National Committee on
Uniform Traffic Control Devices

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Item Number: 26B-BIK-01

NCUTCD PROPOSAL FOR CHANGES TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

COMMITTEE / TASK FORCE:	Bicycle Technical Committee
ITEM NUMBER:	26B-BIK-01
TOPIC:	Bicycle Signal Signs
ORIGIN OF REQUEST:	Bicycle - Signals MCTF
AFFECTED SECTIONS OF MUTCD:	4A.05, 4H.03, 9B.22 Figure 9B-1

DEVELOPMENT HISTORY:
Approved by Bicycle TC: 6/25/2026
Concurrence by Signals TC:.....6/24/2026
Approved by NCUTCD Council: .....

This is a proposed change to the MUTCD that has been developed by a technical committee, joint committee, or joint task force of the NCUTCD. The NCUTCD is distributing this 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, options, or support. 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:
This proposal replaces the Bicycle Signal – Mandatory Movement (R10-40 or R10-40a) and Bicycle Signal – Optional Movement (R10-41, R10-41a, R10-41b, or R10-41c) signs with the R10-10 Bicycle Signal sign (renumbered R10-42 in this proposal) that was part of Interim Approval 16 for the Optional Use of a Bicycle Signal Face.

DISCUSSION:
The 11th Edition of the Manual added Bicycle Signal – Mandatory Movement (R10-40 or R10-40a) signs and Bicycle Signal – Optional Movement (R10-41, R10-41a, R10-41b, or R10-41c) signs and deleted the original Bicycle Signal (R10-10) sign. These signs are new to the Manual, were not part of Interim Approval 16 for the optional use of bicycle signal faces and have not received experimentation or testing. These signs have been added as a standard and are required to be used with bicycle signal faces in most circumstances.

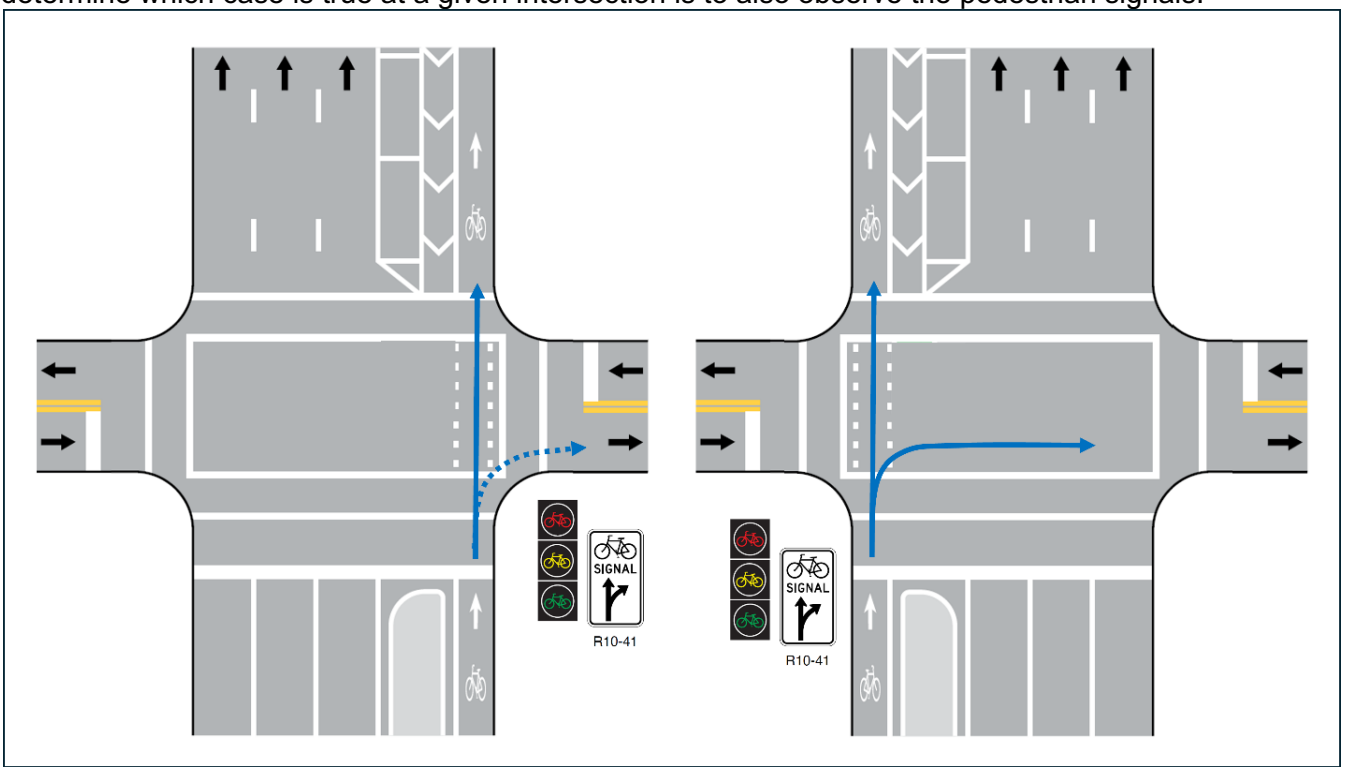
This proposal removes the Bicycle Signal – Mandatory Movement (R10-40 or R10-40a) and Bicycle Signal – Optional Movement (R10-41, R10-41a, R10-41b, or R10-41c) signs because they fail to convey a clear, simple meaning.

