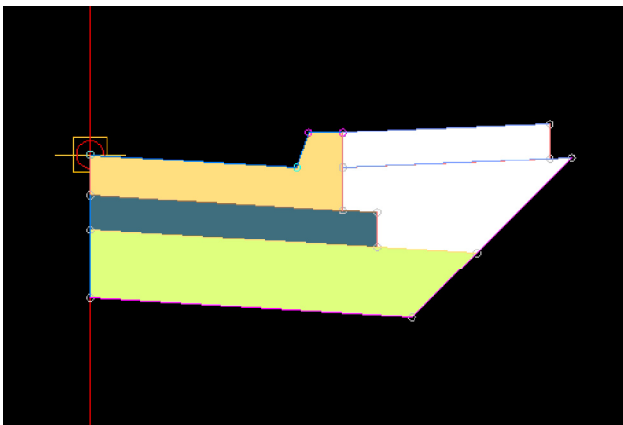


Figure 5: Boulevard with Common

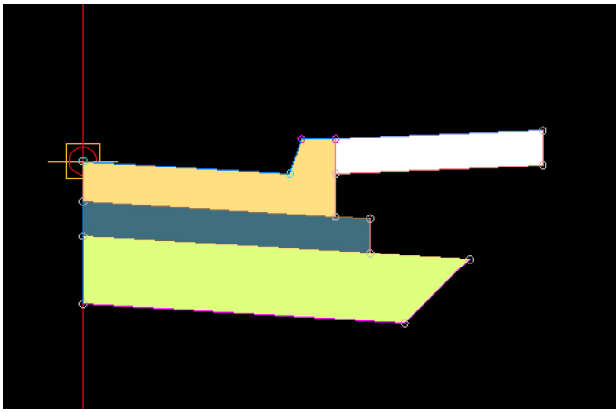


Figure 6: Boulevard no Common

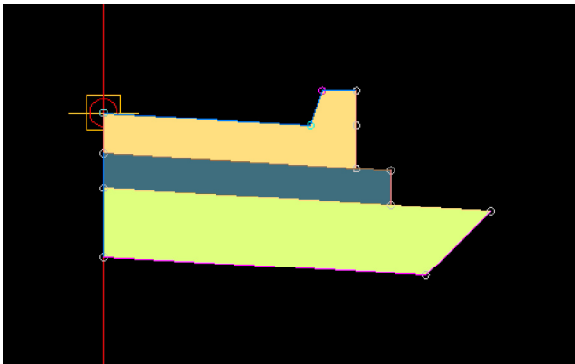


Figure 7: Curb Only

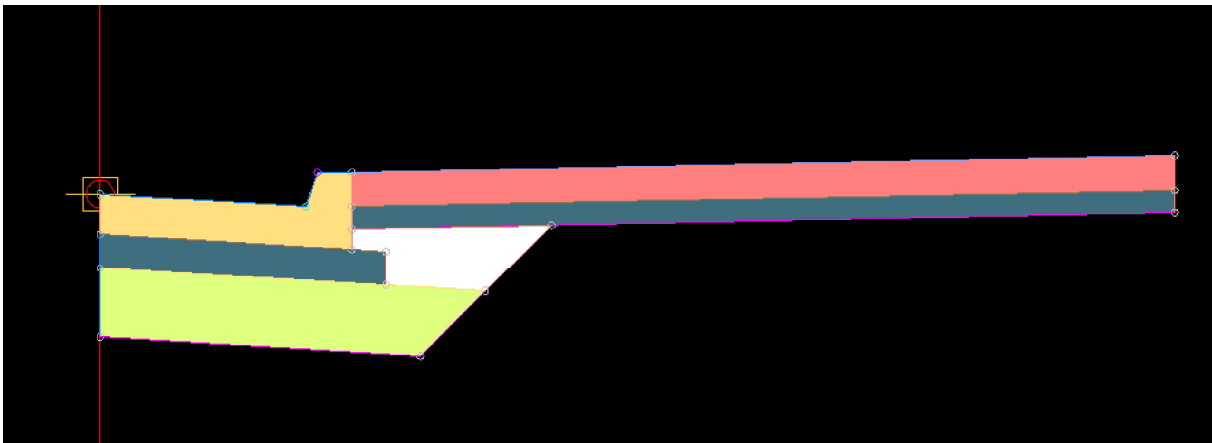


Figure 8: Sidewalk with Common

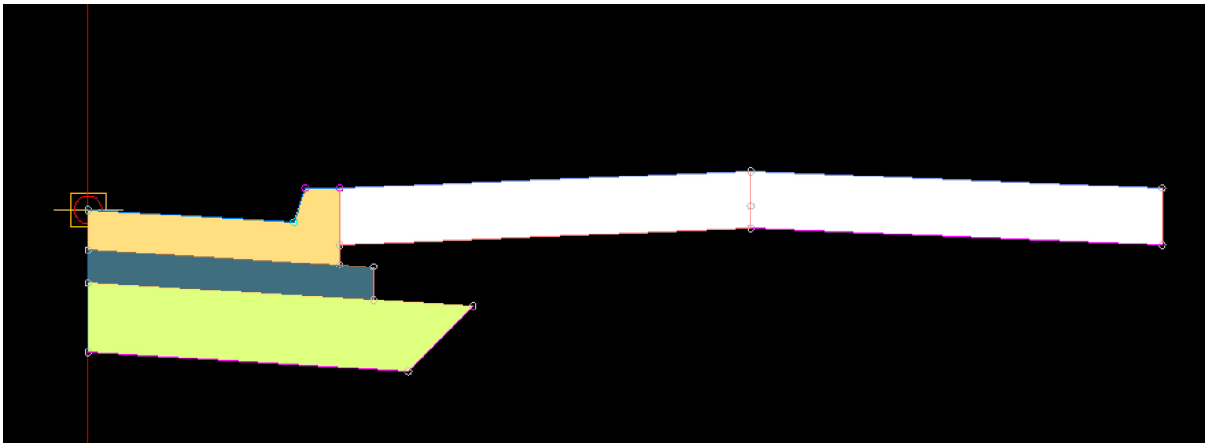


Figure 9: Boulevard - Boulevard no Common

Figure 3: List of Parameters

Parameters:

Include Sidewalk Yes or No

Calculate Common area Yes or No

Curb: Gutter Slope - Slope of the gutter in a percentage

Curb: Gutter Width - Width of the Gutter

Curb: Bottom Slope - Bottom slope of the SubBase in a percentage

SubBase: Depth - The thickness of the SubBase in feet.

SubBase: Extension (Ft) - Distance behind the back of curb feet.

Base: Depth: - The thickness of the Base (or Rock) in Feet.

Base: Extension: - Distance the Curbs Base will extend beyond the back of curb.

Boulevard, Width Inside - The width between the top back of curb and the inside edge of the sidewalk in Feet.

Boulevard, Slope Inside - The slope between the top back of curb and the inside edge of the sidewalk in Percentage.

Boulevard, Top Soil Depth - Depth of the coverage within the inside and outside boulevards in Feet.

Cut Slope: - The slope for the common fill. This will start from the outside edge of the SubBase under the curb and extend to either the existing surface, Inside Boulevard, the Base under the sidewalk or the Outside Boulevard depending on widths and slope.

Sidewalk: Width - Width of the sidewalk in Feet.

Sidewalk: Slope of - Slope of the Side walk or the slope of FG (With the No sidewalk option) in a percentage.

Sidewalk: Thickness - The thickness of the sidewalk in Feet.

Sidewalk: Base Depth: - The thickness of the sidewalk Base (or Rock) in Feet.

Sidewalk: Base extention Inside: - Distance beyond the left side of the sidewalk the Base will extend in Feet.

Sidewalk: Base extention Outside: - Distance beyond the right side of the sidewalk the Base will extend in Feet.

