ATTACHMENT NO. 23

TTC No. 6

National Committee on
Uniform Traffic Control Devices

17200 West Bell Road No.1135 * Surprise, Ariz. 85374
Telephone (623) 214-2403 * e-mail: ncutcd@aol.com

NOTE: This is a recommendation to FHWA on changes to the MUTCD by the National Committee on Uniform Traffic Control Devices (NCUTCD). This recommendation is not a revision to the MUTCD and does not constitute official standards, guidance, or options. No proposed revision to the MUTCD is effective unless and until approved by FHWA through an Interim Approval or through the Federal rulemaking process.

TTC Agenda item 9 - June 2014

National Committee on Uniform Traffic Control Devices
TTC TC

TECHNICAL COMMITTEE: NCUTCD Temporary Traffic Control Technical Committee

DATE OF ACTION: 6-26-14
TASK FORCE: David Church (chair), Hicks, Leonard, Lohman, Flaherty, Stroth, Ullman, Edmonds, Putman

TTC TC APPROVAL DATE: 6-26-14

TRANSMITTAL TO SPONSORS DATE:

TOPIC: Figures 22, 24 and 25

AFFECTED PORTIONS OF MUTCD: 2009 Edition – Figures 22, 24, and 25

DISCUSSION:
The issue is similar in all three Figures: a work activity across an intersection turns a through lane into a trapped lane. In Figure 6H.22, a driver in the right lane wait too long to make the merge into the left lane. If the merge occurs as the driver enters the intersection, a sudden merge creates a dangerous condition for drivers in the left lane. The modified sketch resolves this by using a lane closure that merges drivers into the left lane prior to the intersection. The right lane converts to a right turn only lane.

In Figure 24, there is a similar trapped lane for the drivers in the right lane. Merging the traffic upstream of the intersection eliminates last second merges in the intersection while creating a right turn only lane for those turning right.

Figure 25 presents a different trapped lane scenario. In this case a driver in the left lane that intends to continue through the intersection can be forced into a last minute merge to the right or be forced to make a left turn. This dangerous last minute maneuver is avoided by merging traffic in the right lane upstream of the intersection then providing a left turn only lane for those making that move.

RECOMMENDATION:
TTC TC recommends that the Figures 22, 24 and 25 be modified as noted in the following drawings. The notes have been edited to match the modified drawings.

RECOMMENDED WORDING:

Note: this language is from the 2009 Edition, Section 6H, Figures 22, 24 and 25

For each Figure you will see the TA and Notes as in the 2009 Edition followed by the modified drawing and the edited notes.

Notes for Figure 6H-22—Typical Application 22
Right-Hand Lane Closure on the Far Side of an Intersection

