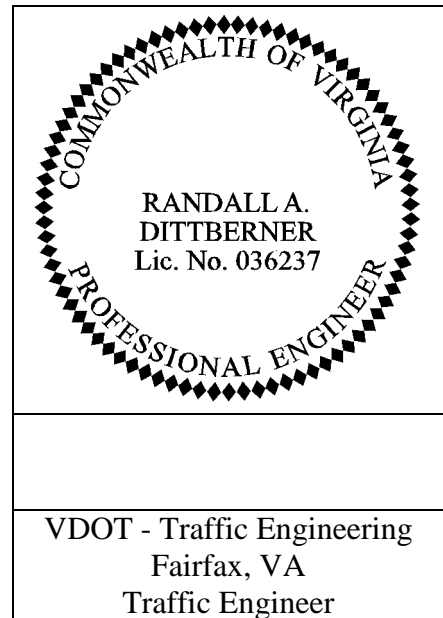
 Northern Region Traffic Engineering Practice	No. 303.1
<p align="center">Hatch Marks on Non-Limited-Access Roadways</p>	April 17, 2015

Hatch marks, known in the MUTCD as crosshatch markings, are discussed in Sec. 3B.24 of the Virginia Supplement to the MUTCD. Several figures in the MUTCD and the Supplement illustrate examples of their use.

Hatch marks in the MUTCD are always optional; there is no situation in which hatch marks are required by a standard or recommended by a guidance statement.

This document provides additional information about the use of hatch marks in the Northern Region.

This document applies to roadways other than limited-access roadways. It applies to white hatch marks at the right edge of a traveled way, white chevron markings between two flows of traffic in the same direction, and yellow hatch marks at the left edge of a traveled way or in a median.



GENERAL CONSIDERATIONS

Hatch marks are valuable traffic control devices in some situations, but they are expensive to install because each mark must be laid out by hand and installed using labor-intensive portable equipment. Observations in the Northern Region have shown that in many cases, reducing or eliminating hatch marks has not had any observable impact on traffic operations or safety.

Furthermore, hatch marks do not convey any legal meaning. Traveling on a hatched area is not prohibited by the Code of Virginia, and Fairfax County Police have confirmed that parking on a hatched area is permissible. The MUTCD and the Virginia Supplement indicate that the purpose of hatch marks is only to “discourage” travel in certain areas, not to prohibit travel. Longitudinal pavement markings alone convey these same legal meanings.

Excessive hatch marks can also create operational problems, such as the following:

- Some left-turning drivers may be deterred from using median-hatched areas to wait for a gap in opposing traffic, even though this is often the safest part of the roadway because of the reduced threat of rear-end collisions and the improved sight lines.

- Median hatch marks through intersections or across driveways sometimes lead drivers to think that left-turns across the hatched areas are prohibited, even though this is not legally the case. The confusion can result in unexpected driving behavior and conflicts.
- Some bicyclists may avoid using hatched areas even where these areas are not unsafe.
- Hatch marks to the right of the traveled way can create confusion about whether parking is permitted.

Pavement marking designers should consider on a site-by-site basis whether hatch marks are needed. For instance, on a roadway without a demonstrated traffic safety or operational problem, designers should consider omitting hatch marks.

Just because pavement is not intended to be used is not enough reason to specify hatch marks. Designers should be able to identify a particular reason, such as a potential safety concern, change in alignment, or possible driver confusion before choosing to use hatch marks.

Designers should consider pavement marking alternatives that avoid or reduce the need for hatch marks. For instance, it may be possible to reduce or eliminate median hatch marks by extending left-turn lanes or creating a two-way left-turn lane.

Hatch marks should not be used where the area to be hatched is less than 6' wide, except:

- *where there are localized concerns such as at intersections or driveway crossings*
- *in a buffer area adjacent to a buffered bicycle lane*

Narrow areas are unlikely to be mistaken by drivers as legitimate areas for travel.

LAYOUT

Where hatch marks are determined to be necessary, they should be spaced no closer than 20' apart.

Where hatch marks are determined to be necessary over a long distance, a series of three hatch marks should be placed at each end of the area to be hatched, and additional patterns of three hatch marks should be spaced at intervals of about 300 feet. This distance may be adjusted based on site conditions, for instance, if significant horizontal or vertical curvature reduces drivers' visibility of the road ahead.

Additional information about width and configuration of hatch marks can be found in Sec. 3B.24 of the Virginia Supplement to the MUTCD.

