

DESIGN SPEED	DESIGN ADT	FORESLOPES			BACKSLOPES		
		6:1 or Flatter	5:1 to 4:1	3:1	3:1	5:1 to 4:1	6:1 or Flatter
40 mph or less	Under 750 ^c	7-10	7-10	b	7-10	7-10	7-10
	750-1500	10-12	12-14	b	10-12	10-12	10-12
	1500-6000	12-14	14-16	b	12-14	12-14	12-14
	Over 6000	14-16	16-18	b	14-16	14-16	14-16
45-50 mph	Under 750 ^c	10-12	12-14	b	8-10	8-10	10-12
	750-1500	14-16	16-20	b	10-12	12-14	14-16
	1500-6000	16-18	20-26	b	12-14	14-16	16-18
	Over 6000	20-22	24-28	b	14-16	18-20	20-22
55 mph	Under 750 ^c	12-14	14-18	b	8-10	10-12	10-12
	750-1500	16-18	20-24	b	10-12	14-16	16-18
	1500-6000	20-22	24-30	b	14-16	16-18	20-22
	Over 6000	22-24	26-32 ^a	b	16-18	20-22	22-24
60 mph	Under 750 ^c	16-18	20-24	b	10-12	12-14	14-16
	750-1500	20-24	26-32 ^a	b	12-14	16-18	20-22
	1500-6000	26-30	32-40 ^a	b	14-18	18-22	24-26
	Over 6000	30-32 ^a	36-44 ^a	b	20-22	24-26	26-28
65-70 ^d mph	Under 750 ^c	18-20	20-26	b	10-12	14-16	14-16
	750-1500	24-26	28-36 ^a	b	12-16	18-20	20-22
	1500-6000	28-32 ^a	34-42 ^a	b	16-20	22-24	26-28
	Over 6000	30-34 ^a	38-46 ^a	b	22-24	26-30	28-30

Source: AASHTO *Roadside Design Guide*, Chapter 3.

TABLE A-2-1

CLEAR ZONE DISTANCES (IN FEET FROM EDGE OF DRIVING LANE)*

- a. When a site specific investigation indicates a high probability of continuing crashes, or when such occurrences are indicated by crash history, the designer may provide clear zone distances greater than the clear zone shown in Table A-2-1. Clear zones may be limited to 30 feet for practicality and to provide a consistent roadway template if previous experience with similar projects or designs indicates satisfactory performance.
- b. Because recovery is less likely on the unshielded, traversable 3:1 fill slopes, fixed objects should not be present in the vicinity of the toe of these slopes. Recovery of high speed vehicles that encroach beyond the edge of shoulder may be expected to occur beyond the toe of slope. Determination of the width of the recovery area at the toe of slope should take into consideration right of way availability, environmental concerns, economic factors, safety needs, and crash histories. Also, the distance between the edge of the travel lane and the beginning of the 3:1 slope should influence the recovery area provided at the toe of slope. While the application may be limited by several factors, the fill slope parameters which may enter into determining a maximum desirable recovery area are illustrated in FIGURE A-2-4. A 10 foot recovery area at the toe of slope should be provided for all traversable, non-recoverable fill slopes.
- c. For roadways with low volumes it may not be practical to apply even the minimum values found in Table A-2-1. Refer to Chapter 12 for additional considerations for low volume roadways and Chapter 10 for additional guidance for urban applications in AASHTO *Roadside Design Guide*.
- d. When design speeds are greater than the values provided, the designer may provide clear zone distances greater than those shown in Table A-2-1.

* Rev. 1/16