



ROAD | TRAFFIC | INSPECTORATE

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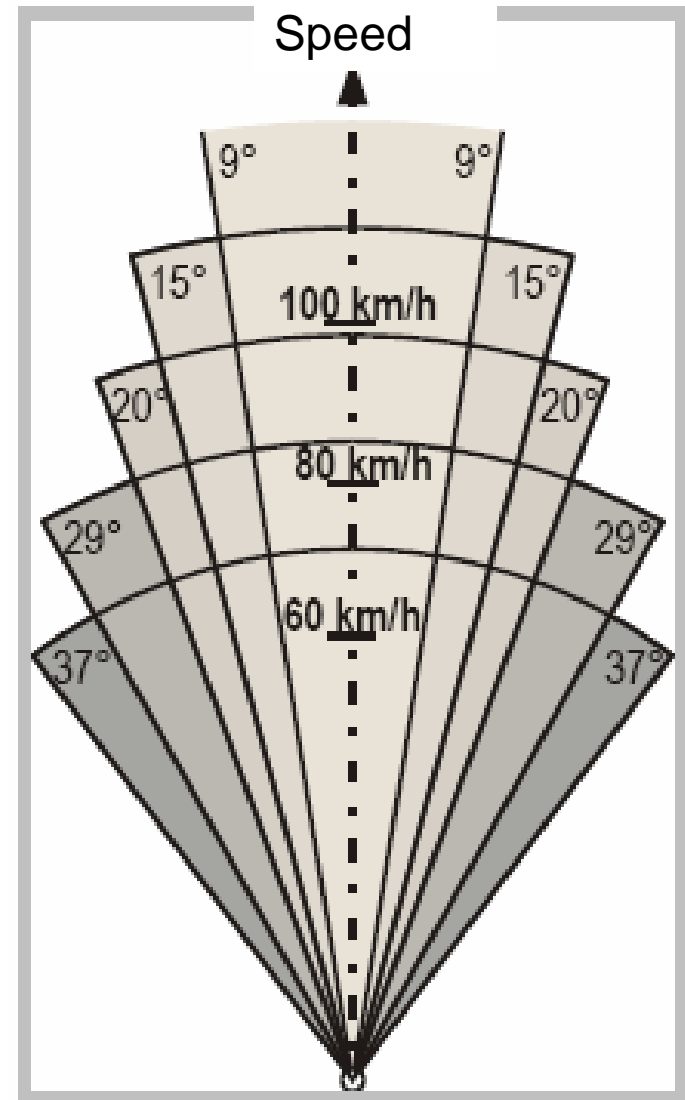


