ATTACHMENT 4g

PART 3. MARKINGS CHAPTER 3G. ISLANDS

Markings Technical Committee Recommendations Approved by NCUTCD Council January 10 & 12, 2008

Additional Changes Approved by NCUTCD Council June 21, 2008

Yellow highlight indicates recommended changes to the NPA.

Section 3G.01 General

3G.01 Approved by NC with revisions to NPA. Approved revision highlighted in yellow.

Support:

Chapter 3G addresses the characteristics of islands as traffic-control devices. Criteria for the design of islands are set forth in "A Policy on Geometric Design of Highways and Streets" (see Section 1A.11).

Standard:

An island for traffic control purposes shall be the defined area between traffic lanes for control of vehicular movements, <u>for-toll-collection</u>, or for pedestrian refuge. Within an intersection area, a median or an outer separation shall be an island.

Option:

An island may be designated by <u>curbs</u>, <u>pavement edges</u>, pavement markings, channelizing devices, eurbs, pavement edges, or other devices.

Section 3G.02 Approach-End Treatment

Guidance:

The ends of islands first approached by traffic should be preceded by a gradually diverging longitudinal pavement markings on the roadway surface, to guide vehicles into desired paths of travel along the island edge.

Option Support:

<u>The neutral area between approach-end markings that can be readily crossed even</u> at considerable speed <u>may sometimes</u> contains slightly raised (usually less than 25 mm (1 in) high) sections of coarse aggregate or other suitable materials to create rumble sections that provide increased visibility of the marked areas and that produce an audible warning to road users traveling across them. For additional discouragement to driving in the neutral area, bars or buttons projecting 25 to 75 mm (1 to 3 in) above the pavement surface are sometimes placed in the neutral area. These bars or buttons are designed so that any wheel encroachment within the area will be obvious to the vehicle operator, but will result in only minimal effects on control of the vehicle. Such bars or buttons are sometimes preceded by rumble sections or their height is gradually increased as approached by traffic. Guidance:

3G.02 Approved by NC without revisions to NPA When raised bars or buttons are used in these neutral areas, they should be marked with white or yellow retroreflective materials, as determined by the direction or directions of travel they separate. relocated from Section 3G.03

Standard:

Rumble strips or other <u>Channelizing</u> devices, when used in advance of islands having raised curbs, shall not be placed in such a manner as to constitute an unexpected obstacle.

Guidance:

Bars or buttons should not project more than 25 to 75 mm (1 to 3 in) above the pavement surface and should be designed so that any wheel encroachment within the area will be obvious to the vehicle operator, but will not result in loss of control of the vehicle. incorporated into the above Support paragraph

Option:

Bars or buttons may be preceded by rumble sections, or their height may be gradually increased as approached by traffic. incorporated into the above Support paragraph

Pavement markings may be used with raised bars to better designate the island area.

Section 3G.03 Island Marking Application

Standard:

Markings, as related to islands, shall consist only of pavement and curb markings, object markers, <u>channelizing devices</u>, and delineators.

Guidance:

<u>Unless engineering judgment determines that there is not a need</u> on the approach to <u>a particular</u> islands, the triangular neutral area in advance of the <u>upstream</u> end of the island <u>shall should</u> include pavement markings as described in Section 3B.10.

Option:

As indicated in Section 3G.02, rumble sections, or other similar traffic control designs which contrast with the pavement surface, may also be applied in the triangular neutral area in advance of the end of an island.

Section 3G.04 Island Marking Colors

Guidance:

Islands outlined by curbs or pavement markings should be marked with retroreflective white or yellow material as determined by the direction or directions of travel they separate (see Section 3A.04).

The retroreflective area should be of sufficient length to denote the general alignment of the edge of the island along which vehicles travel, including the approach nose, when viewed from the approach to the island.

Option:

On long islands, curb retroreflection may be discontinued such that it does not extend for the entire length of the curb, especially if the island is illuminated or marked with delineators or edge lines.

3G.04 Approved by NC without revisions to NPA.

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revisions to

| 3G.05 Approved by NC without revisions to NPA. | Section 3G.05 Island Object Markers |
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| | Option: Object markers <u>(see Chapter 2L)</u> may be installed alone or in combination with <u>other</u> signs (such as <u>KEEP RIGHT Keep Right</u> , <u>KEEP LEFT Keep Left</u> , double arrows, or guide signs) located within the island. |
| | Section 3G.06 Island Delineators |
| 3G.06 Approved by NC without revisions to NPA. | Standard: Delineators installed on islands shall be the same colors as the related edge lines except that, when facing wrong-way traffic, they shall be red (see Section 3D.03). Each roadway through an intersection shall be considered separately in positioning delineators to assure maximum effectiveness. |
| 3G.07 Approved by NC without revisions to NPA. | Section 3G.07 Pedestrian Islands and MediansSupport: Raised islands or medians of sufficient width that are placed in the center area of a street or highway can serve as a place of refuge for pedestrians who are attempting to cross at a midblock or intersection location. Center islands or medians allow pedestrians to find an adequate gap in one direction of traffic at a time, as the pedestrians are able to stop, if necessary, in the center island or median area and wait for an adequate gap in the other direction of traffic before crossing the second half of the street or highway. The minimum widths for refuge islands are specified in the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)" (see Section 1A.11).Placement of detectable warnings (see Section 3B.18) at the back of the curb line on curb ramps allows placement of the detectable warning behind depressed curbing. At cut-through islands or medians (see Figure 3G-1), detectable warnings can readily be placed such that they are even with or just behind the face of curb to increase the separation between the detectable warnings at the opposite sides of the island or median to better define the area of refuge. Increased separation also |

Document Comment Related to Approval of Indicated Text

Section 3G.01: The term "toll collection" should be removed from this section as toll collection booths are not considered as islands. This change was recommended by the NCUTCD Toll Road Task Force and approved by the Markings Technical Committee and the NCUTCD.

provides clearer information to pedestrians who have visual disabilities.