

MARKINGS TECHNICAL COMMITTEE SPONSOR BALLOT

APPROVED BY NCUTCD COUNCIL, JUNE 22, 2007

**NEW SECTION 3A.06 – DEFINITIONS AND SECTION 3B.05 – OTHER WHITE
LONGITUDINAL PAVEMENT MARKINGS, INCLUDING CHANGES TO FIGURES
3B-8, 3B-9, AND 3B-10.**

Section 3A.06 Definitions Relating to Pavement Markings

Standard:

The following technical terms, when used in Part 3, shall be defined as follows:

1. Neutral area: The area associated with an entrance or exit ramp that is between the channelizing lines (See Figures 3B-8, 3B-9, and 3B-10).
2. Physical gore: An area on the ramp where a non-traversable road surface hinders road users from crossing from a ramp to the through lanes or vice versa (See Figures 3B-8, 3B-9, and 3B-10).
3. Theoretical gore: The tip of the generally triangular-shaped neutral area where the channelizing line for the ramp separates from the channelizing line for the adjacent through lane.

Section 3B.05 Other White Longitudinal Pavement Markings

Standard:

A channelizing line shall be a wide or double solid white line.

Option:

Channelizing lines may be used to form channelizing islands where traffic traveling in the same direction is permitted on both sides of the island.

Standard:

Other pavement markings in the channelizing island area shall be white.

Guidance:

Where used to mark the edge of a right-turn channelization island, the width of the line should be at least 200 mm (8 in) wide.

Support:

Examples of channelizing line applications on freeways are shown in Figures 3B-8, 3B-9, and 3B-13.

Channelizing lines at freeway exit ramps as shown in Figure 3B-8 define the neutral area, direct exiting traffic at the proper angle for smooth divergence from the main lanes into the ramp, and reduce the probability of colliding with objects adjacent to the roadway.

Channelizing lines at entrance ramps as shown in Figure 3B-9 promote **reasonably safe and** efficient merging with the through traffic.

Standard:

For exit and entrance ramps, channelizing lines shall be placed on both ~~along the sides~~ of the neutral area. ~~adjacent to the through traffic lane and the ramp lane. With a parallel deceleration lane, a lane line shall be extended from the beginning of the channelizing line upstream for a distance of one-half the length of the full-width deceleration lane as shown in Figures 3B-8.~~

For exit ramps, the channelizing lines for the ramp and through lanes shall begin at the theoretical gore and extend downstream on each side of the neutral area to the physical gore.

For entrance ramps, the channelizing line for the ramp and through lanes shall begin at the physical gore and extend downstream on each side of the neutral area to the theoretical gore.

Guidance:

For parallel exit ramps, as shown in Figure 3B-8a, a dotted line should extend from the end of the deceleration taper to the beginning of the channelizing lines.

Option:

For parallel exit ramps as shown in Figure 3B-8a, a dotted line may extend from the beginning of the deceleration taper to the end of the deceleration taper.

For tapered exit ramps, as shown in Figure 3B-8b, a dotted line may extend from the beginning of the deceleration taper to the theoretical gore.

A combination of a broken line and a dotted line may be used for long parallel exit ramps similar to a lane drop application(see Figure 3B-10).

Standard:

For parallel entrance ramps, as shown in Figure 3B-9a, a dotted line shall extend from the theoretical gore at least one-half the distance to the beginning of the acceleration taper.

Option:

The dotted line on parallel entrance ramps may be followed by one or more lane reduction arrows (Figure 3B-9a and 3B-21f).

Option:

For tapered entrance ramps, as shown in Figure 3B-9b, a dotted line may extend from the end of the channelizing line at the theoretical gore to the end of the acceleration taper.

Standard:

For an auxiliary lane between an entrance and exit ramp, a dotted line or lane drop marking shall extend from the end of the entrance ramp theoretical gore to the beginning of the exit ramp theoretical gore as shown in Figure 3B-8c.

Option:

A broken line may be used between the dotted line at the entrance ramp and the dotted line at the exit ramp for a long auxiliary lane. Figure 3B-10 illustrates the exit ramp portion of such an auxiliary lane application.

White chevron markings may be placed in the neutral area for special emphasis as shown in Figure 3B-8.

Guidance:

~~— For entrance ramps, a channelizing line should be placed along the side of the neutral area adjacent to the ramp lane.~~

~~— For entrance ramps with a parallel acceleration lane, a lane line should be extended from the end of the channelizing line for a distance of one-half the length of the full-width acceleration lane as shown in Figure 3B-9.~~

Option:

~~— For entrance ramps with a tapered acceleration lane, lane line markings may be placed to extend the channelizing line, but not beyond a point where the tapered lane meets the near side of the through-traffic lane as shown in Figure 3B-9.~~

~~Lane drop markings as shown in Figure 3B-10 may be used in advance of lane drops at exit ramps to distinguish a lane drop from a normal exit ramp or from an auxiliary lane. The lane drop marking may consist of a wide, white dotted line with line segments 0.9 m (3 ft) in length separated by 2.7 m (9 ft) gaps.~~

Standard:

Dotted line markings as shown in Figure 3B-10 shall be used in advance of lane drops at exit ramps to distinguish a lane drop from a normal exit ramp.

Guidance:

If used, lane drop markings should begin at the first sign indicating an EXIT ONLY lane or no less than 800 m (0.5 mi) in advance of the theoretical gore ~~point~~.

Option:

Where lane changes might cause conflicts, a wide solid white channelizing line may extend upstream from the theoretical gore ~~point~~.