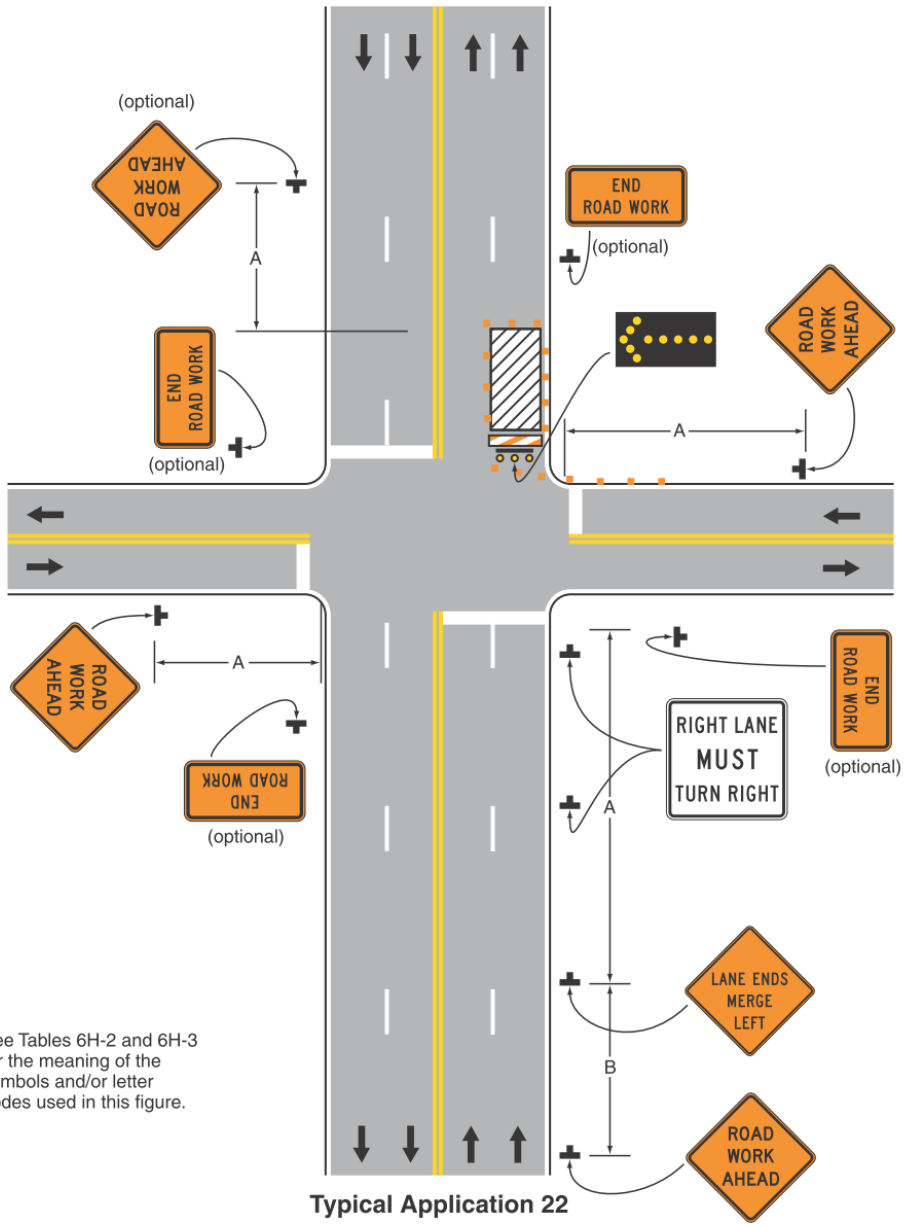
Guidance:

1. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.*

Option:

2. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a right-hand lane having significant right turning movements, then the right-hand lane may be restricted to right turns only, as shown. This procedure increases the through capacity by eliminating right turns from the open through lane.
3. For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through vehicular traffic.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. Where the turning radius is large, it may be possible to create a right-turn island using channelizing devices or pavement markings.

Figure 6H-22. Right-Hand Lane Closure on the Far Side of an Intersection (TA-22)