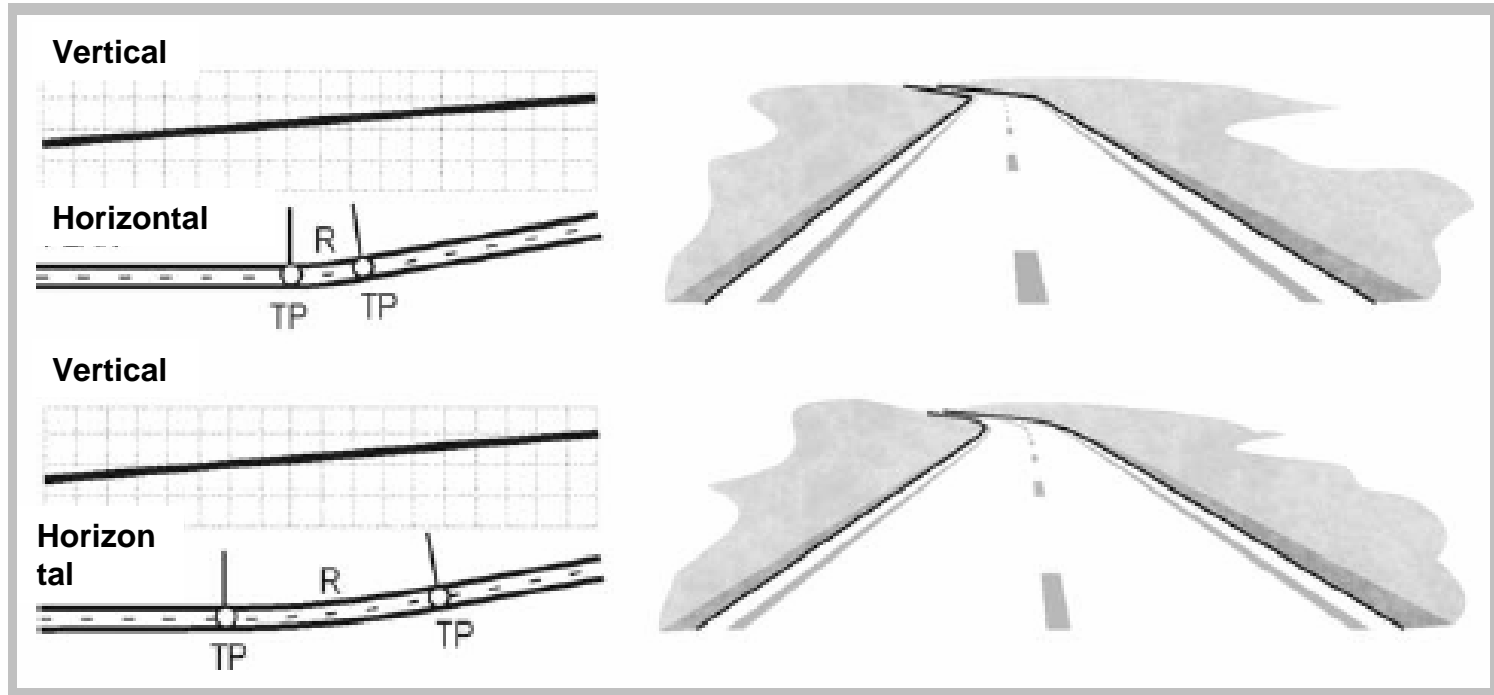


<b><i>Accident type</i></b>	<b><i>Killed per year, Swedish state roads 1995-98, %</i></b>
<b>Run-off</b>	<b>30</b>
<b>Head-on</b>	<b>29</b>
<b>Overtake</b>	<b>4</b>
<b>Rear-end</b>	<b>1</b>
<b>Turn-off</b>	<b>4</b>
<b>Crossing</b>	<b>8</b>
<b>Bike</b>	<b>7</b>
<b>Pedestrian</b>	<b>8</b>
<b>Other</b>	<b>9</b>
<b>Total</b>	<b>100</b>



