

# Traffic Control Quick Guide

## Summary of Layout Dimensions

### SUGGESTED ADVANCE WARNING SIGN SPACING

Road Type	Distance Between Signs (in feet)		
	A	B	C
Urban (low speed)	100'	100'	100'
Urban (high speed)	350'	350'	350'
Rural	500'	500'	500'
Expressway/Freeway	1,000'	1,500'	2,640'

### MAXIMUM SPACING OF CHANNELIZING DEVICES (IN FEET)

Road Type	Taper	Buffer/Work Space	Downstream
Two-lane	20'	2 x Speed Limit	20'
Multi-lane	Speed Limit	2 x Speed Limit	20'

### TAPERS AND FLAGGER STATION DISTANCES (IN FEET)

Speed Limit (mph)	Two-Lane	Multi-Lane **			Flagger Station/ Buffer
	Max. Two-Way Taper *	Merging Taper 12' lane	Shifting Taper 12' lane	Shoulder Taper 10' shoulder	
20	100'	80'	40'	25'	115'
25	100'	125'	70'	35'	155'
30	100'	180'	90'	50'	200'
35	100'	245'	130'	70'	250'
40	100'	320'	160'	90'	305'
45	100'	540'	280'	150'	360'
50	100'	600'	300'	170'	425'
55	100'	660'	330'	190'	495'
60	100'	720'	360'	200'	570'
65	100'	780'	390'	220'	645'

\* Refers to a one-lane, two-way traffic taper (see pages 7 and 26).

\*\* Multi-lane layouts use buffer zones instead of flagger stations

Note: Downstream taper = 100 feet

## 2018 USA Work Zone Fatalities

754 Fatalities

124 Worker Fatalities

- Long-term stationary – Work that occupies a location more than three days.
- Intermediate-term stationary – Work that occupies a location more than one daylight period up to three days, or nighttime work lasting more than one hour.
- Short-term stationary – Daytime work that occupies a location for more than one hour, within a single daylight period.
- Short duration – Work that occupies a location up to one hour.
- Mobile – Work that moves intermittently or continuously.

## Create a Flagger TTC Plan



Use the figure above to draw a traffic control plan.

Place the signs and other devices needed. Center skip lines are not to scale.

Write in the appropriate distances and spacing for the signs, tapers, cones, buffer space, etc.

