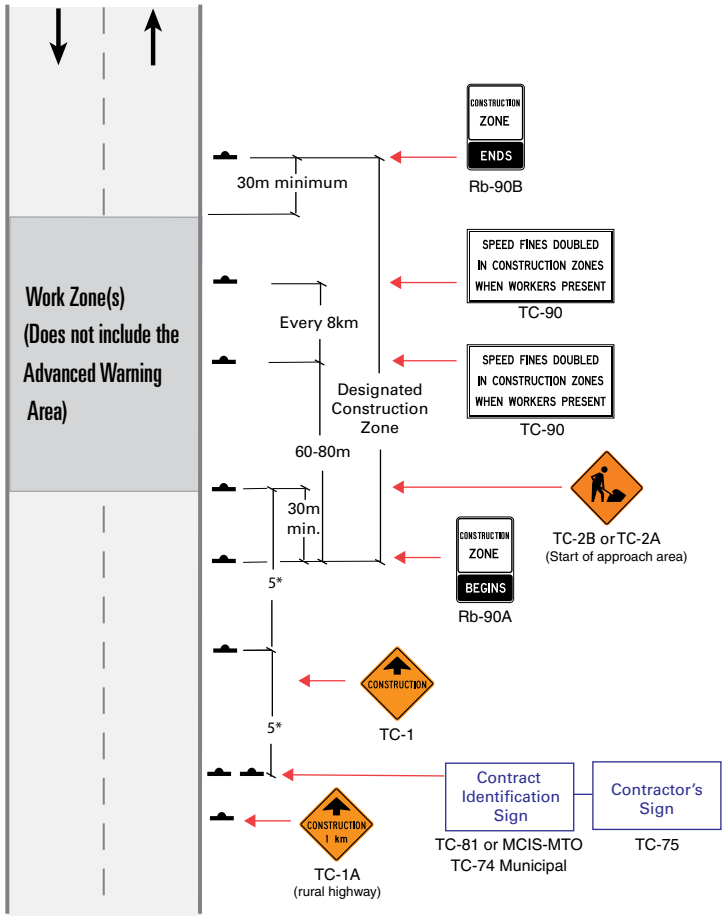
Figure TL-1 Designated Construction Zone Signing

- ☑ **Two-Lane**
- ☐ Multi-Lane
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ **Long Duration**



* See *Table B*.

NOTES

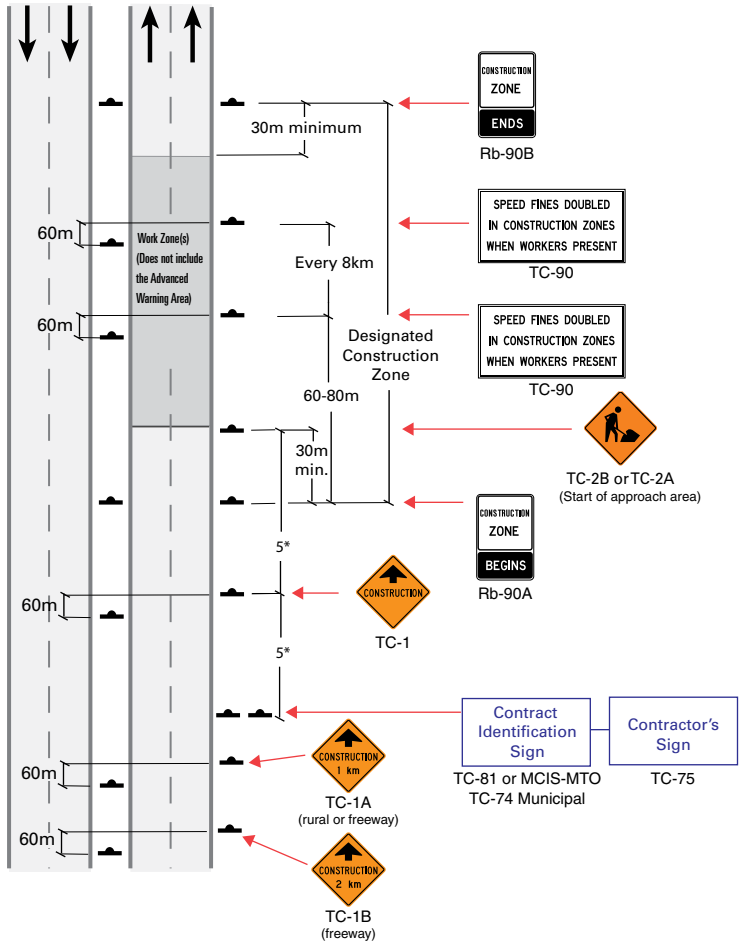
i) The same signing is required in the opposite direction.