The field of vision is decreasing at higher speed

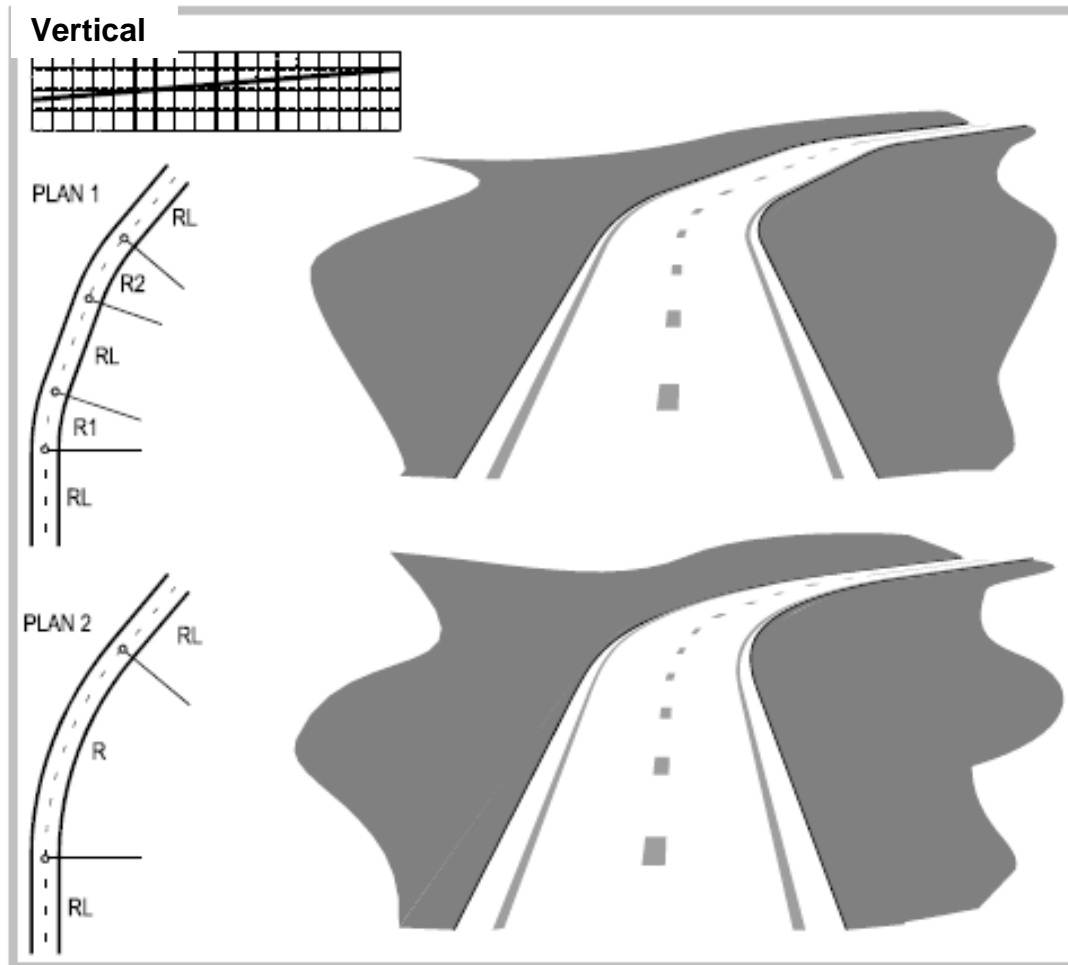




At direction changes the bend must be long enough to achieve harmonic alignment.



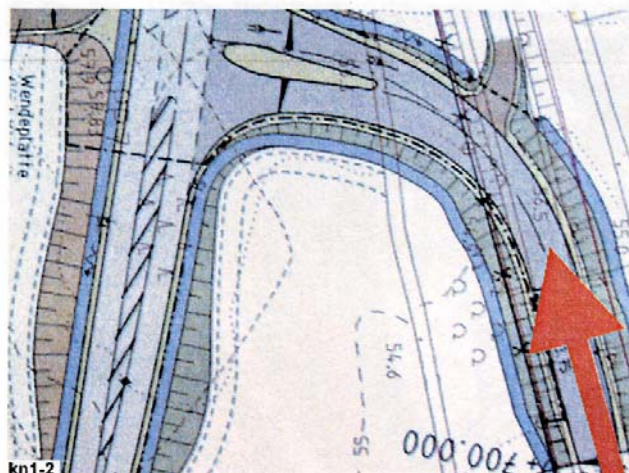
The effect of two circular bends with a short straight between (upper picture) and the same situation with only one continued circular bend with bigger radius (lower picture)





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Good optical guidance and visibility is very important. Do not lead the traffic the wrong way!





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# Clearly visibility/recognizability from all approaches

