National Committee on
Uniform Traffic Control Devices

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Item Number: 26B-TTC-02

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

COMMITTEE / TASK FORCE:	Temporary Traffic Control Technical Committee
ITEM NUMBER:	26B-TTC-02
TOPIC:	Typical Applications Coordination
ORIGIN OF REQUEST:	Typical Applications Task Force
AFFECTED SECTIONS OF MUTCD:	6B.09, 6H.23, 6P.01, 6P.04 (was 6N.09), 6P.05 (added) Table 6P-1, Table 6P-2 Figures 6P-10, 6P-12, 6P-12a (was 6P-11), 6P-13, 6P-14, 6P-15, 6P-16 Notes for Figures 6P-8, 6P-9, 6P-9a (was 6P-19), 6P-9b (was 6P-20), 6P-10, 6P-12, 6P-12a (was 6P-11), 6P-13, 6P-14, 6P-15, 6P-16

DEVELOPMENT HISTORY:
Approved by TTC TC: 06/24/2026
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 modifies eleven temporary traffic control typical applications (TAs) to address: worker safety concerns, conflicts with sections of Part 6 and other sections of the Manual, to clarify worker duties, and the need to assess operational impacts on detour routes, clearer guidance on warning sign usage and placement.

DISCUSSION:
This proposal is similar to 20B-TTC-02 approved by the NCUTCD Council to modify the 2009 Edition and then rescinded by NCUTCD after the publication of the 11th Edition.

Typical Applications 15 and 16 are proposed to be combined and revised for simplification and to address safety concerns for workers. A note is added to four Typical Applications (TA-8, TA-9, TA-9a, TA-9b) to direct users to evaluate operational impacts on detour routes. Changes are proposed to TA-10, TA-12, TA-12a, TA-13, TA-14 to provide clearer guidance and explanation regarding warning sign use and placement.

The following are summaries of proposed revisions to the typical application notes, figures, or both:

Table 6P-1
Typical Application 16 is proposed to be removed and the concepts combined with Typical Application 15.

Table 6P-2
The surveyor symbol is used only in Typical Application 16. With the proposed removal of that typical application the symbol is no longer needed in the table.

Typical Applications 8, 9, 9a, and 9b
A guidance statement is added to the notes to evaluate the impacts of additional traffic on a detour route.

Typical Application 10
Added the BE PREPARED TO STOP sign to the Typical Application and modified the Guidance note, and added an Option note to indicate the use of this sign as typical and omission of it optional.

Typical Application 12
Note 7 presents guidance that sign locations may need to be adjusted. Presently it states that "recognizing that the distances shown for sign spacings are minimums". However, Section 6B.04, Par. 7 indicates that, "These distances should be adjusted for field conditions, if necessary, by increasing or decreasing the recommended distances." An example of decreasing a sign spacing is in Section 6B.04, Par. 8 – at intersections or major driveways. Therefore, the note is proposed to be revised by deleting the statement that sign spacings are minimums.

In note 9, warning lights are not suggested on the Signal Ahead warning signs - the most important signs in the series. Recommend that note 9 be revised, similar to note 3 for Typical Application 10 "Flashing warning lights and/or flags may be used to call attention to the advance warning signs."

Given that Typical Application 12 is similar to Typical Application 10 except in the method for indicating right-of-way, it is proposed to add the text from Typical Application 10 regarding optional use of the BE PREPARED TO STOP sign. This text is added to the end of note 9 and as two new guidance statements after note 10a. Note 10a was previously approved in 24A-TTC-06.

On Figure 6P-12, remove warning light symbols above the signs. The use of warning lights is addressed in the revised note for this figure and are removed from the figure for consistency with other typical application figures. The BE PREPARED TO STOP sign is added to the figure.

Typical Application 12a
In note 3, warning lights are not suggested on the Yield Ahead warning sign and the YIELD regulatory sign - the most important signs in the series. And in this option for a night lane closure, Type B warning lights are suggested when they should be Type A. Recommend that the note be revised, similar to note 3 for Typical Application 10 "Flashing warning lights and/or flags may be used to call attention to the advance warning signs."

On Figure 6P-12a, remove warning light symbols above the signs. The use of warning lights is addressed in the revised note for this figure and are removed from the figure for consistency with other typical application figures.

Typical Application 13
The option in note 4 is proposed to be reversed to make use of the BE PREPARED TO STOP sign typical and omission of it optional. In following the idea of a typical three-sign sequence in advance of a

work zone, the BE PREPARED TO STOP sign should be used unless there is reason to omit it. The sign is shown on the figure making the Guidance in note 7 unnecessary.

On Figure 6P-13, remove the “(optional)” tags by the BE PREPARED TO STOP signs.

Also on Figure 6P-13, the END ROAD WORK sign is added with accompanying “(optional)” text next to the sign for consistency throughout the typical applications.

Typical Application 14

Recommend adding an option similar to note 4 from Typical Application 10 “Flashing warning lights and/or flags may be used to call attention to the advance warning signs.” Two notes are added to address the BE PREPARED TO STOP sign.

On Figure 6P-14, remove warning light symbols above the signal ahead sign. The use of warning lights is addressed in the new note for this figure and are removed from the figure for consistency with other typical application figures. On the Figure 6P-14, “(optional)” is added adjacent to the NO PASSING ZONE pennant sign.

Typical Applications 15 and 16

On Figure 6P-15 “(optional)” is added adjacent to the R4-7 Keep Right signs.

The task force identified several deficiencies in Typical Application 16, the most egregious of which is use of flaggers in the center of the road performing non-flagging duties. While proposing revisions, it was decided that Typical Application 16 appears to be a surveying specific application of Typical Application 15 and that the relevant information can be addressed in revisions to Typical Application 15. The task force also supposes that surveying equipment and practices have evolved to the point where it is unlikely to necessitate the setup shown in Typical Application 16. The task force recommends combining Typical Applications 15 and 16. The notes and figure for Typical Application 16 are proposed to be removed. Concepts from Typical Application 16 are added to Typical Application 15 as two additional notes regarding the use of spotters, rather than flaggers, and Survey Crew warning signs. They are:

- “A worker or a spotter should be used to warn workers and surveyors who cannot watch road users. The spotter(s) should be provided with an audible warning device, such as a two-way radio, air horn, or whistle.”
- “A SURVEY CREW (W21-6) sign may be used in place of the ROAD WORK AHEAD (W20-1) sign.”

The option to use a “SURVEY CREW AHEAD” sign is added to the Survey Crew Sign definition in 6H.23.

Section 6B.09 Detours and Diversions

Add a guidance statement to evaluate the impacts of additional traffic on a detour route for consistency with the Typical Applications in 6P.

Section 6H.23 SURVEY CREW Sign (W21-6)

An option is added indicating that AHEAD can be added to the legend on the sign.

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 6
TEMPORARY TRAFFIC CONTROL

CHAPTER 6B. TEMPORARY TRAFFIC CONTROL ELEMENTS

Section 6B.09 Detours and Diversions

Support:

01 A detour is a temporary rerouting of road users onto an existing highway in order to avoid a TTC zone.

Guidance:

02 Detours should be clearly signed over their entire length so that road users can easily use existing highways to return to the original highway.

02a The detour route should be evaluated using engineering judgment to assess the impacts from additional traffic directed onto the detour.

Support:

03 A diversion is a temporary rerouting of road users onto a temporary highway or alignment placed around the work space ~~area~~. [25A-TTC-04, June 2025]

CHAPTER 6H. TTC ZONE WARNING SIGNS

Section 6H.23 SURVEY CREW Sign (W21-6)

Guidance:

01 The SURVEY CREW (W21 6) sign (see Figure 6H 1) should be used to warn of surveying crews working in or adjacent to the roadway.