Two Lane Street, Urban Area

35 mph, 10 ft Lanes

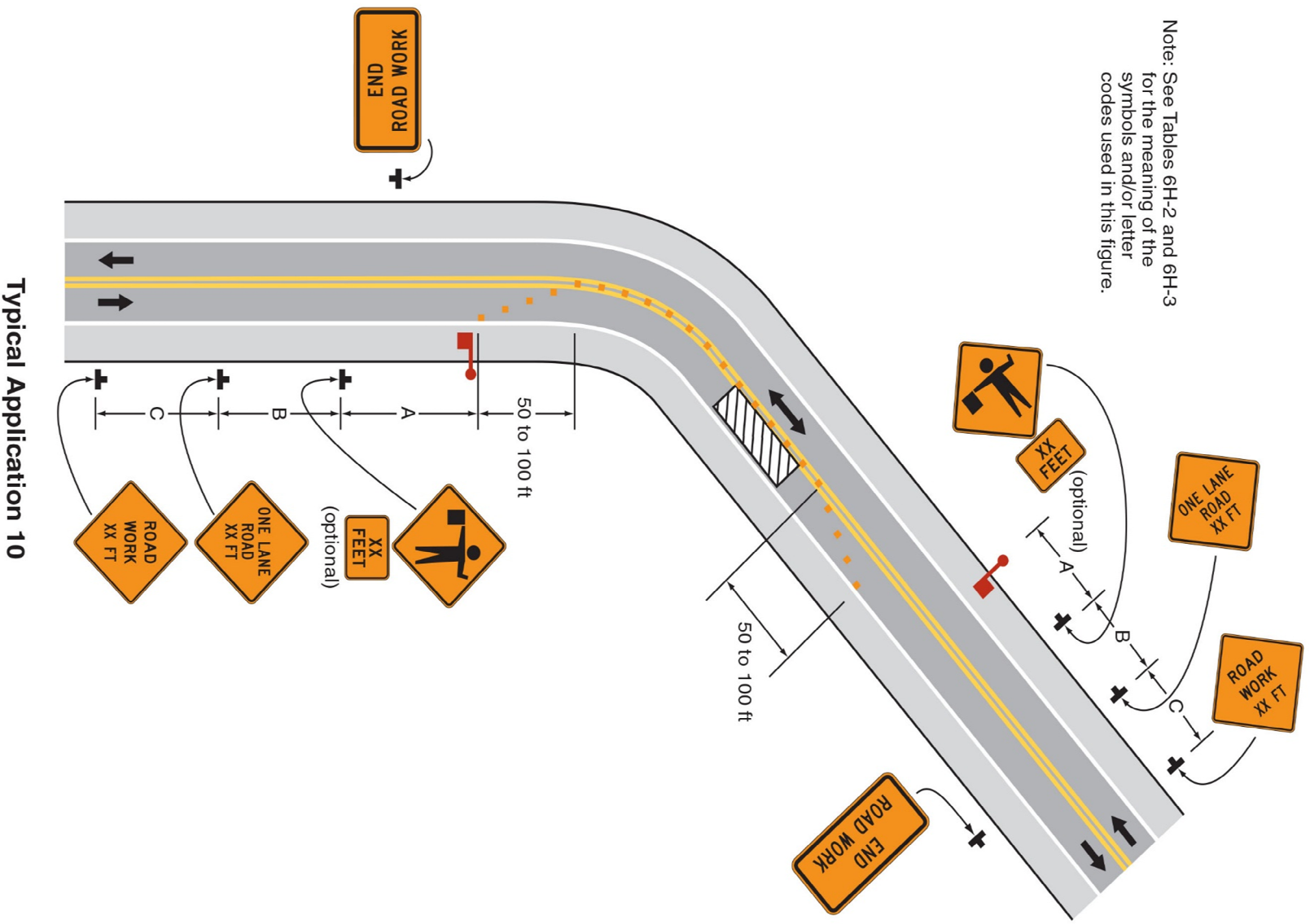
Work Space = 300 feet

Duration = 6 daylight hours

ADT = 1500

**Figure 6H-10. Lane Closure on a Two-Lane Road Using Flaggers (TA-10)**

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



**Typical Application 10**

## Notes for Figure 6H-10—Typical Application 10 Lane Closure on a Two-Lane Road Using Flaggers

### Option:

1. For low-volume situations with short work 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 6E).
2. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
3. 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.

### Guidance:

4. *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:

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

### Guidance:

6. *When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.*
7. *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.*
8. *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.*
9. *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.*
10. *Early coordination with the railroad company or light rail transit agency should occur before work starts.*

### Option:

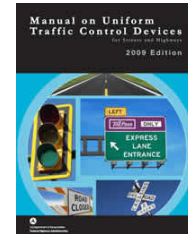
11. A flagger or a uniformed law enforcement officer may be used at the grade crossing to minimize the probability that vehicles are stopped within 15 feet of the grade crossing, measured from both sides of the outside rails.

# Work Zone Traffic Control - INLTAP

## Useful Resources:

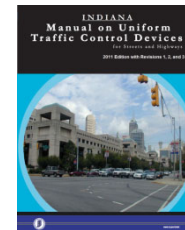
Manual on Uniform Traffic Control Devices

<https://mutcd.fhwa.dot.gov/>



Indiana Manual on Uniform Traffic Control Devices

<https://www.in.gov/dot/div/contracts/design/mutcd/mutcd.html>



Concise Handbook for Temporary Traffic Control – IN LTAP

<https://www.purdue.edu/inltap/>



Field Guide to Installation and Removal of TTC

[www.atssa.com/WorkZoneSafetyGrant/GuidanceDocs](http://www.atssa.com/WorkZoneSafetyGrant/GuidanceDocs)

