ADMINISTRATIVE INFORMATION: This Office of Traffic Safety & Mobility Instruction (TSMI) is effective immediately.

PURPOSE: This TSMI is intended to provide a hierarchy for markings used in the passing section of a climbing lane on a State highway.

BACKGROUND: In 2007, New York State adopted the 2003 Edition of the National Manual on Uniform Traffic Control Devices (MUTCD) and also developed a State Supplement to the MUTCD. Prior to the adoption, the 2005 New York State MUTCD allowed markings for climbing lanes to consist of normal broken white lines, white partial barrier lines, and double broken white lines (see Figures 263-13 through Figures 263-15). The conversion to the National MUTCD eliminated the latter two choices.

The 2009 Edition of the MUTCD allows for the use of normal broken white lines to denote the separation of a through lane from an auxiliary climbing lane. The MUTCD also provides an option that utilizes a normal solid white line.

Currently, the National Committee on Uniform Traffic Control Devices (NCUTCD) has a joint task force considering a revision of the standards for signs and markings used in the layout of passing lanes which includes a climbing lane. A proposal has also been submitted by the NCUTCD to NCHRP to recommend research on this topic. Any findings from the task force or research project will not be available for several years. In the interim, this TSMI serves as the Department’s official guidance on the topic.

TECHNICAL INFORMATION:

The MUTCD infers that markings for a climbing lane consist of a normal broken white line. This standard can be found in paragraphs 01 and 05 of Section 3B.04 White Lane Line Pavement Markings and Warrants.

01 When used, lane line pavement markings delineating the separation of traffic lanes that have the same direction of travel shall be white.

05 Except as provided in Paragraph 6, where crossing the lane line markings with care is permitted, the lane line markings shall consist of a normal broken white line.

There are instances where an agency or jurisdiction may opt for an alternative marking to separate the through lane from the auxiliary climbing lane because lane changes are discouraged or prohibited due to geometric conditions involving horizontal and/or vertical curves. This would likely occur only on a non-freeway type climbing lane where the geometrics may be less desirable.
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If lane changing is discouraged, then Paragraph 20 of Section 3B.04 specifies:

20  Where crossing the lane line markings is discouraged, the lane line markings shall consist of a normal or wide solid white line.

Paragraphs 28 and 29 of Section 3B.04 provide such an option for a climbing lane:

28  Solid white lane line markings may be used to separate through traffic lanes from auxiliary lanes, such as an added uphill truck lane or a preferential lane (see Section 3D.02)

29  Wide solid lane line markings may be used for greater emphasis.

If lane changing is prohibited, then Paragraphs 30 of Section 3B.04 specifies:

30  Where crossing the lane line markings is prohibited, the lane line markings shall consist of a solid double white line (see Figure 3B-12).

The NYSDOT Customary Standard Sheets (685-01 Pavement Markings, Sheet 1 of 9) requires that the width of normal pavement marking lines on freeways and expressways shall be 6 inches instead of 4 inches.

Normal broken white lines should be used to separate the through lane from the auxiliary climbing lane in conjunction with signs specified in Section 2B.31 and 2C.42 of the MUTCD and the New York State Supplement.

For climbing lanes, Paragraph 04 of Section 2B.31 recommends that Section 3B.09 Lane-Reduction Transition Markings and Figure 3B-14 Examples of Applications of Lane-Reduction Transition Markings be consulted:

04  Appropriate pavement markings should be installed at both the upstream and downstream ends of the extra lane (see Section 3B.09 and Figure 3B-14).

SUMMARY OF POLICY

The above information is a compilation of various sources and is summarized as follows:

- Normal broken white lines should be used to separate the through lane from the auxiliary climbing lane in conjunction with signs specified in Section 2B.31 and 2C.42 of the MUTCD and the New York State Supplement

- Appropriate pavement markings should be installed at both the upstream and downstream ends of the extra lane per Section 3B.09 and Figure 3B-14.
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- Solid white lane line markings may be used to separate through traffic lanes from auxiliary lanes in place of normal broken white lines where it is determined that crossing the lane line markings should be discouraged.

- Other methods of climbing lane pavement markings (i.e.; partial barrier lines, double broken white lines) shall no longer be used and should be discontinued at the next available re-striping cycle.

REFERENCES:
http://mutcd.fhwa.dot.gov/

17 NYCRR Chapter V (New York Supplement), March 2011

17 NYCRR Chapter V (New York State MUTCD), Figures 263-13 through Figures 263-15, 2005

US Customary Standard Sheets, 685-01 Pavement Marking Details (Sheet 1 of 9), May 2013

CONTACT: Direct questions regarding this issuance to the Office of Traffic Safety & Mobility, Operations Bureau at (518) 457-1793.