ii) Speed Fines Doubled signs are recommended, but not required.

iii) As shown, the limits of the Designated Construction Zone do not need to include TC-1, TC-1A, TC-1B, TC-5, TC-5A, TC-5B and information signs.

Figure TL-2 Designated Construction Zone Signing

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☑ **Freeway**
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ **Long Duration**



* For Non-Freeways, see *Table B*. For Freeways, see *Table C*.

NOTES

i) Where signs cannot be accommodated in the median, provide additional signs on the right shoulder or oversize as practicable.

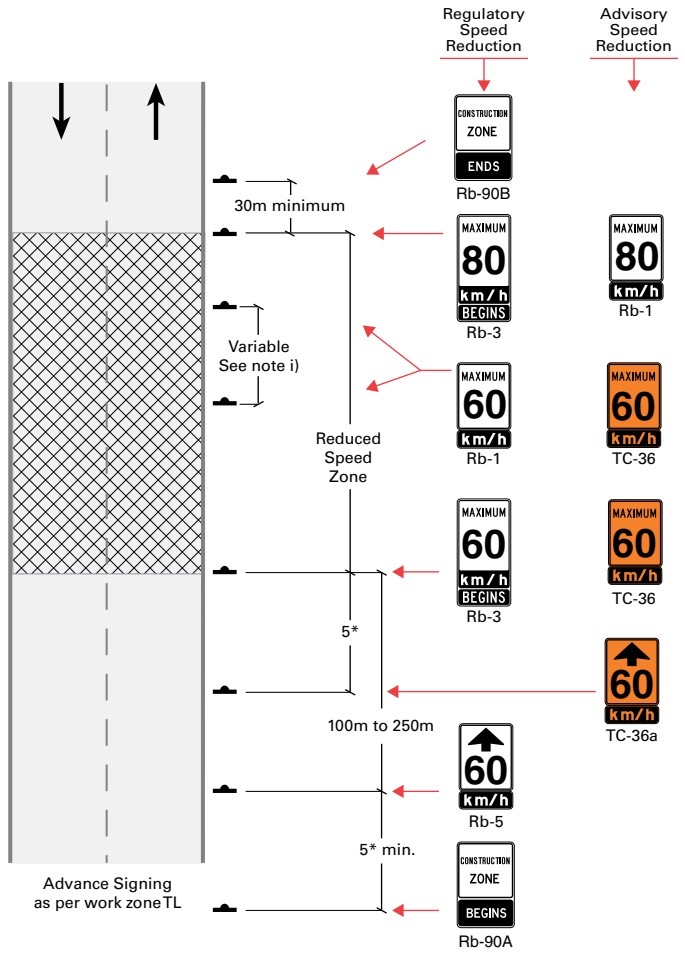
ii) Speed Fines Doubled signs are recommended, but not required.

iii) As shown, the limits of the Designated Construction Zone do not need to include TC-1, TC-1A, TC-1B, TC-5, TC-5A, TC-5B and information signs.

Figure TL-3 Reduced Speed Zone Signing

☑ **Two-Lane**
☐ Multi-Lane
☐ Undivided Non-freeway
☐ Divided Non-freeway
☐ Freeway

☐ Mobile Operations
☐ Very Short Duration
☑ **Short Duration**
☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) Refer to Regulation 615 of the Highway Traffic Act and OTM Book 5 for distance between regulatory speed limit signs.