The R10-40 and R10-41 series signs are essentially a combination of the old R10-10 bike signal sign and R3-5 and R3-6 Mandatory Movement and Optional Movement signs. However, while the R3-5 and R3-6 signs control what movements are permissible from a given lane, the R10-40 and R10-41 signs are intended to control what movements a signal controls, without making it clear to the user whether such movements are protected or permissive.

For example, an R3-5 (LEFT TURN ONLY) sign can be used in conjunction with a signal which only operates in the permissive mode, operates only in the exclusive mode, or operates in both the protected and permissive modes. The sign can also be used at an uncontrolled or stop-controlled intersection. An R3-5 used in conjunction with a CIRCULAR GREEN does not risk confusing a driver that the movement is protected, as the lane movement sign and signal are independent traffic control devices that control different aspects.

However, the R10-40 and R10-41 signs are intended to be used as a part of the bicycle signal face, rather than independently. The signs show not only what movements are permissible from the bicycle lane, but also what movements are controlled by the bicycle signal.

Consider the R10-41 (BIKE SIGNAL THRU AND RIGHT) sign. This sign is the sign that should be used for the most typical bike signal application, which is for a right-side one-way bicycle lane. In this case, the sign must show all possible movements from the bike lane, which include the through movement that would have been unambiguously controlled by the old R10-10 sign and the right turn movement which crosses the parallel pedestrian path. However, the R10-41 controls both what movements are allowed from the bike lane and what movements are controlled by the signal. Therefore, when the bicycle signal shows a GREEN BICYCLE indication, cyclists can proceed through on a protected phase, but generally have to yield to parallel pedestrians. However, it is possible to phase the bicycle signal so that both the right turn and through movements are protected. The only way for a bicyclist to determine which case is true at a given intersection is to also observe the pedestrian signals.

