ATTACHMENT NO. 6

Item No. 16B-MKG-01

TECHNICAL COMMITTEE: Markings Committee
ITEM NUMBER: 16B-MKG-01
TOPIC: Channelization Devices Used for Emphasis of Pavement Marking Patterns

TASK FORCE: Jim Kellenberger (Chair), Tom Aber, and Mike Hare

ORIGIN OF REQUEST: Industry presentation at January 6, 2016 MTC meeting suggesting that NCUTCD review Chapter 3H in regards to the color of permanent devices.

AFFECTED SECTIONS OF MUTCD: Chapter 3H Channelization Devices Used for Emphasis of Pavement Marking Patterns

DEVELOPMENT HISTORY:
- Approved by Technical Committee: 06/09/2016
- Distributed as sponsor ballot in Summer 2016
- Approved by Technical Committee following sponsor comments: 01/05/2017
- Approved by NCUDTC Council: 01/06/2017

This is a proposal for recommended changes to the MUTCD that has been developed by a technical committee of the NCUTCD. The NCUTCD is distributing it to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the proposal prior to NCUTCD council consideration. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, or options. If approved by the NCUTCD Council, the recommended changes will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only through the federal rulemaking process.

Summary: There is a need for a new/expanding category or classification within the MUTCD as there is currently confusion and disagreement within five MUTCD sections, in regards to flexible delineators/channelizers.

In Section 3H.01, the color of the devices used outside of temporary traffic control zones (TTCZ) shall be either orange or the same color as the pavement markings they supplement. As a short term fix for 3H.01, it is proposed that the color orange should not be an option except for use as temporary traffic control. Any permanent device would have to have the same color as the pavement marking that it supplements, or for which it is a substitution. Long term, subsections within Chapter 3H for permanently mounted channelizer posts with emphasis on
color, dimensions, placement and reflectivity should be created. As a beginning, Section 3H.02 Tubular Markers is being proposed.

**Recommended Changes to the MUTCD:**

The proposed changes to Section 3H CHANNELIZING DEVICES USED FOR EMPHASIS OF PAVEMENT MARKING PATTERNS, are shown in the following pages. Additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in red strikethrough. Changes previously approved by the NCUTCD Council (but not yet adopted by the FHWA) are shown in green double underline for additions and green strikethroughs for deletions.
Proposed New Language for Chapter 3H. of 2009 MUTCD including the 2012 Council approved Changes shown in green

CHAPTER 3H. CHANNELIZING DEVICES USED FOR EMPHASIS OF PAVEMENT MARKING PATTERNS

Section 3H.01 Channelizing Devices—General
Option:
01 Channelizing devices used to emphasize pavement markings, as described in Sections 6F.63, 6F.65, 6F.66, 6F.72 through 6F.73, and 6F.75, and as shown in Figure 6F-7 include such as cones, tubular markers, vertical panels, and drums, lane separators, and raised islands (Council 1/19/2012), and may be used for general traffic control purposes in permanent installations such as adding emphasis to reversible lane delineation, channelizing lines, or islands. Channelizing devices may also be used along a center line to preclude turns or along lane lines to preclude turns or along lane lanes to preclude lane changing, as determined by engineering judgment.

Support:
01a Although not defined as traffic control devices, lane separators and raised islands can be used for channelizing purposes. (Council 1/19/2012)

Standard:
02 Except for color, the design of channelizing devices, including but not limited to retroreflectivity, minimum dimensions, and mounting height, shall comply with the provisions of Chapter 6F except for color.
03 The color of the channelizing devices used outside of temporary traffic control zones shall be either orange or the same color as the pavement marking that they supplement, or for which they are substituted.
04 For nighttime use, channelizing devices shall be retroreflective (as described in Part 6) or internally illuminated. On channelizing devices used outside of temporary traffic control zones, retroreflective sheeting or bands shall be white if the devices separate traffic flows in the same direction and shall be yellow if the devices separate traffic flows in the opposite direction or are placed along the left hand edge line of a one-way roadway or ramp

Guidance:
05 Channelizing devices should be kept clean and bright to maximize target value.
04 The color of the channelizing devices used outside of temporary traffic control zones should be the same color as the pavement marking that they supplement-emphasize.
05 On channelizing devices used outside of temporary traffic control zones, retroreflective sheeting or bands on channelizing devices should be white if the devices separate traffic flows in the same direction and should be yellow if the devices separate traffic flows in the opposite direction or are placed along the left hand edge line of a one-way roadway or ramp.

Section 3H.02 Tubular Markers
Standard:
01 Tubular markers shall be retroreflectORIZED AND made with a material that can be struck without causing damage to the impacting vehicle. Tubular markers

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shall be a minimum of 28 inches in height and shall be a minimum of 2 inches wide facing road users.

Guidance:

02 Tubular markers should be the same color as the pavement marking they supplement. Retroreflective material should be the same color as the tubular marker.

03 Tubular markers should be affixed to the pavement or other surface either directly or by means of an attachment system that is affixed to the pavement or other surface. Tubular markers should normally be spaced no greater than N as cited in Section 3B.11.

Option:

03 Other spacing may be used based on engineering judgment.