

markings in this figure are shown for illustrative purposes only.

j. *Notes for Figure 6H-10:* The FHWA moves item 4 in the OPTION statement to become a new OPTION item 11, and renumbers the other items accordingly for improved clarity. The FHWA also replaces item 4 (item 5 in the NPA) with the note regarding buffer space that was added to the figure in the NPA. The FHWA believes that buffer space is an important application that is often ignored, and placing the note in the notes as well as on the figure is appropriate. The FHWA also changes item 5 (item 6 in the NPA) from a GUIDANCE to a STANDARD to be consistent with Section 6E.05 Flagger Stations, and rewords the statement accordingly. The flagger and advance sign series are all moved farther upstream in the figure. Additional space is needed beyond the work area to allow the traffic in the wrong lane to return to their proper lane without conflicting with stopped vehicles in the opposite direction. The FHWA makes these changes in this final rule to address comments from the City of Charlotte, North Carolina, and a private citizen suggesting these changes to be consistent with other areas of the MUTCD.

k. *Notes for Figure 6H-11:* The FHWA removes item 2 of the STANDARD statement (from the 2000 MUTCD) because this Typical Application specifically does not involve the use of flaggers. Typical Application 10 covers the temporary traffic control zone applicable to this STANDARD, using flaggers. The FHWA received no comments regarding this change, and adopts this change in this final rule. The FHWA received two comments from the City of Charlotte, North Carolina, and a private citizen suggesting that the Type B flashing warning lights referenced in the OPTION should be changed to Type A for night work. The FHWA disagrees because there is no change from the 2000 MUTCD language elsewhere in Part 6 that would justify changing this note for Figure 6H-11.

l. *Notes for Figure 6H-12:* The FHWA adds to item 2 of the STANDARD statement that durations of red clearance intervals shall be adequate to clear the one-lane section of conflicting vehicles. Additionally, the FHWA adds a new item 5 to the STANDARD statement that safeguards shall be incorporated to avoid the possibility of conflicting signal indications at each end of the temporary traffic control zone. The FHWA proposed slightly different wording for item 5 in the NPA, however the FHWA modifies the wording based on a comment from a

traffic control device manufacturer in order to maintain consistency with Section 6F.80 Temporary Traffic Control Signals of the MUTCD. The FHWA renumbers the remaining items.

m. *Notes for Figure 6H-13:* The FHWA modifies item 2 of the STANDARD statement to indicate that a flagger or uniformed law enforcement officer shall be used during a temporary road closure. Additionally, the FHWA removes item 3 of the OPTION statement (as numbered in the 2000 MUTCD) because it is not applicable. The FHWA also adds a new item 3 as a GUIDANCE statement, which states that the law enforcement officer, if used for this application, should follow the procedures of Sections 6E.04 Flagger Procedures and 6E.05 Regulatory Sign Authority. This is to encourage law enforcement officers to use proper flagging devices and procedures for a temporary road closure. The FHWA received editorial comments on these changes, which the FHWA incorporates as appropriate in this final rule.

n. *Notes for Figure 6H-14:* The FHWA adds a new item 6 under Flagging Method which states, "At night, flagger stations shall be illuminated, except in emergencies." In response to concerns about the orientation of the signal heads in the figure, the two overhead traffic signal heads in each direction have been relocated to show one post mounted head and one overhead mounted traffic signal head.

o. *Notes for Figure 6H-15:* The FHWA adds a new item 2 to the GUIDANCE statement that workers in the roadway should wear high-visibility safety apparel as described in Section 6D.03 Worker Safety Considerations. See discussion of items regarding vehicle hazard warning signals in paragraph a above. The FHWA received comments from ATSSA and the Virginia DOT suggesting that all workers exposed to traffic wear high visibility safety apparel, and the statement be strengthened to a STANDARD. The City of Charlotte, North Carolina, and a private citizen felt the new text is unnecessary because it is obvious that workers should wear high visibility safety apparel. The FHWA strengthens the existing GUIDANCE statement in 6D.03 to include that the high visibility safety apparel should meet the requirements of ISEA "American National Standard for High-Visibility Safety Apparel" (see Section 1A.11 Relation to Other Publications) and labeled as ANSI 107-1999 standard performance for Class 1, 2, or 3 risk exposure and that a competent person, designated by the employer to be responsible for the worker safety plan

within the activity area of the job site, should make the selection of the appropriate class of garment. While this is not a mandate as suggested in two of the docket comments, the emphasis is significantly heightened from the 2000 MUTCD and does allow employer flexibility on the use of the high visibility safety apparel to fit the conditions that exist. Accordingly, the FHWA adopts the text as proposed in the NPA.

p. *Notes for Figure 6H-17:* The FHWA adds a new item 3 to the STANDARD statement that if an arrow panel is used, it shall be used in the caution mode. The FHWA renumbers the remaining items. Additionally, the FHWA removes item 5 of the GUIDANCE statement (as numbered in the 2000 MUTCD) and moves it to the OPTION statement as part of item 9 that the use of a truck mounted attenuator is optional on either a shadow vehicle or a work vehicle. Several commenters suggested an optional truck mounted attenuator be retained on the work vehicle. The FHWA agrees and includes the optional attenuator in this final rule.

q. *Notes for Figure 6H-19:* The FHWA repeats the GUIDANCE items from the notes for Figure 6H-20 in the notes for Figure 6H-19 to address two comments from the City of Charlotte, North Carolina, and a private citizen suggesting that these items be added because they are applicable and necessary for proper use of the typical application. The FHWA agrees and makes the editorial change to add these notes in this final rule.

r. *Notes for Figure 6H-21:* (See discussion of items regarding vehicle hazard warning signals in paragraph a above.) The NCUTCD objected to the addition of "optional" to the flag tree in the figure, stating it should be guidance. Optional is consistent with the text in Section 6F.57 High-Level Warning Devices. Upgrading to a GUIDANCE condition goes beyond the scope of the NPA and would need to be addressed in a future rulemaking. Practitioners can choose to make its use recommended or mandatory in their jurisdictions if appropriate.

s. *Notes for Figure 6H-22:* In the NPA, the FHWA proposed removing item 5 (as numbered in the 2000 MUTCD) from the OPTION statement, regarding a right-turn island using channelizing devices. The FHWA received three comments from the NCUTCD, the City of Charlotte, North Carolina, and a private citizen opposed to this proposal, stating that the item provides useful information that is not evident from looking at the figure. The FHWA agrees and restores the text of the 2000