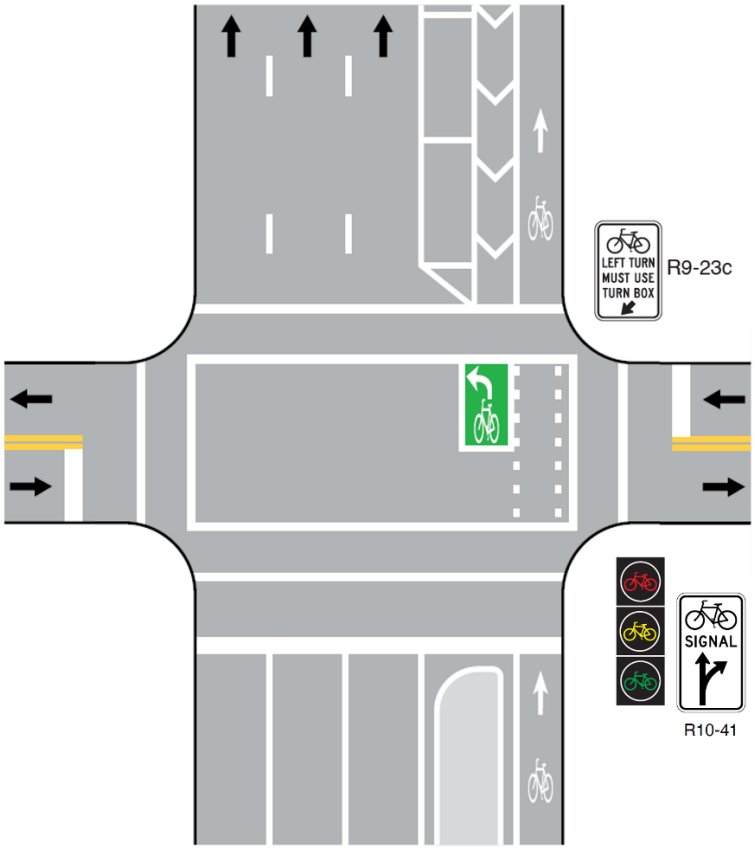


The graphic shows identical uses of the bike signal and R10-41 sign with different meanings. In the graphic, solid lines represent protected movements and dotted lines represent permissive movements where yielding to other users is required.

In the graphic above, the exact same combination of an R10-41 and green bicycle signal indication treat the right turn movement differently. On the left half, the R10-41 in conjunction with the GREEN BICYCLE means that through cyclists have a protected movement and right-turning cyclists must yield to pedestrians. The right half of the image shows the same sign and signal combination, but here, the meaning is that cyclists turning right have a protected movement.

The former R10-10 (BIKE SIGNAL) sign (redesignated R10-42 in this proposal) did not create this type of confusion. Additionally, this sign was frequently used in conjunction with pavement markings such as lane extension lines and green markings that made it clear that the bike signal governed a movement following the bike lane.

Furthermore, the R10-40 and R10-41 series signs conflict somewhat with the R9-23 series (Two-Stage Bicycle Turn Box Regulatory Signing) signs, which are used to mandate that turns use the two-stage turn box.



In a situation where a bicycle signal governs the through movement of a one-way right-side bike lane, the typical sign to use would be the R10-41 (BIKE SIGNAL THRU AND RIGHT) sign. However, if bicyclists making left turns are required to use a two-stage bicycle turn box, they would enter the intersection during the GREEN BICYCLE indication and then stage in the two-stage bicycle turn box part-way across the intersection. However, Section 4A.05 paragraph 01A says that the green bicycle signal indication shall permit the cyclist to enter the intersection ONLY to make the movement(s) displayed on the R10-40/R10-41 sign. As a result, this conflicts directly with Section 9B.18 paragraph 03, as a cyclist would never be able to legally enter the intersection to get into the two-stage bicycle turn box.

By attempting to control both the lane movement and signal operations with a static sign, the 11th Edition creates conflicts with other sections of the Manual and is likely to confuse users.

RECOMMENDED MUTCD CHANGES:

The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in ~~red strikethrough~~. Changes previously approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double underline for additions and ~~green double strikethrough~~ for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by [bracketed white text in shaded green]. Deletions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in ~~highlighted red strikethrough and sans-serif text~~. Additions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in underline blue and sans-serif text.

PART 4
HIGHWAY TRAFFIC SIGNALS

CHAPTER 4A. GENERAL

Section 4A.05 Meanings of Bicycle Symbol Signal Indications

Standard:

01 **The following meanings shall be given to bicycle symbol signal indications for bicyclists:**

A. Bicyclists facing a steady GREEN BICYCLE signal indication are permitted ~~to enter the intersection only to make the movement indicated by the lane-use arrow(s) displayed on the Bicycle Signal sign (see Section 9B.22) that is located immediately adjacent to the signal face~~ to proceed in any direction that is lawful and practical and provided the bicycle movement is not modified by lane-use signs, turn prohibition signs, pavement markings, separate bicycle signal turn indications, or other traffic control devices. Bicyclists proceeding into the intersection during the display of the steady GREEN BICYCLE signal indication shall yield the right-of-way to: [The added text comes from Interim Approval 16 for the Optional use of a Bicycle Signal Face. This added text is consistent with the meaning of CIRCULAR GREEN signal indications except the indication cannot be in conflict with simultaneous motor vehicle movements. The restriction on concurrent conflicting turning motor vehicle movements during the bike green is located in Section 4H.01 paragraph 09.]