Option:

01a An AHEAD message may be added to the SURVEY CREW (W21-6) sign.

CHAPTER 6P. TYPICAL APPLICATIONS

Section 6P.01 Typical Applications

[Table 6P-1 incorporates 24B-TTC-01, 24B-TTC-05, 25A-TTC-06, and 25B-TTC-01.]

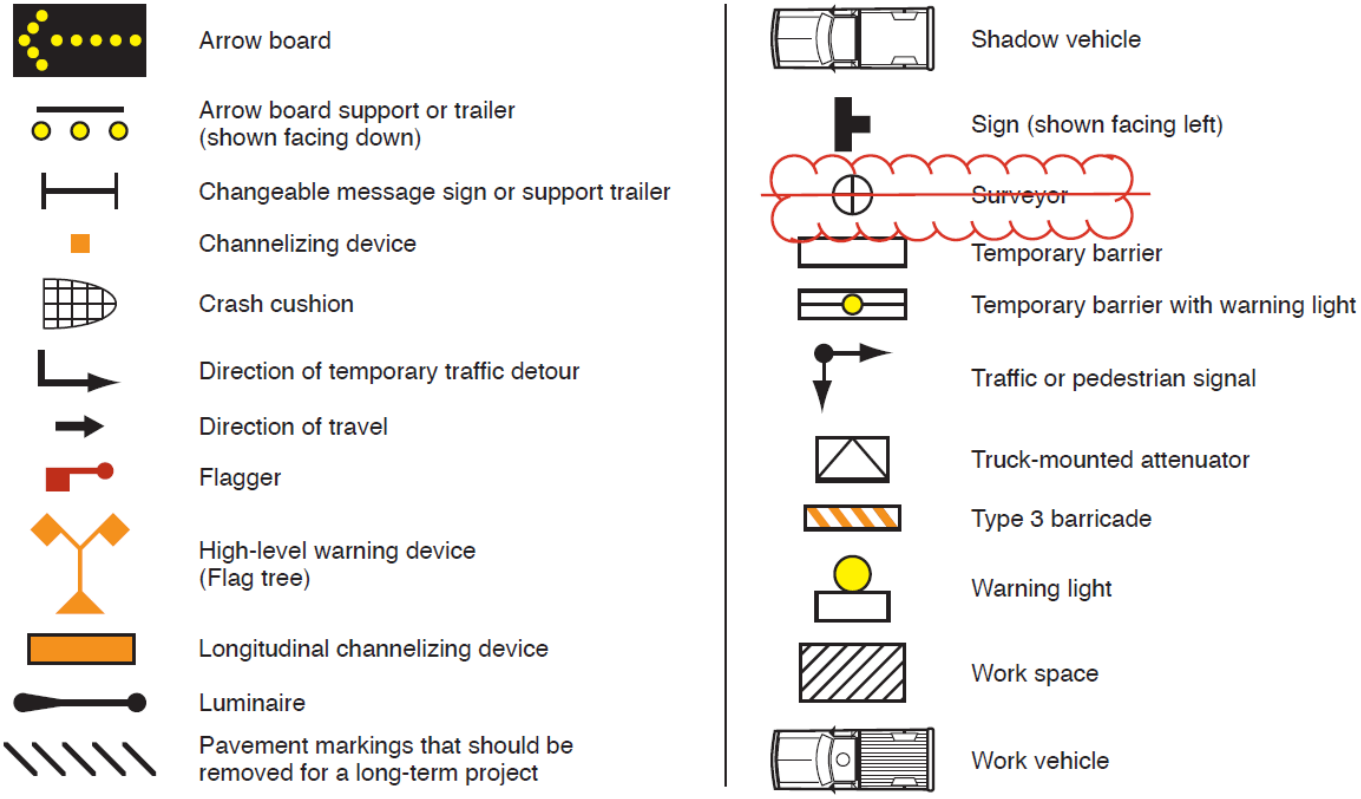
Table 6P-1. Index to Typical Applications

Typical Application Descriptions	Typical Application Number
Work On the Shoulder or Outside of the Shoulder (see Section ~~6N.05~~ 6P.03)	
Work ~~Beyond~~ Outside the Shoulder	TA-1
~~Blasting Zone~~	TA-2
~~Work on the Shoulder (see Sections 6N.06 and 6N.07)~~	
~~Work on the Shoulders~~	~~TA-3~~
Short Duration or Mobile Operation on a Shoulder	TA-4
Work on the Shoulders	~~TA-3~~ TA-4a
Shoulder Closure on a Freeway or Expressway	TA-5
Shoulder Work with a Minor Encroachment	TA-6
Work Within the Traveled Way ~~of a Two-Lane Highway~~ Imposing a Detour or Diversion (see Section ~~6N.09~~ 6P.04)	
~~Road Closed with a Diversion~~	~~TA-7~~
Road Closed with an Off-Site Detour	TA-8
Overlapping Routes with a Detour	TA-9
Detour for One Travel Direction	~~TA-19~~ TA-9a
Detour for a Closed Street	~~TA-20~~ TA-9b
Road Closed with a Diversion	~~TA-7~~ TA-9c
Work Within the Traveled Way of a Two-Lane Highway (see Section 6P.05)	
Lane Closure on a Two-Lane Road Using Flaggers	TA-10
Lane Closure on a Two-Lane Road Using Automated Flagger Assistance Device (AFAD)	TA-10a
~~Lane Closure on a Two-Lane Road with Low Traffic Volumes~~	~~TA-11~~
Lane Closure on a Two-Lane Road Using Traffic Control Signals	TA-12
Lane Closure on a Two-Lane Road with Low Traffic Volumes	~~TA-11~~ TA-12a
Lane Closure on a Minor Street	~~TA-18~~ TA-12b
Temporary Road Closure	TA-13
Haul Road Crossing	TA-14
Work in the Center of a Road with Low Traffic Volumes	TA-15
~~Surveying Along the Center Line of a Road with Low Traffic Volumes~~	~~TA-16~~
Mobile Operations on a Two-Lane Road	TA-17
~~Work Within the Traveled Way of an Urban Street (see Section 6N.10)~~	
~~Lane Closure on a Minor Street~~	~~TA-18~~
~~Detour for One Travel Direction~~	~~TA-19~~
~~Detour for a Closed Street~~	~~TA-20~~
Work Within the Traveled Way of an Intersection and on Sidewalks (see Section ~~6N.12~~ 6P.06)	
Lane Closure on the Near Side of an Intersection	TA-21
Right-Hand Lane Closure on the Far Side of an Intersection	TA-22
Left-Hand Lane Closure on the Far Side of an Intersection	TA-23
Half Road Closure on the Far Side of an Intersection	TA-24
Multiple Lane Closures at an Intersection	TA-25
Closure in the Center of an Intersection	TA-26