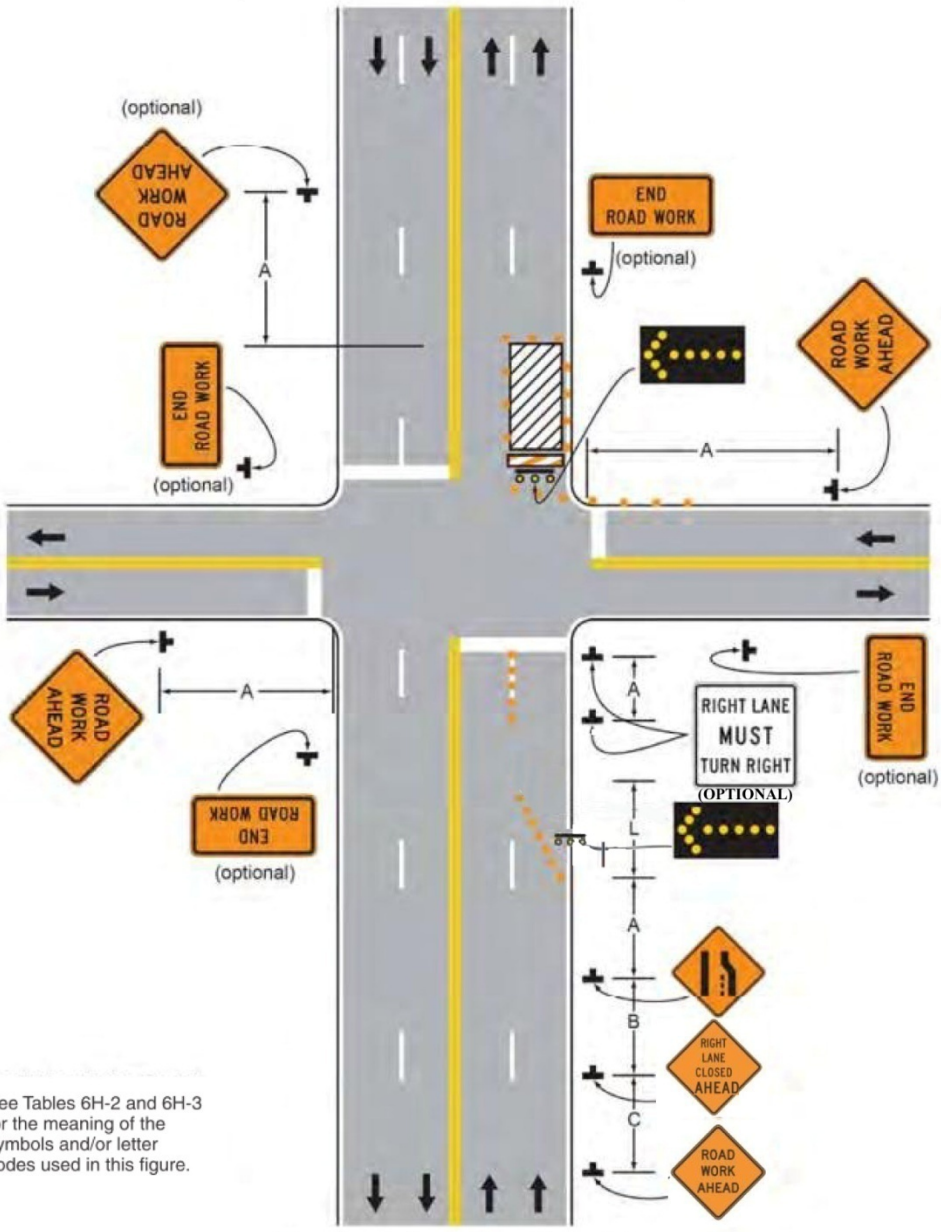


Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 22

Figure 6H-22. Right-Hand Lane Closure on the Far Side of an Intersection (TA-22)

Proposed Modified Sketch



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 22

(Proposed Language)

Notes for Figure 6H-22—Typical Application 22

Right-Hand Lane Closure on the Far Side of an Intersection

Guidance:

1. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.*

Option:

~~2.~~ The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection, as shown. ~~However,~~ W~~w~~hen this results in the closure of a right-hand lane having significant right turning movements, then the right-hand lane may be restricted to right turns only requiring through traffic to utilize the left lane~~, as shown~~. ~~This procedure increases the through capacity by eliminating right turns from the open through lane.~~

3. For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through vehicular traffic.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. Where the turning radius is large, it may be possible to create a right-turn island using channelizing devices or pavement markings.
6. If “dimension A” is not available to create a temporary right-turn lane, the installation of continuous channelizers from the end of the taper to the intersection may occur. As a result, the “RIGHT-LANE MUST TURN RIGHT” signs would not be installed.

