

MUTCD, with editorial changes. The NCUTCD, the Kansas DOT, the City of Charlotte, North Carolina, and a private citizen objected to the removal of "optional" from the arrow panel in the figure. In Section 6F.56 Arrow Panels, the FHWA adds a new GUIDANCE statement on the use of arrow panels for certain conditions such as multi-lane, high speed, high volume, limited sight distance or unexpected locations which applies in this typical application. Accordingly, the FHWA adopts the change deleting "optional" from the arrow panel in this final rule.

t. *Notes for Figure 6H-24:* The NCUTCD objected to the addition of "optional" for the buffer space and the NCUTCD, the Wisconsin DOT, the City of Charlotte, North Carolina, and a private citizen objected to the deletion of "optional" from the arrow panel in the figure. The FHWA agrees with the docket comments and withdraws these proposed changes.

u. *Notes for Figure 6H-25:* The NCUTCD objected to the term "optional" for the flag tree, stating that for work in intersections the high-level warning device is very useful and it should not be labeled as optional. 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. Based on additional comments from the City of Charlotte, North Carolina, and a private citizen, the FHWA relocates the southbound ROAD WORK AHEAD sign upstream and dimensions it with respect to the first channelizing device rather than the intersection.

v. *Notes for Figure 6H-26:* (See discussion of items regarding vehicle hazard warning signals in paragraph a above.) The NCUTCD objected to the term "optional" for the flag tree in the figure. Similar to figures 6H-21 and 24, "optional" is consistent with the text in Section 6F.57. Practitioners can choose to make its use recommended or mandatory in their jurisdictions, if appropriate.

w. *Notes for Figure 6H-27:* (See discussion of items regarding vehicle hazard warning signals in paragraph a above.) The NCUTCD objected to the term "optional" for the flag tree in the figure. Similar to Figures 6H-12, 24, and 26, "optional" is consistent with the text in Section 6F.57 High-Level Warning Devices (Flag Trees). Practitioners can choose to make its use recommended or mandatory in their

jurisdictions, if appropriate. In addition, consistent with Section 6E.05 Flagger Stations, the FHWA adds a new STANDARD statement which states, "At night, flagger stations shall be illuminated, except in emergencies."

x. *Notes for Figure 6H-28:* In the NPA, the FHWA proposed adding a new item 3 to the GUIDANCE statement that audible warnings should be considered where midblock closings and changed crosswalk areas cause inadequate communication to pedestrians who have visual disabilities. The FHWA received five comments, including comments from representatives of the blind community, opposing this new item, and suggesting rewording. The FHWA agrees and revises this item by changing the phrase "audible warning" to "audible information devices." Additionally, the FHWA adds the use of Type D 360-degree Steady-Burn warning lights to item 7 of the OPTION statement (as numbered in the NPA), to provide consistency with other sections in Part 6. There were no comments regarding this change, and the FHWA adopts this change. The FHWA received two comments from the NCUTCD and a traffic engineering consultant regarding item 1 in the STANDARD statement, suggesting that the wording be revised for clarity. The FHWA agrees and clarifies the statement in this final rule to indicate that when crosswalks or other pedestrian facilities are closed or relocated, the temporary facilities shall be detectable and shall include accessibility features consistent with features present in the existing pedestrian facility.

y. *Notes for Figure 6H-29:* (Refer to the discussion for Figure 6H-28 regarding item 3 of the GUIDANCE statement and item 1 of the STANDARD statement). The City of Charlotte, North Carolina, and a private citizen suggested that an additional advance pedestrian crossing sign is necessary for eastbound traffic on the east leg of the intersection. The FHWA agrees and changes the figure accordingly in this final rule.

z. *Notes for Figure 6H-30:* The FHWA received comments from the NCUTCD, the Wisconsin DOT, the City of Charlotte, North Carolina, and a private citizen objecting to the removal of the term "optional" for the arrow panels in the figure. The FHWA modifies the new GUIDANCE statement in Section 6F.56 Arrow Panels on the placement criteria for use of arrow panels which will allow optional use in some conditions. Accordingly, the FHWA withdraws this proposed deletion of "optional" from the figure for this Typical Application.

aa. *Notes for Figure 6H-31:* The FHWA received one comment from

Caltrans suggesting that the metric maximum spacing formula for channelizing markings, as stated in item 4 of the GUIDANCE, is not accurate, and needed to be revised to be accurate and to be consistent with Figure 6H-32. The FHWA agrees that this was a typographical error and revises this item in this final rule from "0.1 S km" to "0.1 S m." The FHWA also adds the text "in km/h (mph)" following "where S is the speed." The FHWA received three comments suggesting that items 7 and 9 be revised to better correlate with the illustration on Figure 6H-31. The FHWA agrees and revises the items accordingly in this final rule. In note 7, the words "Two Lane" are added before "Reverse Curve" in the first and second sentences of note 7. The FHWA deletes the first sentence in note 9. Similar to Figure 6H-30, the FHWA also received four docket comments objecting to the removal of the term "optional" for the arrow panels in the figure. For the reasons listed in paragraph z above, the FHWA withdraws the proposed deletion of "optional" from the Figure for this Typical Application.

bb. *Notes for Figure 6H-32:* In the NPA, the FHWA proposed adding a new item 2 to the STANDARD statement requiring at least one advance warning sign when paved shoulders having a width of 2.4 m (8 ft) or more are closed and that channelizing devices shall be used to close the shoulder in advance to delineate the beginning of the work space and direct motor vehicle traffic to remain within the traveled way. The FHWA received comments from the City of Charlotte, North Carolina, and a private citizen opposed to this new statement, indicating that this statement better relates to work exclusively on the shoulder. The FHWA agrees and changes this statement to a GUIDANCE and clarifies the statement to indicate that channelizing devices (rather than signs) should be used to close the shoulder in advance of the merging taper for a lane closure, to direct vehicular traffic to remain within the traveled way. The FHWA also adds a new item 4 under GUIDANCE regarding use of Reverse Curve signs rather than a Double Reverse Curve sign under certain conditions for consistency with GUIDANCE elsewhere in Part 6. The FHWA rennumbers the remaining items. One docket comment from the City of Charlotte, North Carolina, suggested that item 6 be clarified with respect to the start of temporary traffic control near railroad grade crossings where queues may extend through the crossing. The FHWA agrees and revises "transition area" to "merging taper." The FHWA