Closure at the Side of an Intersection	TA-27
Short-Term or Short Duration Work in a Circular Intersection	~~TA-52~~ TA-27a
Flagging Operation on a Single-Lane Circular Intersection	~~TA-53~~ TA-27b
Inside Lane Closure on a Multi-Lane Circular Intersection	~~TA-54~~ TA-27c
Outside Lane Closure on a Multi-Lane Circular Intersection	TA-27d
~~Sidewalk Detour or Diversion~~	~~TA-28~~
~~Crosswalk Closures and Pedestrian Detours~~	~~TA-29~~
Work Within the Traveled Way of a Multi-Lane, Non-Access Controlled Highway (see Section ~~6N.11~~ 6P.07)	
Interior Lane Closure on a Multi-Lane Street	TA-30
Lane Closure on a Street with Uneven Directional Volumes	TA-31
Half Road Closure on a Multi-Lane~~, High-Speed~~ Highway	TA-32
~~Work Within the Traveled Way of a Freeway or Expressway (see Section 6N.13 6P.08)~~	
Stationary Lane Closure on a Divided Highway	TA-33
Lane Closure with a Temporary Traffic Barrier	TA-34
Mobile Operation on a Multi-Lane Road	TA-35
Work Within the Traveled Way of a Freeway or Expressway (see Section 6N.13)	
Lane Shift on a Freeway or Expressway	TA-36
Double Lane Closure on a Freeway or Expressway	TA-37
Interior Lane Closure on a Freeway or Expressway	TA-38
Median Crossover on a Freeway or Expressway	TA-39
Median Crossover for an Entrance Ramp on a Freeway or Expressway	TA-40
Median Crossover of an Exit Ramp on a Freeway or Expressway	TA-41
Work in the Vicinity of an Exit Ramp on a Freeway or Expressway	TA-42
Partial Exit Ramp Closure on a Freeway or Expressway	TA-43
Work in the Vicinity of an Entrance Ramp on a Freeway or Expressway	TA-44
Temporary Reversible Lane Using Movable Barriers on a Freeway or Expressway	TA-45
Work Within the Vicinity of a Grade Crossing (see Section ~~6N.17~~ 6P.09)	
Work Within the Vicinity of a Grade Crossing	TA-46
Work in the Vicinity of Sidewalks, Bicycle Lanes and Shared Use Paths (see Section ~~6N.04~~ 6P.10)	
Sidewalk Detour or Diversion	~~TA-28~~ TA-46a
Crosswalk Closures and Pedestrian Detours	~~TA-29~~ TA-46b
Bicycle Lane Closure without Detour	TA-47
Bicycle Lane Closure with On-Road Detour	TA-48
Shared-Use Path Closure with a Diversion	TA-49
On-Road Detour for Shared-Use Path	TA-50
Paved Shoulder Closure with Bicycle Diversion onto Temporary Path	TA-51
~~Work in the Traveled Way of Roundabouts~~	
~~Short-Term or Short-Duration Work in a Circular Intersection~~	~~TA-52~~
~~Flagging Operation on a Single-Lane Circular Intersection~~	~~TA-53~~
~~Inside Lane Closure on a Multi-Lane Circular Intersection~~	~~TA-54~~

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Table 6P-2. Meaning of Symbols on Typical Application Diagrams



Section ~~6N.09~~ 6P.04 Work Within the Traveled Way ~~of a Two-Lane Highway~~ Imposing a Detour or Diversion [24B-TTC-01, Jan 2025]

Notes for Figure 6P-8 – Typical Application 8 Road Closure with an Off-Site Detour

Guidance:

1. *Regulatory traffic control devices should be modified as needed for the duration of the detour.*

1a. The detour route should be evaluated using engineering judgment to assess the impacts from additional traffic directed onto the detour.

Option:

2. If the road is opened for some distance beyond the intersection and/or there are significant origin/destination points beyond the intersection, the ROAD CLOSED and DETOUR signs on Type 3 Barricades may be located at the edge of the traveled way.
3. A Route Sign Directional assembly may be placed on the far left corner of the intersection to augment or replace the one shown on the near right corner.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. Cardinal direction plaques may be used with route signs.

Notes for Figure 6P-9 – Typical Application 9
Overlapping Routes with a Detour

Support:

1. TTC devices are shown for one direction of travel only.

Standard:

2. Devices similar to those depicted shall be placed for the opposite direction of travel.

Guidance:

3. STOP or YIELD signs displayed to side roads should be installed as needed along the temporary route.

3a. The detour route should be evaluated using engineering judgment to assess the impacts from additional traffic directed onto the detour.

Option:

4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. Flashing warning lights may be used on the Type 3 Barricades.
6. Cardinal direction plaques may be used with route signs.

Notes for Figure ~~6P-19~~ 6P-9a – Typical Application ~~19~~ 9a
Detour for One Travel Direction [24B-TTC-01, Jan 2025]

Guidance:

1. This plan should be used for streets without posted route numbers.
2. On multi-lane streets, Detour signs with an Advance Turn Arrow should be used in advance of a turn.

2a. The detour route should be evaluated using engineering judgment to assess the impacts from additional traffic directed onto the detour.

Option:

3. The STREET CLOSED legend may be used in place of ROAD CLOSED.
4. Additional DO NOT ENTER signs may be used at intersections with intervening streets.
5. Warning lights may be used on Type 3 Barricades.
6. Detour signs may be located on the far side of intersections.
7. A Street Name sign may be mounted with the Detour sign. The Street Name sign may be either white on green or black on orange.1.

Standard:

8. When used, the Street Name sign shall be placed above the Detour sign.

Notes for Figure ~~6P-20~~ 6P-9b – Typical Application ~~20~~ 9b
Detour for a Closed Street [24B-TTC-01, Jan 2025]

Guidance:

1. This plan should be used for streets without posted route numbers.
2. On multi-lane streets, Detour signs with an Advance Turn Arrow should be used in advance of a turn.

2a. The detour route should be evaluated using engineering judgment to assess the impacts from additional traffic directed onto the detour.

Option:

3. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
4. Flashing warning lights may be used on Type 3 Barricades.
5. Detour signs may be located on the far side of intersections. A Detour sign with an advance arrow may be used in advance of a turn.
6. A Street Name sign may be mounted with the Detour sign. The Street Name sign may be either white on green or black on orange.

Standard:

7. When used, the Street Name sign shall be placed above the Detour sign.

Support:

8. Figure 6P-9 contains the information for detouring a numbered highway.

Section 6P.05 Work Within the Traveled Way of a Two-Lane Highway [24B-TTC-01, Jan 2025]

Notes for Figure 6P-10 – Typical Application 10
Lane Closure on a Two-Lane Road Using Flaggers

Option:

1. Positive protection devices may be used per Section 6M.02.
2. For low-volume situations with short TTC zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6D).
3. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. A BE PREPARED TO STOP sign may be added to the sign series.
5. Automated Flagger Assistance Devices (see Section 6L.02) may be used in situations where there is only one lane of approaching traffic in the direction to be controlled.

Guidance:

6. *The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.*

Standard:

7. At night, flagger stations shall be illuminated, except in emergencies.

Guidance:

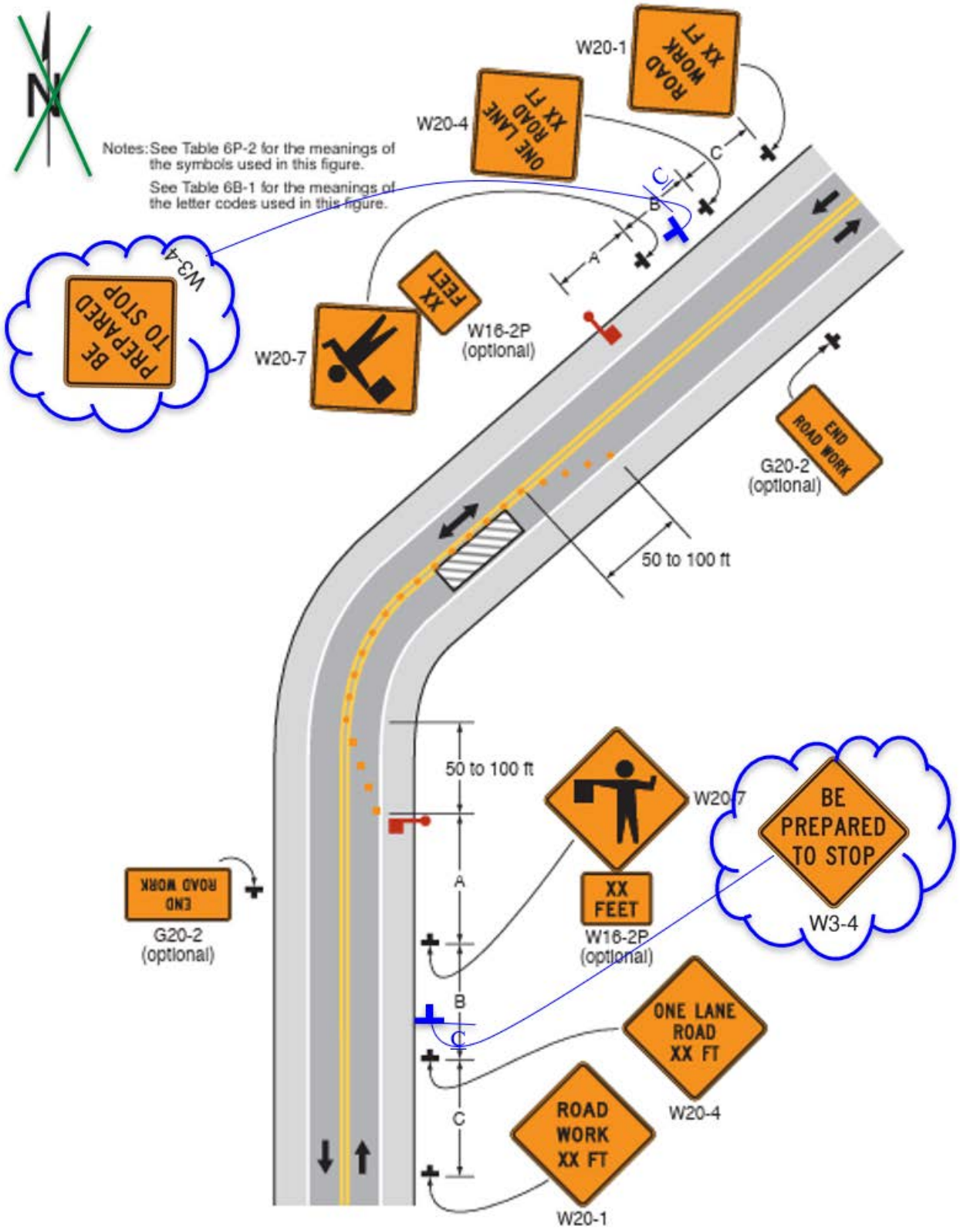
8. *~~When used, the~~ The BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.*
9. *When a grade crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the grade crossing, the TTC zone should be extended so that the transition area precedes the grade crossing.*
10. *When a grade crossing equipped with active warning devices exists within the activity area, provisions should be made for keeping flaggers informed as to the activation status of these warning devices.*
11. *When a grade crossing exists within the activity area, drivers operating on the left-hand side of the normal center line should be provided with comparable warning devices as for drivers operating on the right-hand side of the normal center line.*
12. *Early coordination with the railroad company or transit agency should occur before work starts.*

Option:

13. A flagger or a uniformed law enforcement officer may be used at the grade crossing to minimize the probability that vehicles are stopped within 15 feet of the grade crossing, measured from both sides of the outside rails.
14. A BE PREPARED TO STOP sign may be omitted from the sign series where the space to place signs is constrained.

[North arrow removed in 24A-TTC-03, June 2024]

Figure 6P-10 – Lane Closure on a Two-Lane Road Using Flaggers (TA-10)



Typical Application 10

Notes for Figure 6P-12 – Typical Application 12
Lane Closure on a Two-Lane Road Using Traffic Control Signals

[Incorporating 24A-TTC-06, June 2024]

Standard:

1. **Temporary traffic control signals shall be installed and operated in accordance with the provisions of Part 4. Temporary traffic control signals shall meet the physical display and operational requirements of conventional traffic control signals.**
2. **Temporary traffic control signal timing shall be established by authorized officials. Durations of red clearance intervals shall be adequate to clear the one-lane section of conflicting vehicles, as referenced in Part 4.**
3. **When the temporary traffic control signal is changed to the flashing mode, either manually or automatically, red signal indications shall be flashed to both approaches.**
4. **Stop lines shall be installed with temporary traffic control signals for long-term closures. Existing conflicting pavement markings and raised pavement marker reflectors between the activity area and each stop line shall be removed. After the temporary traffic control signal is removed, the stop lines and other temporary pavement markings shall be removed and the permanent pavement markings restored.**
5. **Safeguards shall be incorporated to avoid the possibility of conflicting signal indications at each end of the TTC zone, as referenced in Part 4.**

Guidance:

6. *Where no-passing lines are not already in place, they should be added.*
7. *Adjustments in the location of the advance warning signs should be made as needed to accommodate the horizontal or vertical alignment of the roadway, recognizing that the distances shown for sign spacings are minimums. Adjustments in the height of the signal heads should be made as needed to conform to the vertical alignment.*

Option:

8. Positive protection devices may be used per Section 6M.02.
9. Flashing warning lights shown on the ROAD WORK AHEAD and the ONE LANE ROAD AHEAD signs may be used. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
10. Removable pavement markings may be used.

10a. Temporary or portable traffic control signal faces may be located over the roadway and/or be positioned outside the travel lanes on both sides of the roadway.

Guidance:

10b. A BE PREPARED TO STOP sign should be added to the sign series.

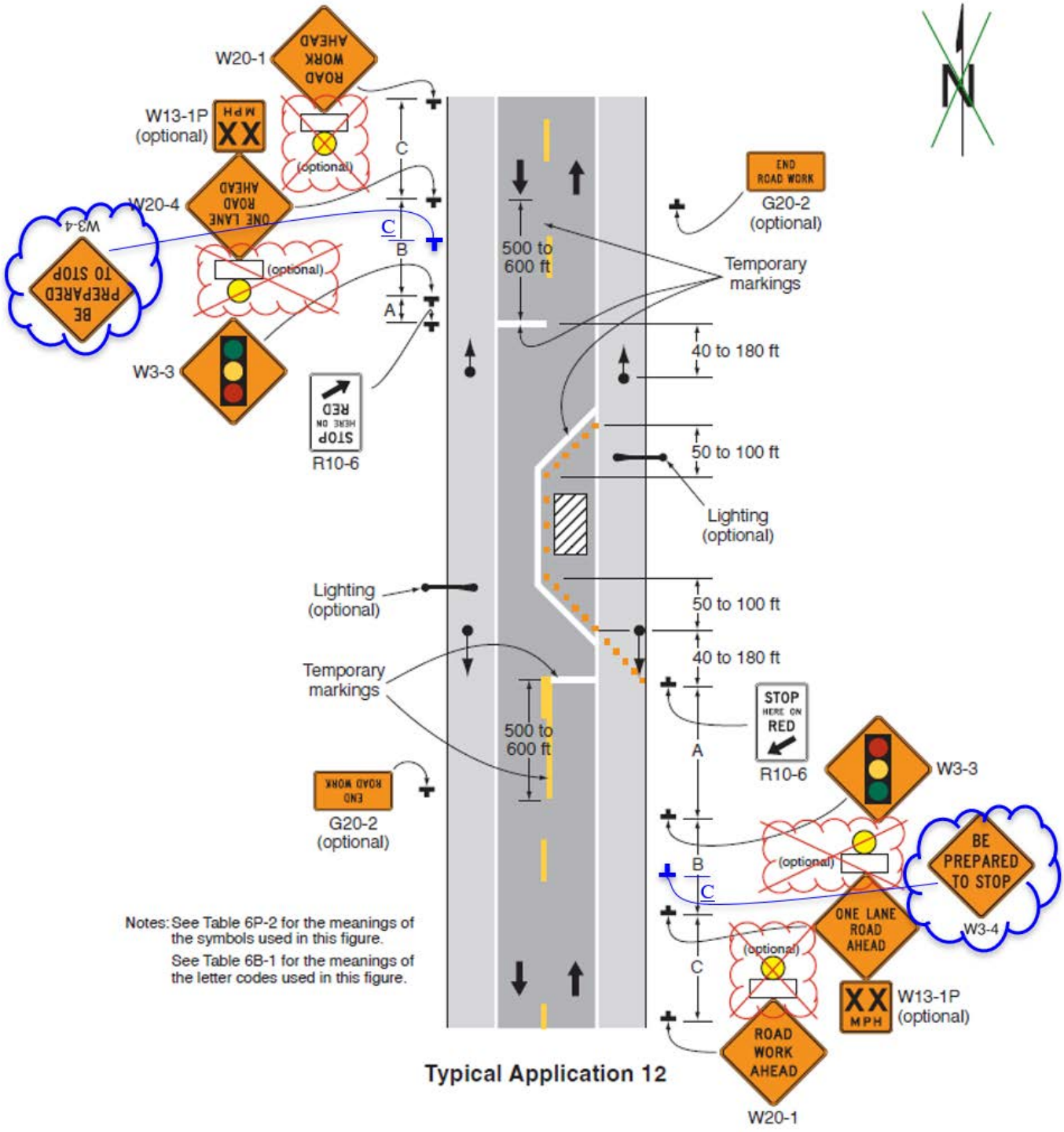
10c. When used, the BE PREPARED TO STOP sign should be located between the ONE LANE ROAD sign and the Signal Ahead sign. When the BE PREPARED TO STOP sign is added, sign spacing criteria in Table 6H-3 should be used for all four signs in the sequence.