example of a junction in Romania with insufficient visibility





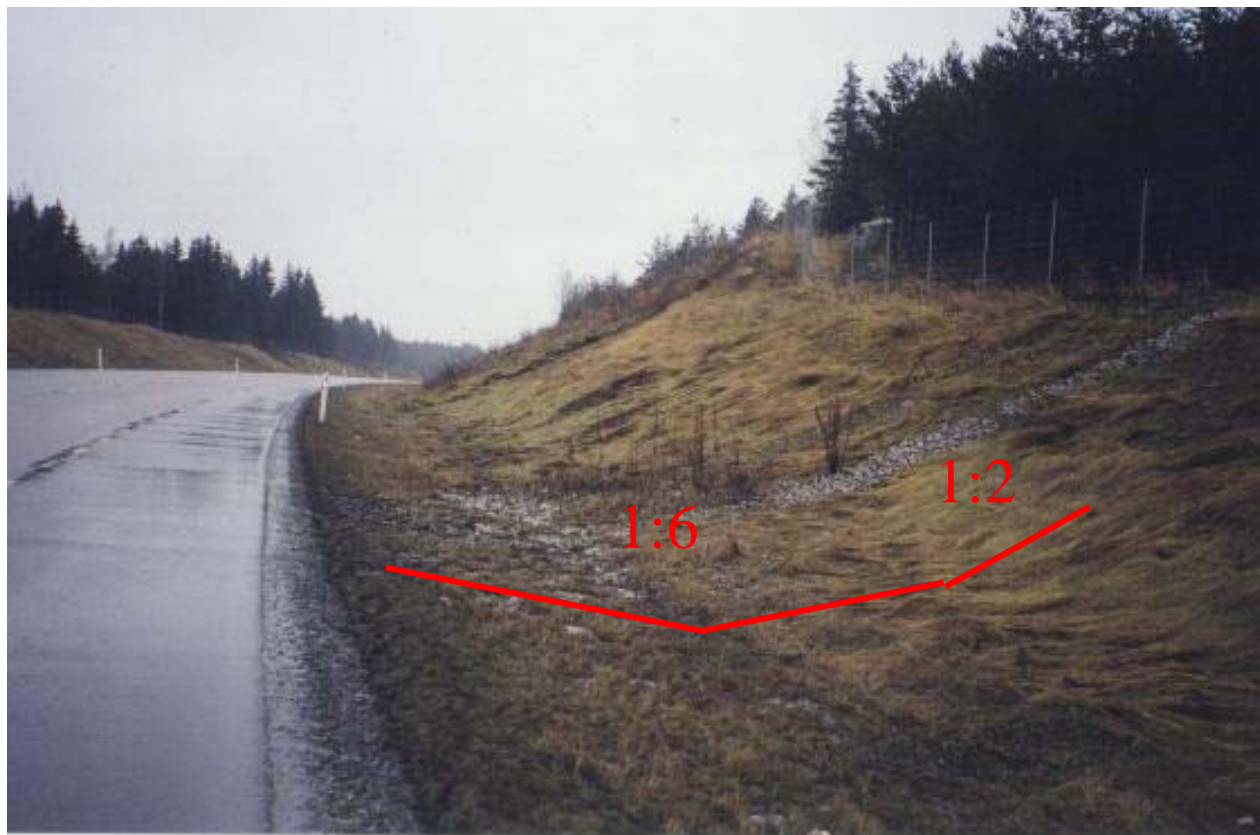
As head-on collisions and run-off accidents are very common the use of median- and road side barriers are most important







An example of a bad method for separation of traffic directions! The concrete barrier is too low and it has been several vehicles vaulting over it. A steel beam barrier had to be added to get the necessary height.



## Safety zone

(high standard)

70 km/h >7 m

90 km/h >9 m

110 km/h >10 m

Flat slopes and no obstacles.