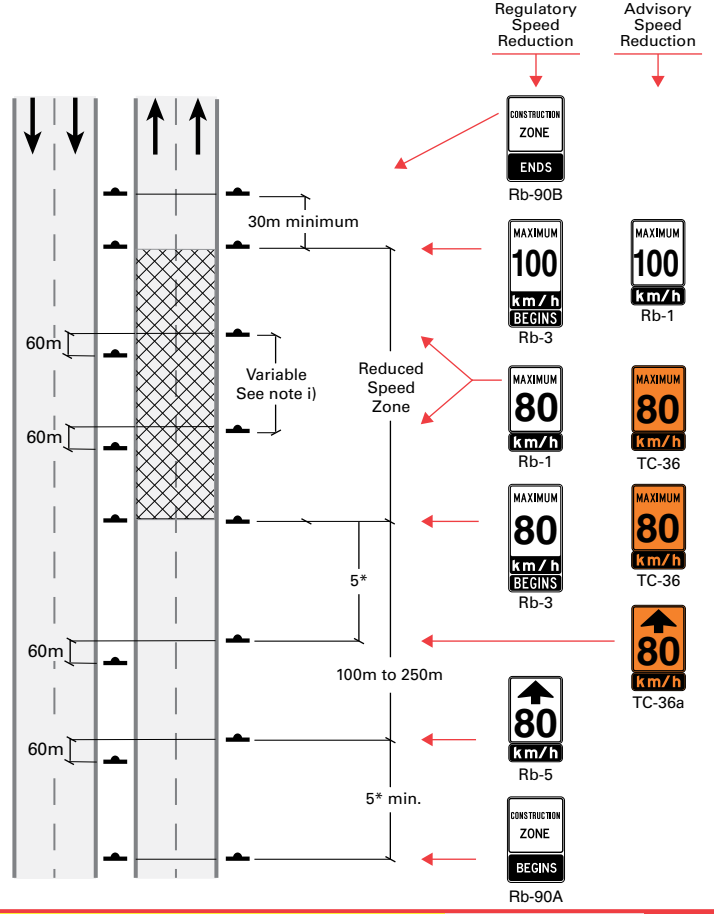
ii) For regulatory speed reduction, a Designated Construction Zone must be established and signed as per TL-1.

iii) The same signing is required in the opposite direction.

Figure TL-4 Reduced Speed Zone Signing

☐ Two-Lane
☑ **Multi-Lane**
☑ **Undivided Non-freeway**
☑ **Divided Non-freeway**
☑ **Freeway**

☐ Mobile Operations
☐ Very Short Duration
☑ **Short Duration**
☑ **Long Duration**



* For Non-Freeways, see *Table A* or *Table B*. For Freeways, see *Table C*.

NOTES

i) Refer to Regulation 615 of the Highway Traffic Act and OTM Book 5 for distance between regulatory speed limit signs.

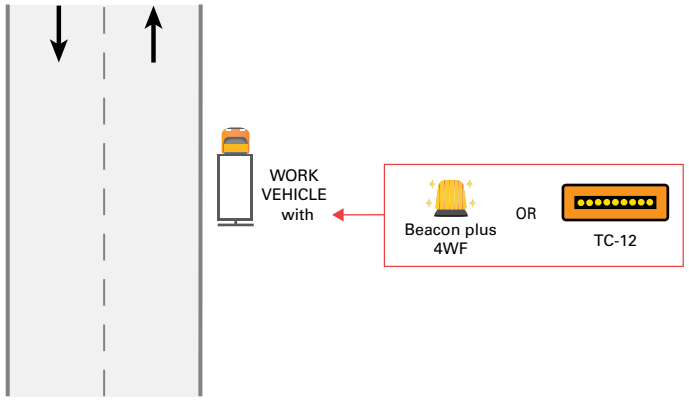
ii) For regulatory speed reduction, a Designated Construction Zone must be established and signed as per TL-1.

iii) Where signs cannot be accommodated in the median, provide additional signs on the right shoulder or oversize as practicable.

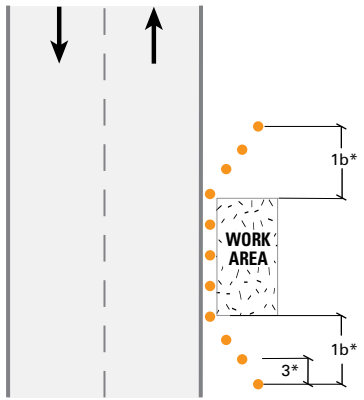
Figure TL-5 Shoulder Work

- ☑ Two-Lane
- ☑ Multi-Lane
- ☑ Undivided Non-freeway
- ☑ Divided Non-freeway
- ☐ Freeway
- ☑ Mobile Operations
- ☑ Very Short Duration
- ☐ Short Duration
- ☐ Long Duration

With work vehicle - Mobile or VSD



No work vehicle - VSD



* See *Table A*.