Notes for Figure 6H-24—Typical Application 24
Half Road Closure on the Far Side of an Intersection

Guidance:

1. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.*
2. *When turn prohibitions are implemented, two turn prohibition signs should be used, one on the near side and, space permitting, one on the far side of the intersection.*

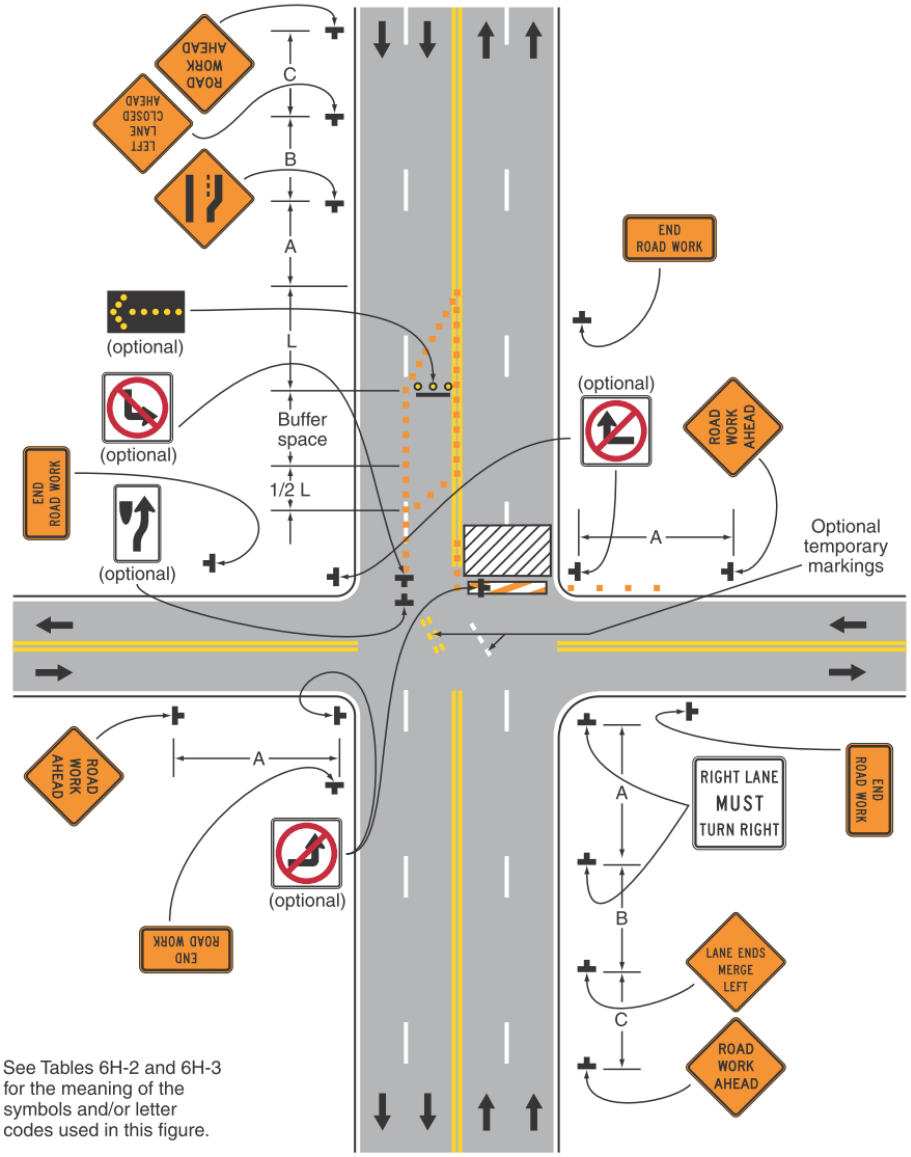
Option:

3. A buffer space may be used between opposing directions of vehicular traffic as shown in this application.
4. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, if there is a significant right-turning movement, then the right-hand lane may be restricted to right turns only, as shown.
5. Where the turning radius is large, a right-turn island using channelizing devices or pavement markings may be used.
6. There may be insufficient space to place the back-to-back Keep Right sign and No Left Turn symbol signs at the end of the row of channelizing devices separating opposing vehicular traffic flows. In this situation, the No Left Turn symbol sign may be placed on the right and the Keep Right sign may be omitted.
7. For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through vehicular traffic.
8. Flashing warning lights and/or flags may be used to call attention to advance warning signs.
9. Temporary pavement markings may be used to delineate the travel path through the intersection.

