Design exercise 2 - Estimating operating speed

This exercise involves the upgrading of a 5.5 km section of two-lane two-way road in undulating terrain. The upgrade covers the widening of the roadway from a 6 m to an 8 m sealed road and improving horizontal alignment, as necessary.

The existing horizontal curve alignment is shown below. Estimate the operating speed for each road section and determine which curve(s) needs to be improved and what action is required.

Approach speed at the start can be taken as 100 kmh.