Support:

11. Temporary traffic control signals are preferable to flaggers for long-term projects and other activities that would require flagging at night.
12. The maximum length of activity area for one-way operation under temporary traffic control signal control is determined by the capacity required to handle the peak demand.

[North arrow removed in 24A-TTC-03, June 2024]

Figure 6P-12 – Lane Closure on a Two-Lane Road Using Temporary Traffic Control Signals (TA-12)



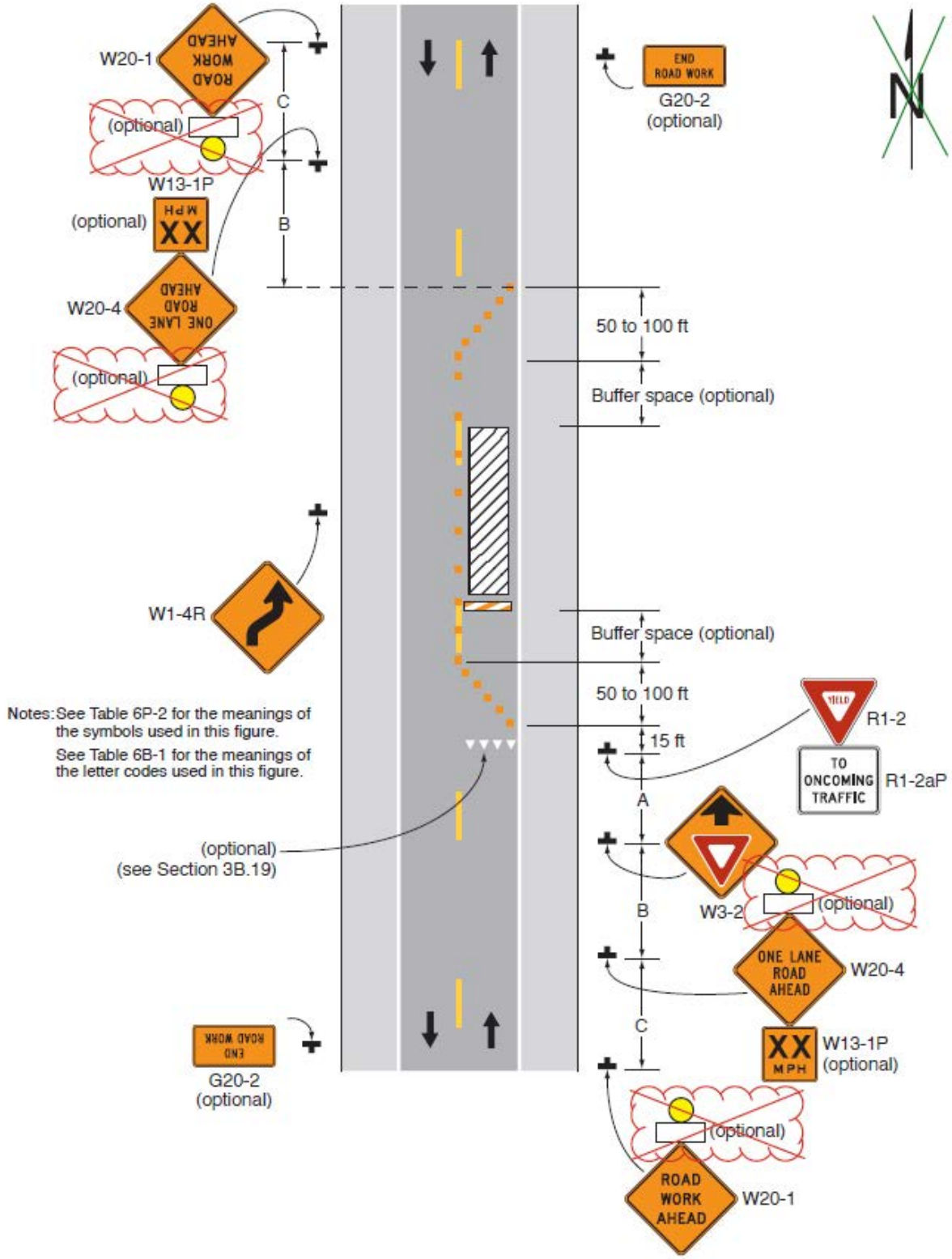
Notes for Figure ~~6P-11~~ 6P-12a – Typical Application ~~11~~ 12a
Lane Closure on a Two-Lane Road with Low Traffic Volumes [24B-TTC-01, Jan 2025]

Option:

1. Positive protection devices may be used per Section 6M.02.
2. This TTC zone application may be used as an alternate to the TTC application shown in Figure 6P-10 (using flaggers) when the following conditions exist:
   a. Vehicular traffic volume is such that sufficient gaps exist for vehicular traffic that must yield.
   b. Road users from both directions are able to see approaching vehicular traffic through and beyond the worksite and have sufficient visibility of approaching vehicles.
3. ~~The Type B flashing warning lights may be placed on the ROAD WORK AHEAD and the ONE LANE ROAD AHEAD signs whenever a night lane closure is necessary.~~ Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

[North arrow removed and figure number revised in 24A-TTC-03, June 2024]

Figure ~~6P-11~~ 6P-12a – Lane Closure on a Two-Lane Road with Low Traffic Volumes (~~TA-11~~ TA-12a)



Typical Application 12a

Notes for Figure 6P-13 – Typical Application 13
Temporary Road Closure

Support:

1. Conditions represented are a planned closure not exceeding 20 minutes during the daytime.

Standard:

2. A flagger or uniformed law enforcement officer shall be used for this application. The flagger, if used for this application, shall follow the procedures provided in Sections 6D.05 and 6D.06.