1. **Pedestrians lawfully within an associated crosswalk, and**
2. **Other vehicles lawfully within the intersection.**

In addition, bicyclists turning left or making a U-turn movement to the left shall yield the right-of-way to other bicyclists approaching from the opposite direction so closely as to constitute an immediate hazard during the time when such turning bicycle is moving across or within the intersection. [This added text matches text within Chapter 4 for the meaning of CIRCULAR GREEN signal indications. This added text uses the term “bicyclists” instead of “vehicle traffic”.]

B. Bicyclists facing a steady YELLOW BICYCLE signal indication are thereby warned that the related green movement is being terminated and that a steady RED BICYCLE signal indication will be displayed immediately thereafter when bicyclists shall not enter the intersection. The rules set forth concerning bicycle operation under the movement being terminated shall continue to apply while the steady YELLOW BICYCLE signal indication is displayed.

C. Bicyclists facing a steady RED BICYCLE signal indication ~~shall not enter the intersection to make the movement indicated by the lane-use arrow(s) displayed on the Bicycle Signal sign (see Section 9B.22) that is located immediately adjacent to the signal face and~~, unless entering the intersection to make another movement permitted by another bicycle symbol signal indication, shall stop at a clearly marked stop line; but if there is no stop line, before entering the crosswalk on the near side of the intersection; or if there is no crosswalk, then before entering the intersection; and shall remain stopped until a GREEN BICYCLE signal indication permitting the movement indicated by

such RED BICYCLE signal indication is displayed. Except when a traffic control device is in place prohibiting a turn on red, bicyclists facing a steady RED BICYCLE signal indication are permitted to enter the intersection to turn right if there are no approach lanes for motor vehicle traffic to their right or left if there are no approach lanes for motor vehicle traffic to their left. The right to proceed with the turn shall be subject to the rules applicable after making a stop at a STOP sign. [The added text is consistent with Interim Approval 16 for the Optional use of a Bicycle Signal Face. The added text is consistent with the meaning of CIRCULAR RED signal indications].

D. A flashing GREEN BICYCLE signal indication has no meaning and shall not be used.

E. A flashing YELLOW BICYCLE signal indication has no meaning and shall not be used.

F. Bicyclists facing a flashing RED BICYCLE signal indication shall stop at a clearly marked stop line; but if there is no stop line, before entering the crosswalk on the near side of the intersection; or if there is no crosswalk, at the point nearest the intersecting roadway where the bicyclist has a view of approaching traffic on the intersecting roadway before entering the intersection. The right to proceed ~~in the direction indicated by the lane-use arrow(s) displayed on the Bicycle Signal sign (see Section 9B.22) that is located immediately adjacent to the signal face~~ shall be subject to the rules applicable after making a stop at a STOP sign.

CHAPTER 4H. BICYCLE SIGNALS

[Note: No changes proposed to Section 4H.01. Included for reference only.]

Section 4H.01 Use of Bicycle Signal Faces

Option:

01 A bicycle signal face may be used to provide separate control of a bicyclist movement for various situations, including the following:

A. To provide a protected bicycle signal phase or a leading or lagging bicycle interval;
B. To continue a through bicycle lane on the right-hand side of a mandatory right-turn lane (or on the left-hand side of a mandatory left-turn lane) that would otherwise be in non-compliance with Paragraph 1 of Section 9E.02 or Paragraph 7 of Section 9E.06;
C. To provide a bicycle interval for a counter-flow bicycle facility; or
D. To provide for unusual or unexpected arrangements of the bicyclist movement through complex intersections, conflict areas, or signal control.

02 A bicycle signal face may be used at a mid-block traffic control signal where there are no motor vehicle movements parallel to the bicycle crossing.

Support:

03 Chapter 4C contains information on warrants for the installation of a new traffic control signal.

Guidance:

04 *The decision as to whether to incorporate a bicycle signal face(s) into a new traffic control signal design should be made during the engineering study performed in accordance with Paragraph 1 of Section 4C.01.*

05 *Engineering judgment should be exercised in determining whether or not it would be advantageous or beneficial to install a bicycle signal face(s) at an existing traffic control signal.*

Support:

06 Retrofitting existing circular traffic signals that are operated as bicycle signal faces with bicycle symbol signal faces is analogous to retrofitting existing traffic signals with pedestrian signals where such a determination is not required through an engineering study.

