

Signals No. 2

CHAPTER 4D. TRAFFIC CONTROL SIGNAL FEATURES

Approved by NCUTCD Council, January 12, 2008

Section 4D.05 of the NPA proposes to change the use of 12” indications from Guidance to Standard under most conditions. The Signals Technical Committee, on a 34-1-0 vote, recommended that the use of 12” indications be retained as Guidance. Since this Guidance versus Standard determination will impact several other sections in Chapter 4D, the Signals Technical Committee presented this issue to the National Committee Council to determine their desire. The National Committee Council supported modifying the NPA proposed text to maintain the use of 12” indications as Guidance. The text changes are shown below. The Signals Technical Committee will continue the review of the remainder of Chapter 4D and incorporate revisions as needed to reflect this change.

The STC recommendation and National Committee Council actions at the January 2008 meeting on Chapter 4D are limited to the two items listed below. The recommended change to Section 4D.11 applies to the three Guidance lines before the shown lettered list. The lettered list and the remainder of Section 4D.11 are not included in the recommended change. The remainder of Chapter 4D will be reviewed and acted on at the June 2008 meeting.

Changes to the NPA text are shown in yellow highlight. Text in gray highlight provides reference locations in the NPA text comparison document.

Section 4D.05 Size of Vehicular Signal Indications

There shall be two nominal diameter sizes for vehicular signal ~~lenses~~ indications: 200 mm (8 in) and 300 mm (12 in).

Guidance:

Except as noted in the Option paragraph below, 300 mm (12 in) signal ~~lenses~~ indications shall ~~shall~~ should be used for all signal sections in all new signal faces, except that existing 200 mm (8 in) signal indications ~~shall~~ be ~~are~~ permitted to be retained for the remainder of their useful service life. [STC approved Page 854 – 39-41 with revisions]

The NPA includes new Guidance text concerning the number of signal faces recommended for an approach “if the posted or statutory speed limit or the 85th-percentile speed on an approach to a signalized location exceeds 60 km/h or exceeds 40 mph higher.” The STC, on a unanimous vote, recommends modifying this text to eliminate some possible confusion over which of the speeds – posted, statutory, or 85th percentile - should be used to determine if the Guidance is applicable to a given situation. It can be argued that, with the NPA proposed text, if any of these speeds exceeds 40 MPH, the specified number of signal faces should be provided. There are certainly many locations where the posted and/or statutory speed limit is 40 MPH but the 85th percentile is higher. As written, even a 40.1 MPH 85th percentile speed would trigger the Guidance condition.

A posted or statutory speed limit will be in multiples of five miles per hour. Therefore, a posted or statutory speed limit that “exceeds 40 MPH” is functionally equivalent to a speed limit that is “45 MPH or higher”. Therefore, by modifying the NPA proposed text as shown below, the situation

where an 85th percentile speed would trigger the Guidance condition while the posted or statutory would not is eliminated. The Signals Technical Committee presented this recommendation to the National Committee Council and the National Committee Council approved the recommendation.

Section 4D.11 Number of Signal Faces on an Approach

Guidance:

If the posted or statutory speed limit or the 85th-percentile speed on an approach to a signalized location exceeds ~~60~~ **is 70** km/h (**45 mph**) or ~~exceeds 40 mph~~ **higher**, signal faces should be provided (see Figure 4D-3) as follows: [STC approves Page 864 – Lines 6-7 with revisions]

- A. All primary (non-supplemental) signal faces for through traffic and any primary signal faces for exclusive turn lanes that are required by Sections 4D.17 through 4D.24 should be located overhead on the far side of the intersection.
- B. If there are two or more lanes for through traffic, a separate signal face should be provided for each through lane and they should be located approximately over the center of each through lane.
- C. Except for shared left-turn and right-turn signal faces, any primary signal face required by Sections 4D.17 through 4D.24 for an exclusive turn lane should be located approximately over the center of each exclusive lane.
- D. One or more supplemental pole-mounted or overhead signal faces on or near the near-right, far-right, near-left, and/or far-left corners of the intersection should be strongly considered to provide added visibility for approaching traffic that is traveling behind large vehicles.
- E. All signal faces on the approach should have backplates.