Guidance:

3. The uniformed law enforcement officer, if used for this application, should follow the procedures provided in Sections 6D.05 and 6D.06.

Option:

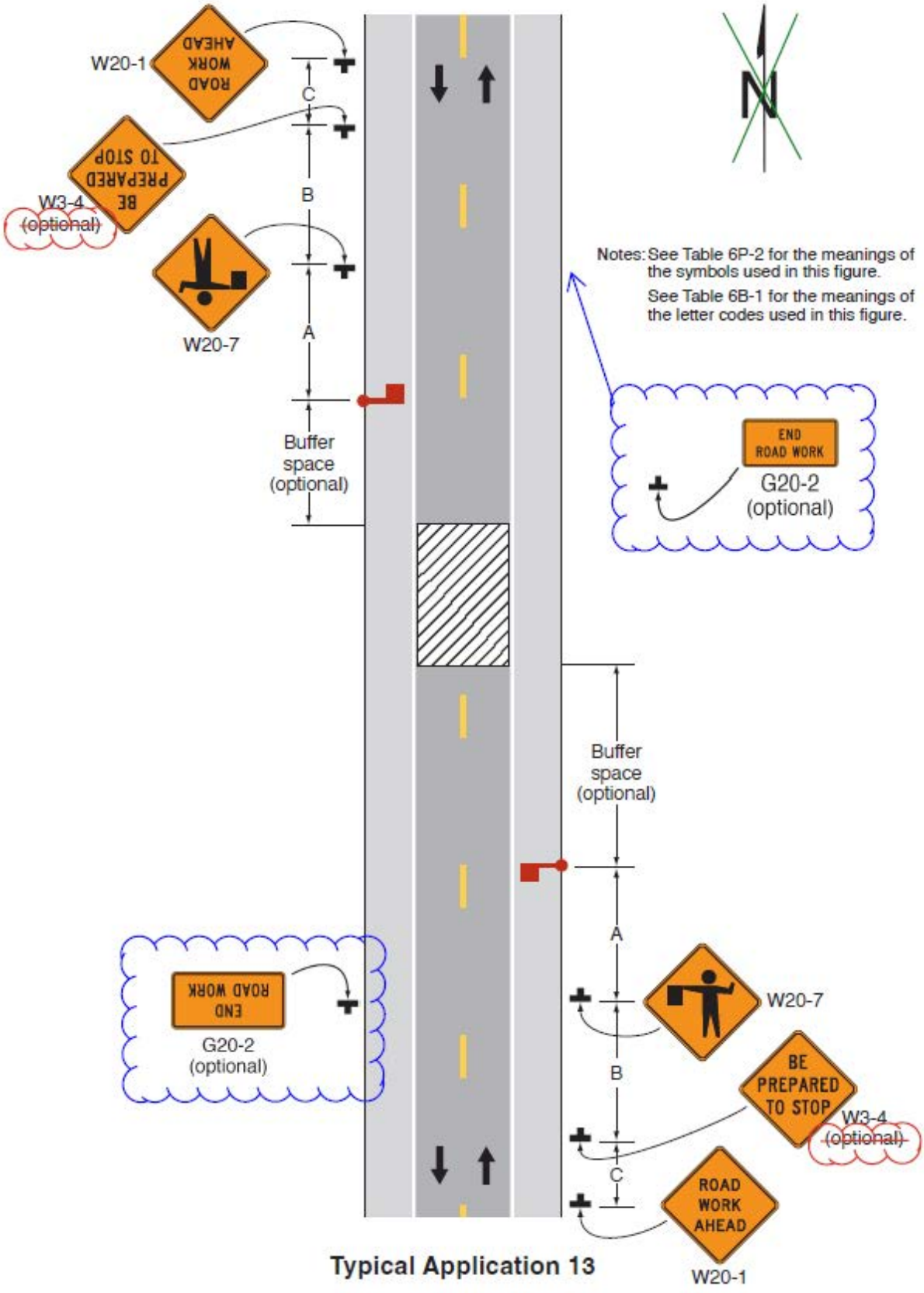
4. A BE PREPARED TO STOP sign may be ~~added to~~ omitted from the sign series where the space to place signs is constrained.
5. Positive protection devices may be used per Section 6M.02.
6. Automated Flagger Assistance Devices (see Section 6L.02) may be used in situations where there is only one lane of approaching traffic in the direction to be controlled.

~~*Guidance:*~~

~~*7. When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.*~~

[North arrow removed in 24A-TTC-03, June 2024]

Figure 6P-13 – Temporary Road Closure (TA-13)



Notes for Figure 6P-14 – Typical Application 14
Haul Road Crossing

Guidance:

1. Floodlights should be used to illuminate haul road crossings where existing light is inadequate.

2. Where no-passing lines are not already in place, they should be added.

Standard:

3. The traffic control method selected shall be used in both directions.

Flagging Method

4. When a road used exclusively as a haul road is not in use, the haul road shall be closed with Type 3 Barricades and the Flagger symbol signs covered.

5. The flagger shall follow the procedures provided in Sections 6D.05 and 6D.06.

6. At night, flagger stations shall be illuminated, except in emergencies.

Signalized Method

7. When a road used exclusively as a haul road is not in use, the haul road shall be closed with Type 3 Barricades. The signals shall either:

a. Flash yellow on the main road and flash red on the haul road or be covered, and the Signal Ahead and STOP HERE ON RED signs shall be covered or hidden from view; or

b. Display green on the main road and steady red on the haul road, but only if actuated signal operation is used such that green is always displayed to the main road except when a vehicle is detected on the haul road.

8. The temporary traffic control signals shall control both the highway and the haul road and shall meet the physical display and operational requirements of conventional traffic control signals as described in Part 4. Traffic control signal timing shall be established by authorized officials.

9. Stop lines shall be used on existing highways with temporary traffic control signals.

10. Existing conflicting pavements markings between the stop lines shall be removed. After the temporary traffic control signal is removed, the stop lines and other temporary pavement markings shall be removed and the permanent pavement markings restored.

Option:

10a. A BE PREPARED TO STOP sign may be added to the sign series.

Signalized Method

10b. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

Flagging Method

11. Automated Flagger Assistance Devices (see Section 6L.02) may be used in situations where there is only one lane of approaching traffic in the direction to be controlled.

Guidance:

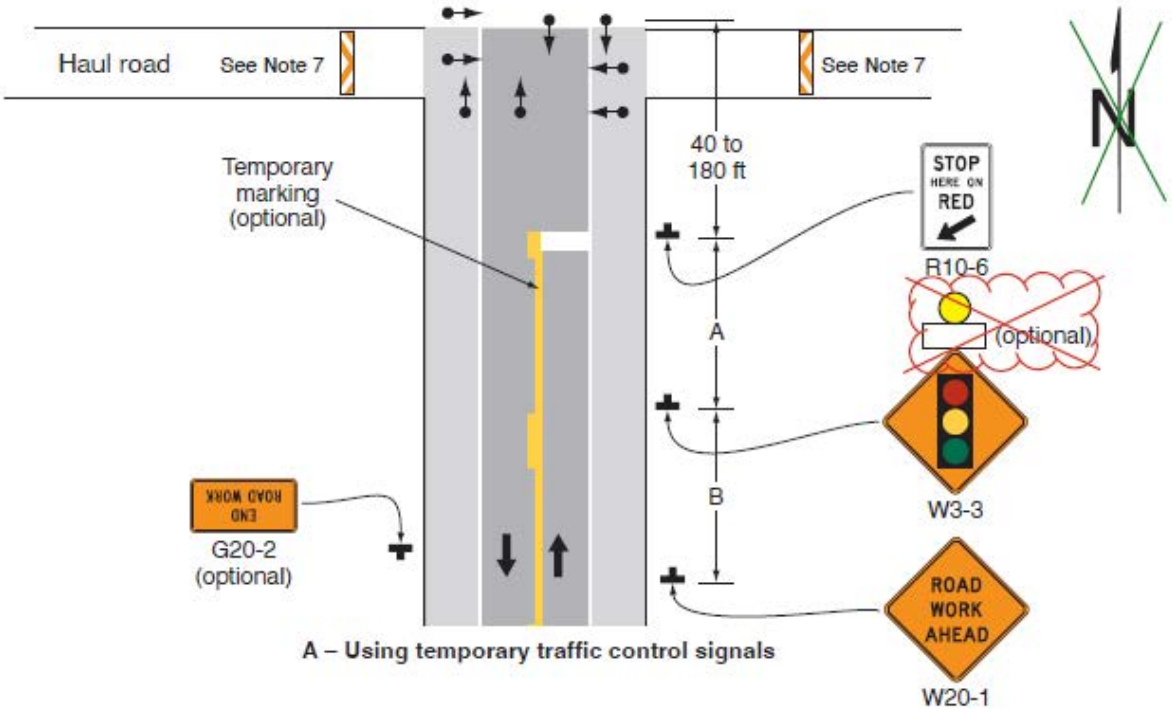
11a. When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.