07 For the purpose of warrant analyses, provisions for classifying bicycles are provided in Paragraph 16 of Section 4C.01 and Paragraph 2 of Section 9F.01.

Standard:

08 **If used, a bicycle signal face shall only be used to control bicyclist movements from a designated bicycle lane or from a separate facility, such as a shared-use path.**

09 **If used, a bicycle signal face shall only be used to control bicyclist movements where bicyclists moving on a GREEN BICYCLE or YELLOW BICYCLE signal indication are not in conflict with any simultaneous motor vehicle movement at the signalized location, including right (or left) turns on red.**

Guidance:

10 *If used where motor vehicle traffic can make the same movements as bicyclists, a bicycle signal face should only be used if the bicyclist movement controlled by the bicycle signal face is sometimes allowed to proceed or sometimes required to stop at times when motor vehicle traffic, making the same movement and controlled by other vehicular signal faces, is required to stop or allowed to proceed, respectively.*

[Note: No changes proposed to Section 4H.02. Included for reference only.]

Section 4H.02 Prohibited Uses of Bicycle Signal Faces

Standard:

01 **Bicycle signal faces shall not be used to allow conflicting bicyclist movements from perpendicular or nearly perpendicular directions to enter the intersection at the same time.**

02 **Bicycle signal faces shall not be used for controlling any bicyclist movement that is sharing an approach lane with motor vehicle traffic.**

03 **Bicycle signal faces shall not be used in any manner with respect to the design and operation of a hybrid beacon.**

Section 4H.03 Bicycle Signal Sign~~s~~

Support:

01 The purpose of the Bicycle Signal (R10-42) sign (see Section 9B.22) is to inform road users that the signal indications in the bicycle signal face are intended only for bicyclists. [This text comes from Interim Approval 16 for the Optional use of a Bicycle Signal Face] ~~The primary purposes of the Bicycle Signal (R10-40, R10-40a, R10-41, R10-41a, R10-41b) sign (see Section 9B.22) are to inform road users that the signal indications in the bicycle signal face are intended only for bicyclists, and to inform bicyclists which specific bicyclist movements are controlled by the bicycle signal face.~~

Standard:

02 **Except as provided in Paragraph 3 of this Section, a Bicycle Signal ~~(R10-40, R10-40a, R10-41, R10-41a, or R10-41b)~~ (R10-42) sign shall be installed immediately adjacent to (including above or below) every bicycle signal face. The Bicycle Signal sign shall have a minimum size of 24 inches x 36 inches if it is placed next to an overhead-mounted bicycle signal face and shall have a minimum size of 12 inches x 21 inches if it is placed next to a post-mounted bicycle signal face.**

Option:

03 The Bicycle Signal sign may be omitted:

A. If it would be adjacent to a supplemental near-side bicycle signal face containing 4-inch indications; or
B. Where the bicycle signal indications are not visible to motor vehicle traffic and the allowed bicycle movements are communicated by sign or pavement markings. [This text is consistent with the purpose of the Bicycle Signal (R10-42) sign.]

04 Where multiple bicycle signal faces control different bicycle movements from the same approach, the Bicycle Signal sign may be replaced by text-only signs indicating which signals control specific bicycle movements.

Support:

05 Section 2B.30 contains information regarding the Advance Intersection Lane Control Signs (R3-8 Series) that can be used to indicate the lane configuration ahead and which can show the layout of bicycle lanes.

PART 9
TRAFFIC CONTROL FOR BICYCLE FACILITIES

CHAPTER 9B. REGULATORY SIGNS

Section 9B.22 Bicycle Signal Signs ~~(R10-40, R10-40a, R10-41, R10-41a, R10-41b, R10-41c~~ (R10-42)

Support:

01 The purpose~~s~~ of the Bicycle Signal (R10-42) sign~~s~~ (see Figure 9B-1) ~~are~~ is to inform road users that the signal indications in the bicycle signal face are intended only for bicyclists~~, and to inform bicyclists which specific bicycle movements are controlled by the bicycle signal face~~.