Support:

10. Keeping the right-hand lane open increases the through capacity by eliminating right turns from the open through lane.
11. A temporary turn island reinforces the nature of the temporary exclusive right-turn lane and enables a second RIGHT LANE MUST TURN RIGHT sign to be placed in the island.

Figure 6H-24. Half Road Closure on the Far Side of an Intersection (TA-24)

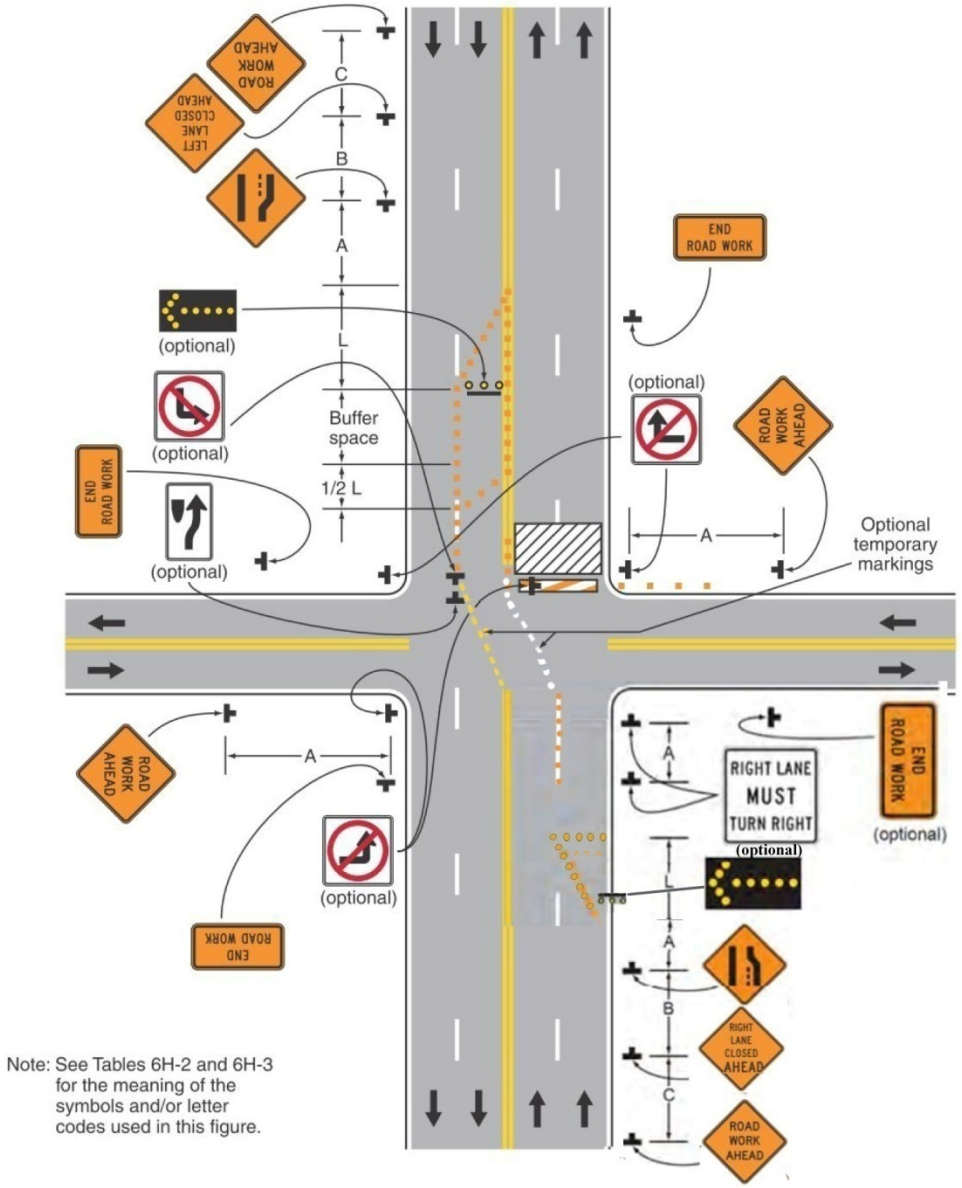


Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 24

Proposed Modified Sketch

Figure 6H-24. Half Road Closure on the Far Side of an Intersection (TA-24)



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 24

(Proposed Language)

Notes for Figure 6H-24—Typical Application 24

Half Road Closure on the Far Side of an Intersection

Guidance:

1. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.*
2. *When turn prohibitions are implemented, two turn prohibition signs should be used, one on the near side and, space permitting, one on the far side of the intersection.*

Option:

3. A buffer space may be used between opposing directions of vehicular traffic as shown in this application.
4. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection, as shown. ~~However,~~ W~~w~~hen this results in the closure of a right-hand lane having significant right turning movements, then the right-hand lane may be restricted to right turns only requiring through traffic to utilize the left lane~~, as shown~~.
5. Where the turning radius is large, a right-turn island using channelizing devices or pavement markings may be used.
6. There may be insufficient space to place the back-to-back Keep Right sign and No Left Turn symbol signs at the end of the row of channelizing devices separating opposing vehicular traffic flows. In this situation, the No Left Turn symbol sign may be placed on the right and the Keep Right sign may be omitted.
7. For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through vehicular traffic.
8. Flashing warning lights and/or flags may be used to call attention to advance warning signs.
9. Temporary pavement markings may be used to delineate the travel path through the intersection.
7. If “dimension A” is not available to create a temporary right-turn lane, the installation of continuous channelizers from the end of the taper to the intersection may occur. As a result, the “RIGHT-LANE MUST TURN RIGHT” signs would not be installed.

~~Support:~~

~~10. Keeping the right-hand lane open increases the through capacity by eliminating right turns from the open through lane.~~

~~11. A temporary turn island reinforces the nature of the temporary exclusive right-turn lane and enables a second RIGHT LANE MUST TURN RIGHT sign to be placed in the island.~~

Notes for Figure 6H-25—Typical Application 25
Multiple Lane Closures at an Intersection

Guidance:

1. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.*
2. *If the left through lane is closed on the near-side approach, the LEFT LANE MUST TURN LEFT sign should be placed in the median to discourage through vehicular traffic from entering the left-turn bay.*