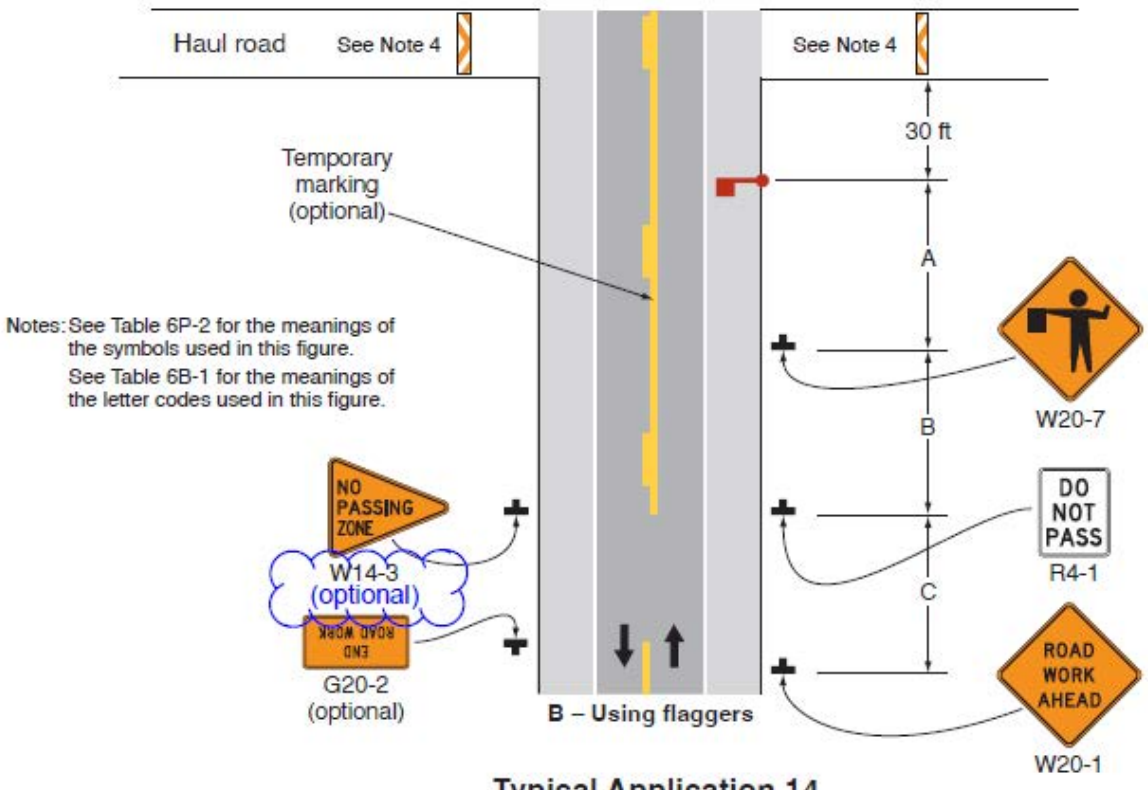
Signalized Method

12. If actuated signal operation is used (see Item b in Note 7 above) and pedestrian facilities, such as sidewalks, are present in the area of the haul road crossing, then consideration should be given to providing pedestrian actuation capability at the temporary traffic control signal to accommodate any pedestrians who might be depending upon a pedestrian phase to cross the main road.

[North arrow removed in 24A-TTC-03, June 2024]

Figure 6P-14 – Haul Road Crossing (TA-14)





Typical Application 14

Notes for Figure 6P-15 – Typical Application 15
Work in the Center of a Road with Low Traffic Volumes

Guidance:

1. *The lanes on either side of the center work space should have a minimum width of 10 feet as measured from the near edge of the channelizing devices to the edge of the pavement or the outside edge of the paved shoulder.*

1a. *A worker or a spotter should be used to warn workers and surveyors who cannot watch road users. The spotter(s) should be provided with an audible warning device, such as a two-way radio, air horn, or whistle.*

Option:

2. Positive protection devices may be used per Section 6M.02.

2a. A SURVEY CREW (W21-6) sign may be used in place of the ROAD WORK AHEAD (W20-1) sign.

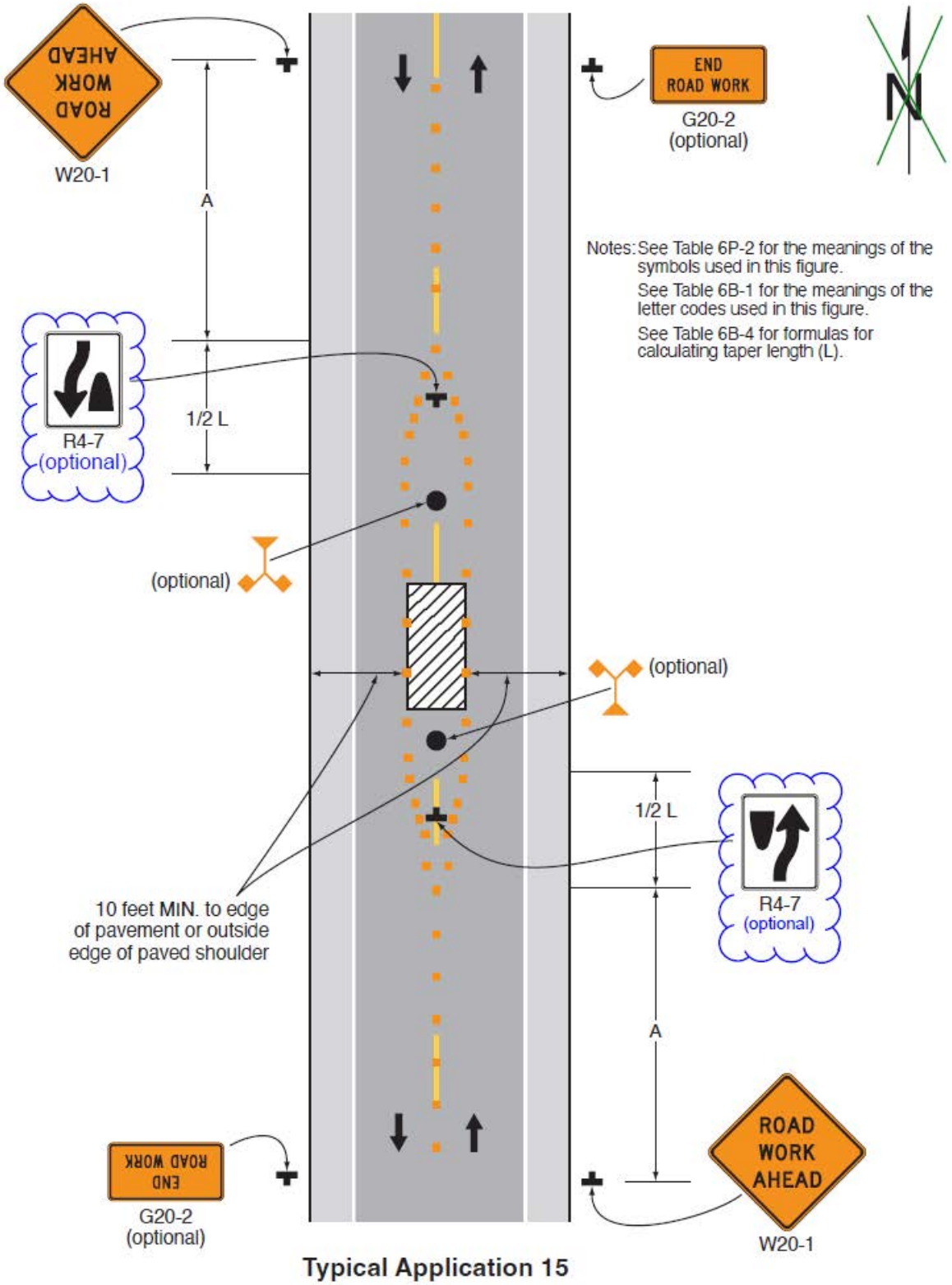
3. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
4. If the closure continues overnight, warning lights may be used on the channelizing devices.
5. A lane width of 9 feet may be used for short-term stationary work on low-volume, low-speed roadways when motor vehicle traffic does not include longer and wider heavy commercial vehicles.
6. A work vehicle displaying high-intensity rotating, flashing, oscillating, or strobe lights may be used instead of the channelizing devices forming the tapers or the high-level warning devices.
7. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

8. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights

[North arrow removed in 24A-TTC-03, June 2024]

Figure 6P-15 – Work in the Center of a Road with Low Traffic Volumes (TA-15)



Typical Application 15

Notes for Figure 6P-16 – Typical Application 16
Surveying Along the Center Line of a Road with Low Traffic Volumes

Guidance:

1. The lanes on either side of the center work space should have a minimum width of 10 feet as measured from the near edge of the channelizing devices to the edge of the pavement or the outside edge of the paved shoulder.

2. Cones should be placed 6 to 12 inches on either side of the center line.

3. A flagger should be used to warn workers who cannot watch road users.

Standard:

4. For surveying on the center line of a high-volume road, one lane shall be closed using the information illustrated in Figure 6P-10.

Option:

5. A high-level warning device may be used to protect a surveying device, such as a target on a tripod.

6. Cones may be omitted for a cross-section survey.

7. ROAD WORK AHEAD signs may be used in place of the SURVEY CREW signs. [Updated to Rev. 1]

8. Flags may be used to call attention to the advance warning signs.

9. If the work is along the shoulder, the flagger may be omitted.

10. For a survey along the edge of the road or along the shoulder, cones may be placed along the edge line.

11. A BE PREPARED TO STOP sign may be added to the sign series.

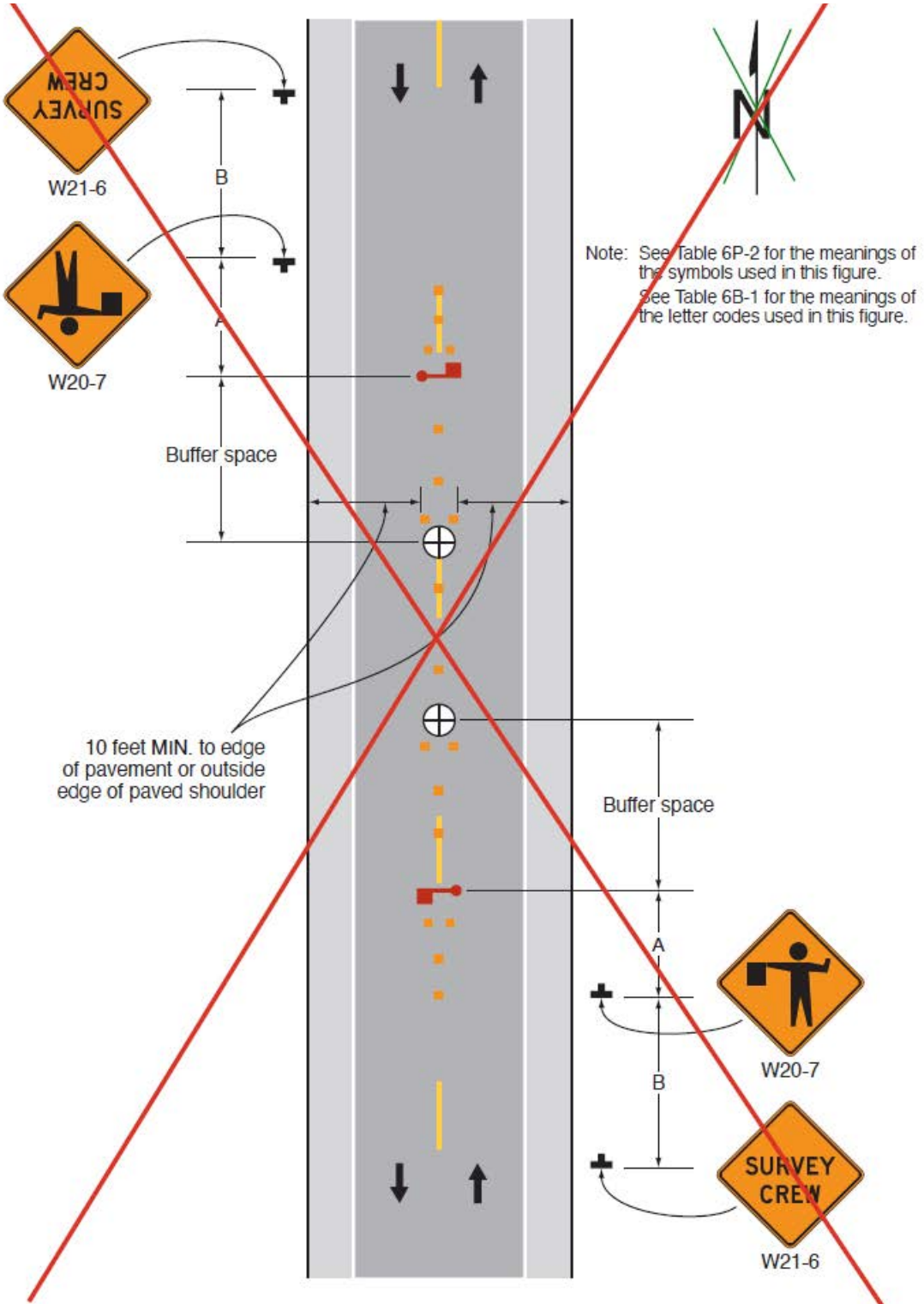
12. Automated Flagger Assistance Devices (see Section 6L.02) may be used in situations where there is only one lane of approaching traffic in the direction to be controlled.

Guidance:

13. When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.

[North arrow removed in 24A-TTC-03, June 2024]

~~Figure 6P-16 – Surveying Along The Center Line of a Road with Low Traffic Volumes (TA-16)~~



Typical Application 16