2_56 Shoulder Rollover

Question:

I have entered in the necessary information into my IRD and RDP files. I have chosen two templates for this project. I did not enter the superelevation information at this point. The issue that I am having is related to the paved shoulder. According to the shoulder rollover std. 560, I should have the same slope on the paved shoulder as the main pavement (shoulder ranges between 2-4). I do not currently have this situation. I have two different slopes for each.

Answer:

The issue with the two templates is the proposed grade is too low in certain areas undercutting the existing pavement. Template V10 uses the exiting ground elevation and the last 6" of pavement to determine the existing cross slope. This will not be the same slope that is coming from the centerline to the existing edge of pavement. Therefore you have two different slopes (the paved shoulder uses the former). This is why it's not recommended to show overlay in the Corridor Modeling cross sections and with Criteria.

The difference between the two slopes is more noticeable when a horizontal point control has been applied.