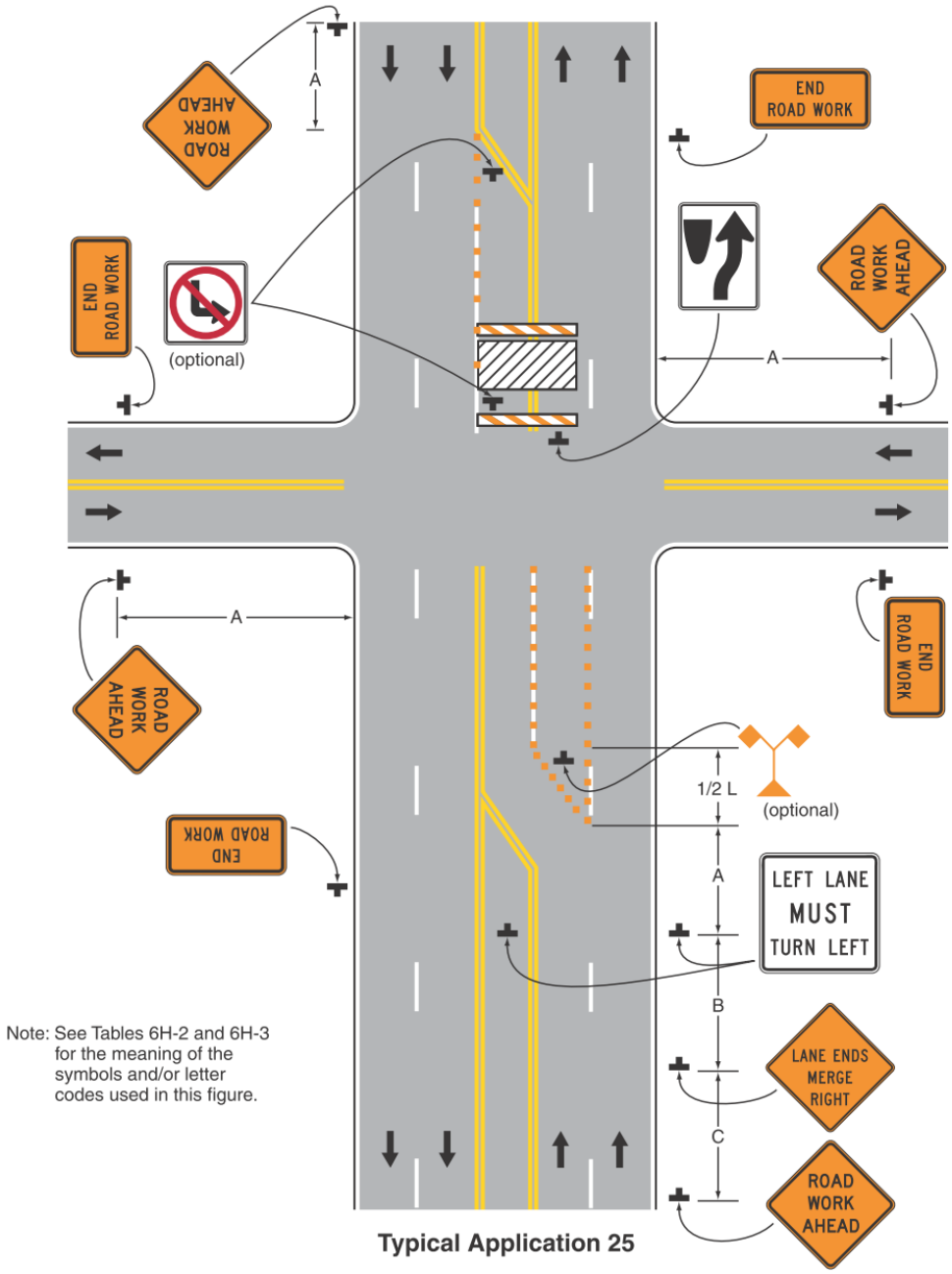
Support:

3. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection.

Option:

4. If the left-turning movement that normally uses the closed turn bay is small and/or the gaps in opposing vehicular traffic are frequent, left turns may be permitted on that approach.
5. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

Figure 6H-25. Multiple Lane Closures at an Intersection (TA-25)