Boulevard, Width Outside: - The width of the green space after the outside edge of the sidewalk in Feet.

Boulevard, Slope Outside: - The slope of the green space after the outside edge of the sidewalk in Percentage.

Codes: Link, Inside Vertical Base under Curb Customized inside vertical link for the Base under the Curb

Codes: Link, Inside Vertical SubBase under Curb Customized inside vertical link for the SubBase under the Curb

Codes: Shape, Base Section under Curb Customized coding for the Base material under the curb. The default is "Base".

Codes: Shape, SubBase Section under Curb Customized coding for the SubBase material under the curb. The default is "SubBase".

Codes: Shape, Common or Back Fill Area Customized coding for the backfill area behind the back of curb. This area will account for the area behind the back of curb that was removed when the subbase and base were laid. The default is "None".

Codes: Shape, Base Section under Sidewalk Customized coding for the base material under the sidewalk. This allows one or two base materials to be calculated for quantities. The default is "Base".

Codes: Shape, Boulevards Customized coding for the boulevard material

Codes: Shape, Sidewalk Customized coding for the sidewalk material

Note:

In 2013 the Output Parameters created in this subassembly when assigned to another subassembly within the Assembly Properties will not automatically update when these variables are changed. However, the changes will be reflected in the corridor once it has been rebuilt.

If the subassembly is mirrored, that subassembly name should be changed. When another subassembly is using the output parameters value of this subassembly, it will pull the values from the original subassembly within that assembly and not the one that was mirrored.

The Common Area will not be calculated if you select a zero width for the Sidewalk, Leaving the two boulevards with independant slopes.

If the depth of the Boulevards is deeper than the bottom of the base of the Sidewalk, you will need to set the Inside and Outside extensions to 0.00'.