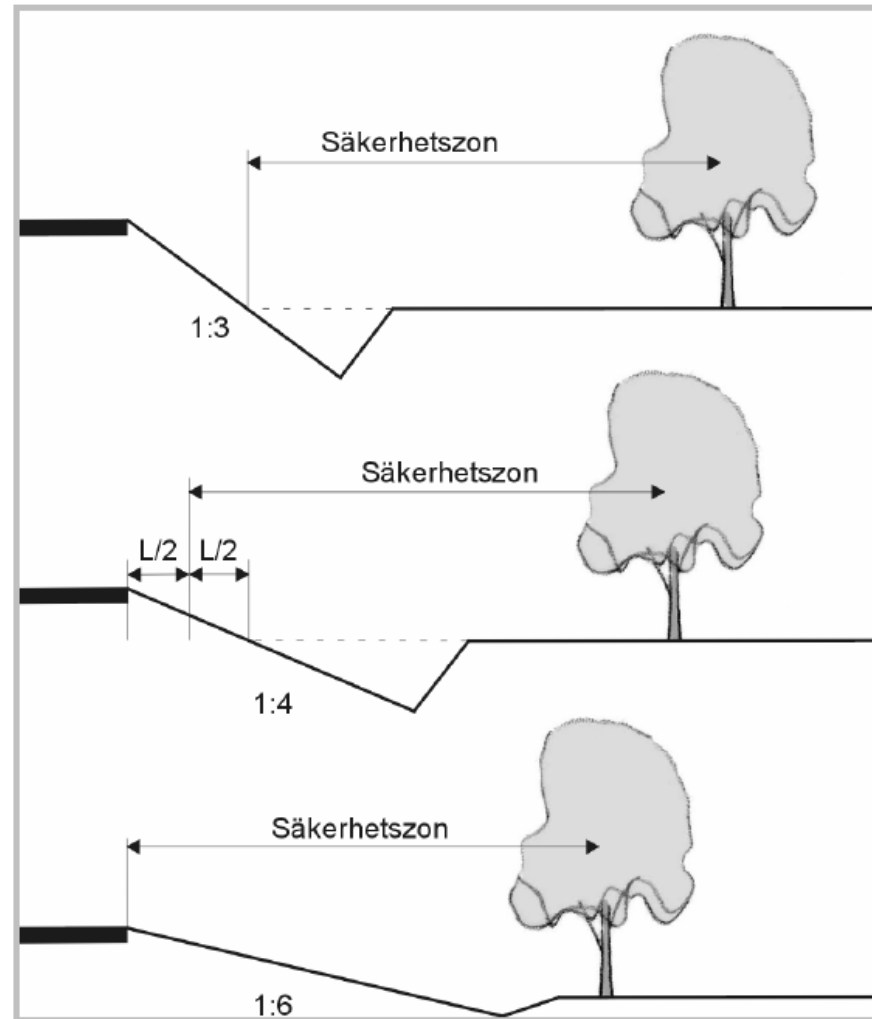
## Safety zone

(high standard  
radius  $\geq 1000$  m)

70 km/h > 7 m

90 km/h > 9 m

110 km/h > 11 m

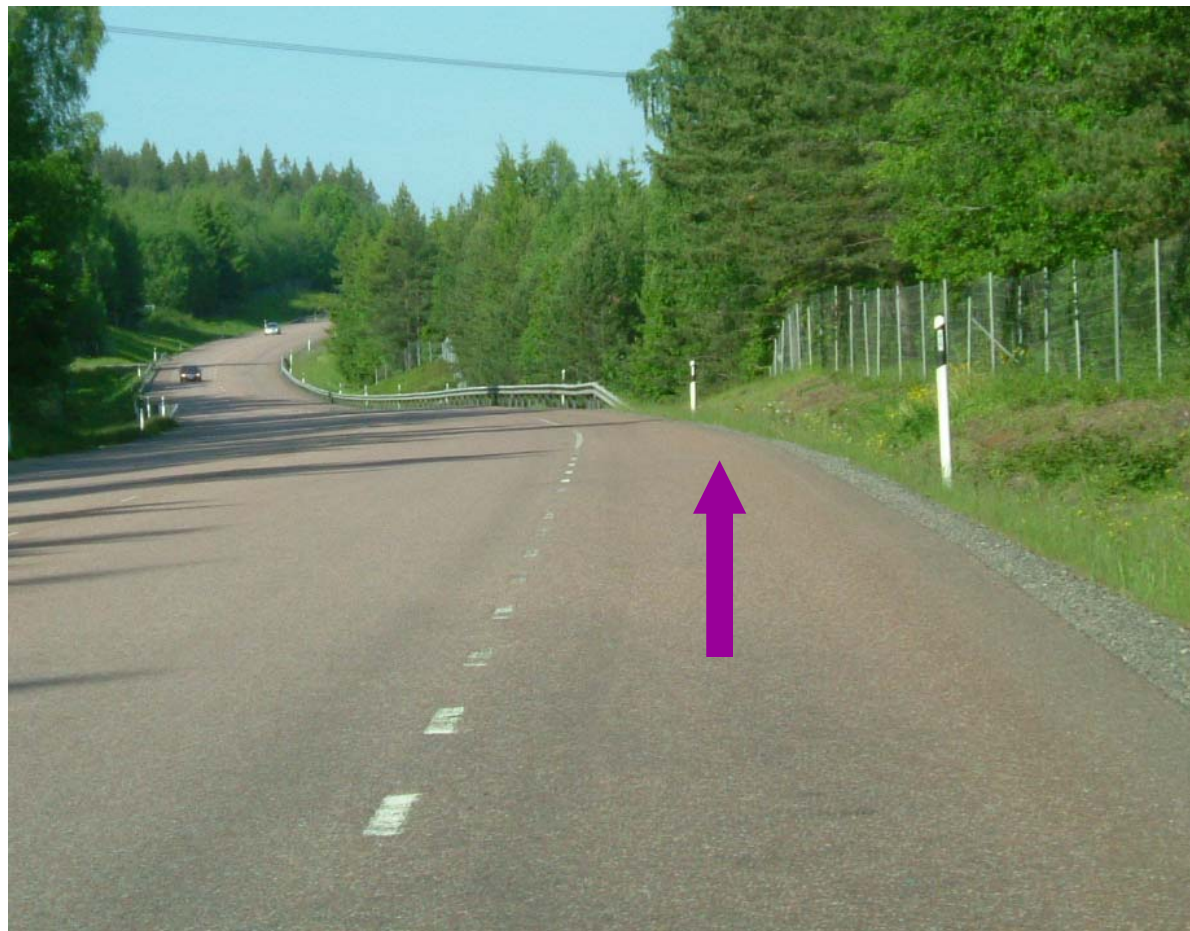




The road side barrier must be founded in such a way that a driver not will get behind it!