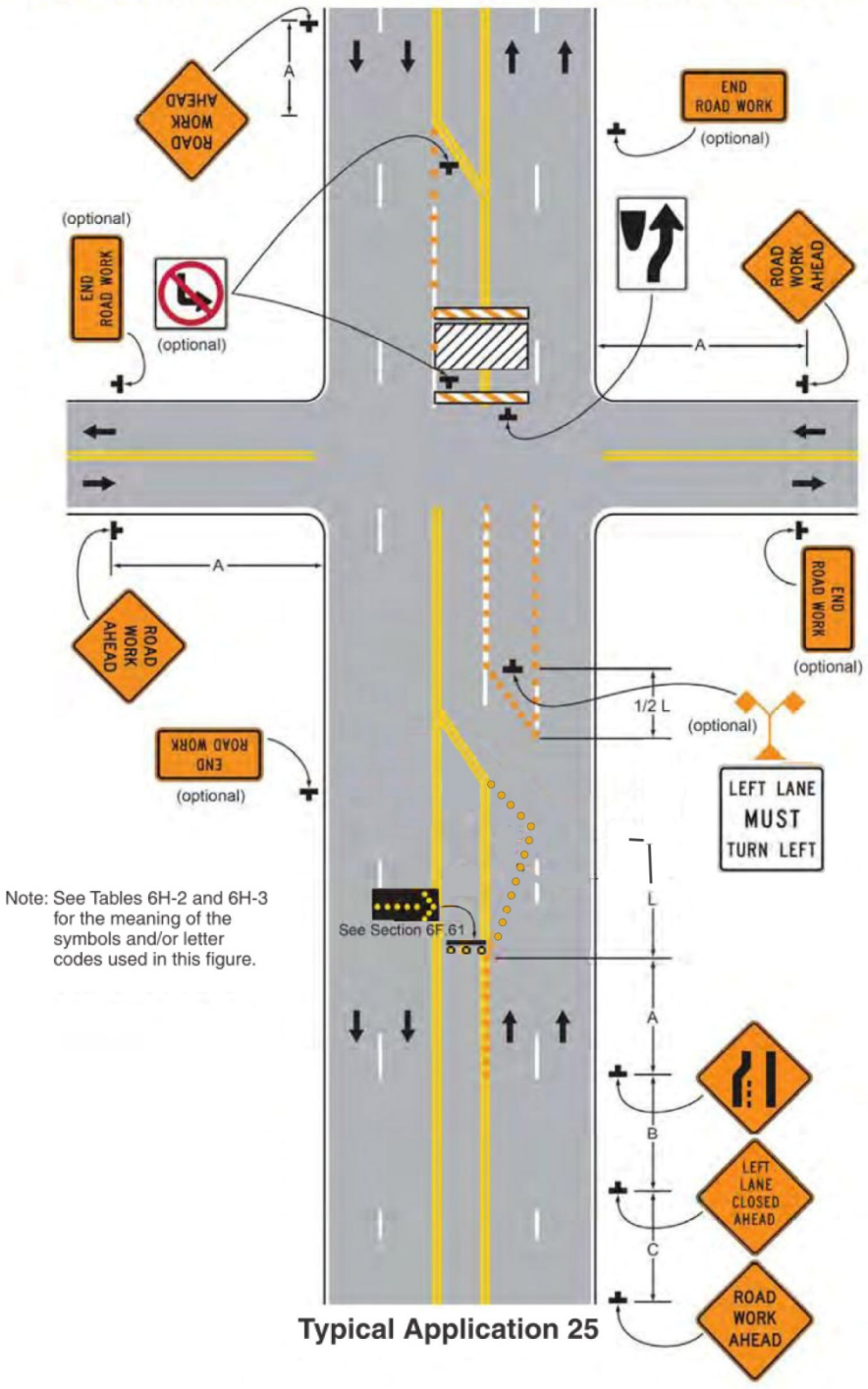


Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 25

Proposed Modified Sketch

Figure 6H-25. Multiple Lane Closures at an Intersection (TA-25)



Typical Application 25

(Proposed Language)

Notes for Figure 6H-25—Typical Application 25
Multiple Lane Closures at an Intersection

Guidance:

1. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.

~~2. If the left through lane is closed on the near-side approach, the LEFT LANE MUST TURN LEFT sign should be placed in the median to discourage through vehicular traffic from entering the left-turn bay.~~

Support:

3. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection as shown.

Option:

4. If the left-turning movement that normally uses the closed turn bay is small and/or the gaps in opposing vehicular traffic are frequent, left turns may be permitted on that approach.
5. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.