

**Table 4.1: Clear zone distances from edge of through travelled way on straights<sup>(5)</sup>**

Batter slopes are described as x:1, being (Horizontal):(Vertical)

Design speed (km/h)	Design ADT <sup>(4)</sup>	Clear zone width (m)						
		Fill batter			Cut batter			
		6:1 to flat	4:1 to < 6:1	Steeper than 4:1 <sup>(2)</sup>	6:1 to flat	4:1 to < 6:1	4:1 to 3:1	Steeper than 3:1 <sup>(3)</sup>
≤ 60	< 750	3.0	3.0	<sup>(2)</sup>	3.0	3.0	3.0	<sup>(3)</sup>
	750 – 1500	3.5	4.5	<sup>(2)</sup>	3.5	3.5	3.5	<sup>(3)</sup>
	1501 – 6000	4.5	5.0	<sup>(2)</sup>	4.5	4.5	4.5	<sup>(3)</sup>
	> 6000	5.0	5.5	<sup>(2)</sup>	5.0	5.0	5.0	<sup>(3)</sup>
70 - 80	< 750	3.5	4.5	<sup>(2)</sup>	3.5	3.0	3.0	<sup>(3)</sup>
	750 – 1500	5.0	6.0	<sup>(2)</sup>	5.0	4.5	3.5	<sup>(3)</sup>
	1501 – 6000	5.5	8.0	<sup>(2)</sup>	5.5	5.0	4.5	<sup>(3)</sup>
	> 6000	6.5	8.5	<sup>(2)</sup>	6.5	6.0	5.0	<sup>(3)</sup>
90	< 750	4.5	5.5	<sup>(2)</sup>	3.5	3.5	3.0	<sup>(3)</sup>
	750 – 1500	5.5	7.5	<sup>(2)</sup>	5.5	5.0	3.5	<sup>(3)</sup>
	1501 – 6000	6.5	9.0	<sup>(2)</sup>	6.5	5.5	5.0	<sup>(3)</sup>
	> 6000	7.5	10.0 <sup>(1)</sup>	<sup>(2)</sup>	7.5	6.5	5.5	<sup>(3)</sup>
100	< 750	5.5	7.5	<sup>(2)</sup>	5.0	4.5	3.5	<sup>(3)</sup>
	750 – 1500	7.5	10.0 <sup>(1)</sup>	<sup>(2)</sup>	6.5	5.5	4.5	<sup>(3)</sup>
	1501 – 6000	9.0	12.0 <sup>(1)</sup>	<sup>(2)</sup>	8.0	6.5	5.5	<sup>(3)</sup>
	> 6000	10.0 <sup>(1)</sup>	13.5 <sup>(1)</sup>	<sup>(2)</sup>	8.5	8.0	6.5	<sup>(3)</sup>
110	< 750	6.0	8.0	<sup>(2)</sup>	5.0	5.0	3.5	<sup>(3)</sup>
	750 – 1500	8.0	11.0 <sup>(1)</sup>	<sup>(2)</sup>	6.5	6.0	5.0	<sup>(3)</sup>
	1501 – 6000	10.0 <sup>(1)</sup>	13.0 <sup>(1)</sup>	<sup>(2)</sup>	8.5	7.5	6.0	<sup>(3)</sup>
	> 6000	10.5 <sup>(1)</sup>	14.0 <sup>(1)</sup>	<sup>(2)</sup>	9.0	9.0	7.5	<sup>(3)</sup>

1. Where a site specific investigation indicates a high probability of continuing crashes, or such occurrences are indicated by crash history, the designer may provide clear zone distances greater than the clear zone shown in Table 4.1. A jurisdiction may limit clear zones to 9 m for practicality and to provide a consistent roadway template if previous experience with similar projects or designs indicates satisfactory performance.

2. For fill batters steeper than 4:1 the batter width shall be treated as non-recoverable and not be considered as part of the clear zone. If a clear zone is to be provided then:

- Providing that the embankment is not considered hazardous (refer to Sections 4.3.3 – 4.3.4) then the clear zone can be provided by the recoverable area at the top and bottom of the embankment. If this summation is equal to or greater than the required clear zone for the appropriate slopes of these areas then the clear zone is satisfied.
- If the embankment is hazardous, then unless the embankment is offset a distance equal to the clear zone for the appropriate slope from the edge of the travelled way to the embankment it is within the clear zone.

3. No clear zone widths are provided for cut batters steeper than 3:1. Therefore unless an appropriate clear zone is provided prior to the cut batter it shall be treated as being within the clear zone. The cut batter and any objects contained on it shall be assessed in accordance with Section 4.5.5.

4. The design ADT in the table is the average daily traffic volume in both directions and in all lanes, other than for divided roads where it is the total traffic in all lanes in one direction. In selecting the traffic to be used for the assessment of the clear zone a 20 year timeframe and allowance for growth over this period shall be considered.

5. Where the road is curved the values in Table 4.1 should be adjusted by the curve correction factors in Table 4.2.

Source: Adapted from AASHTO (2006).