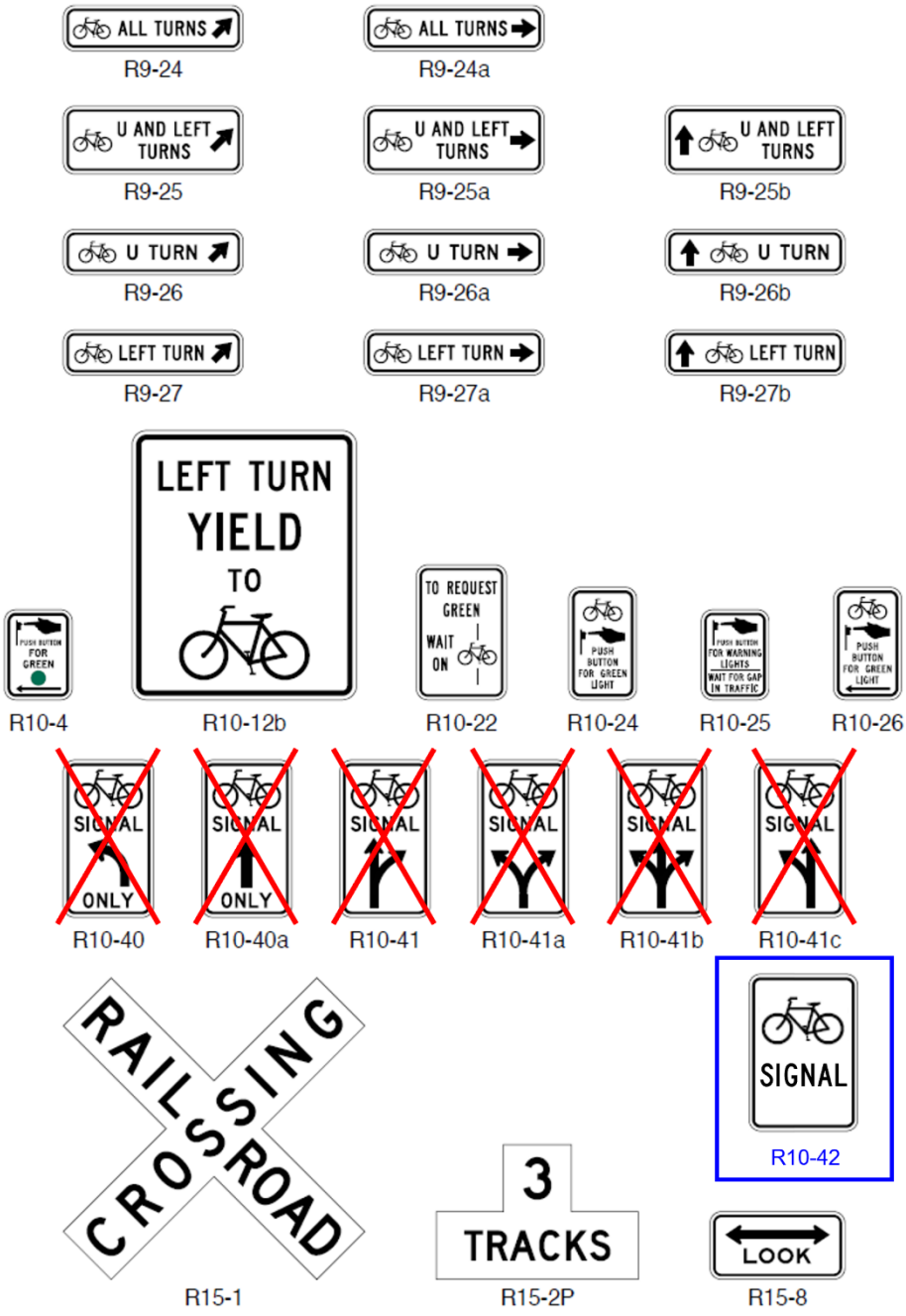
[Text modified to match the proposed text for Paragraph 01 in Section 4H.03]

02 Section 4H.03 contains information on signs that are used in conjunction with bicycle signal faces.

~~03 The Bicycle Signal – Mandatory Movement (R10-40 or R10-40a) sign or the Bicycle Signal – Optional Movement (R10-41, R10-41a, R10-41b, or R10-41c) sign shall require bicycles to turn, shall permit turns where such turns would otherwise not be allowed, shall require a bicycle to stay in the same lane and proceed straight through an intersection, or shall indicate allowed movements when a GREEN BICYCLE signal indication is displayed on a bicycle signal face.~~

261

Figure 9B-1. Regulatory Signs and Plaques for Bicycle Facilities (Sheet 2 of 2)



262