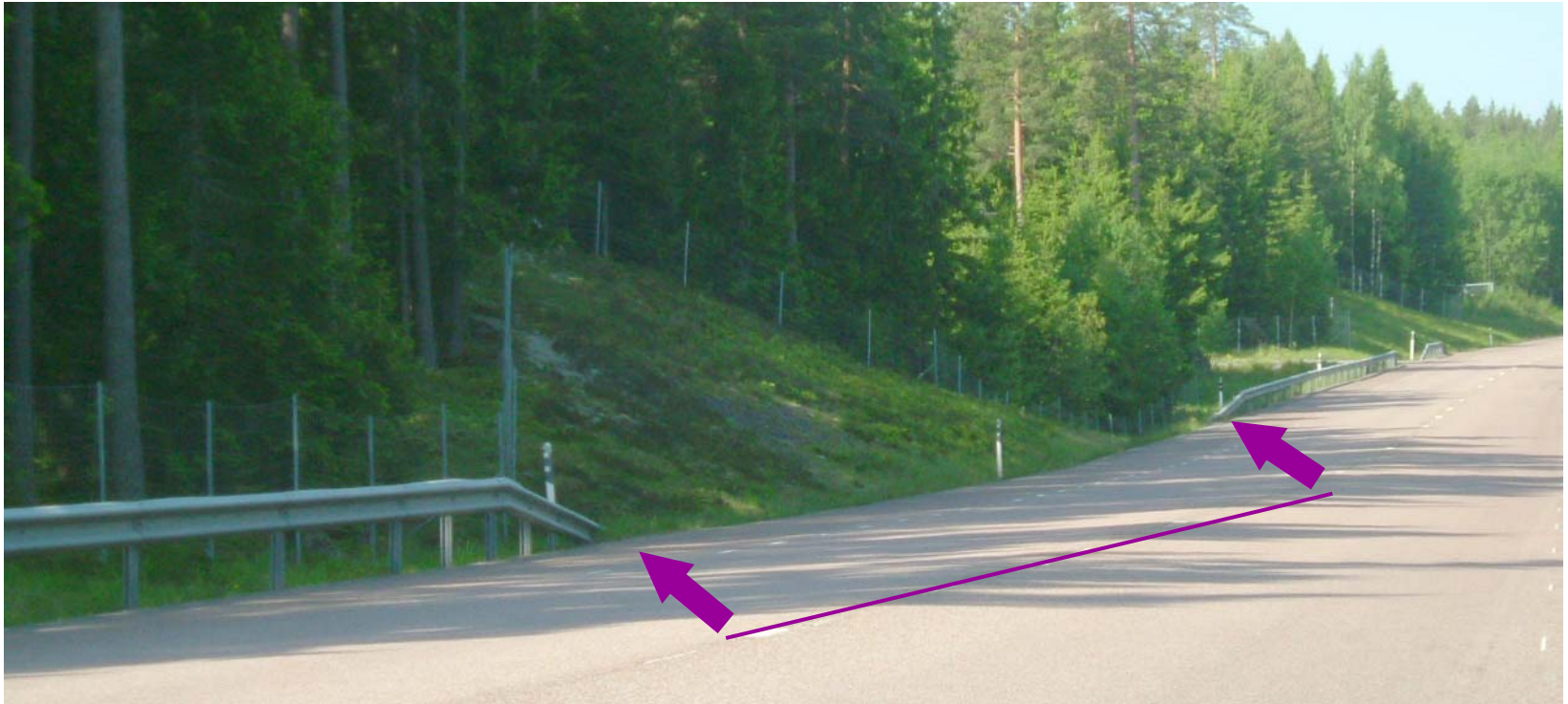


The road side barrier must not leave a window open.





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Do not leave a short gap in the road side barrier!



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A rock cutting is as hazardous as a steep slope!



- Separated laned in different directions
- Non-hazardous road-side areas
- Speed management





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