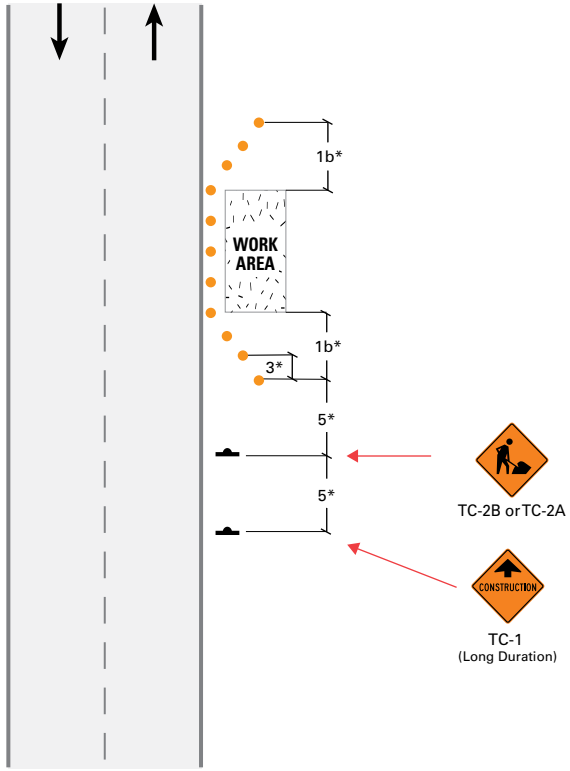
NOTES

i) Work on the left shoulder mirror image for multi-lane divided road.

ii) Termination taper optional.

Figure TL-6 Shoulder Work

- ☑ Two-Lane
- ☑ Multi-Lane
- ☑ Undivided Non-freeway
- ☑ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) Work on the left shoulder mirror image for multi-lane divided road.

ii) Termination taper optional.

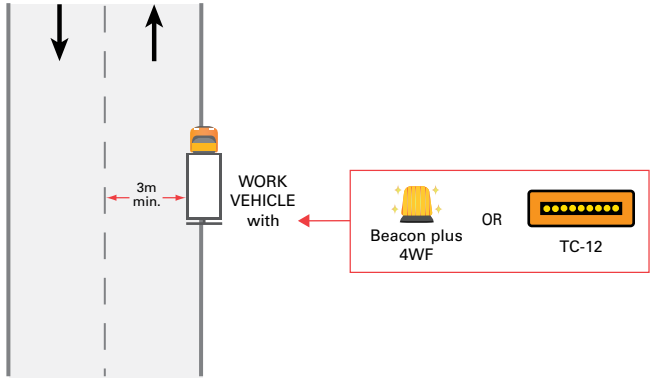
iii) Work area may or may not contain a work vehicle. See General Notes to Typical Layouts #4.

iv) A work vehicle with a TC-12 may replace cones for Short Duration work.

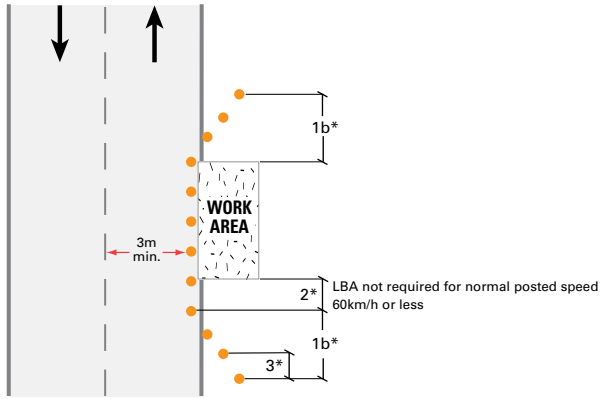
Figure TL-7 Lane Encroachment

- ☑ Two-Lane
- ☑ Multi-Lane
  - ☑ Undivided Non-freeway
  - ☑ Divided Non-freeway
  - ☐ Freeway
- ☑ Mobile Operations
- ☑ Very Short Duration
- ☐ Short Duration
- ☐ Long Duration

With work vehicle - Mobile or VSD



No work vehicle - VSD



* See *Table A*.

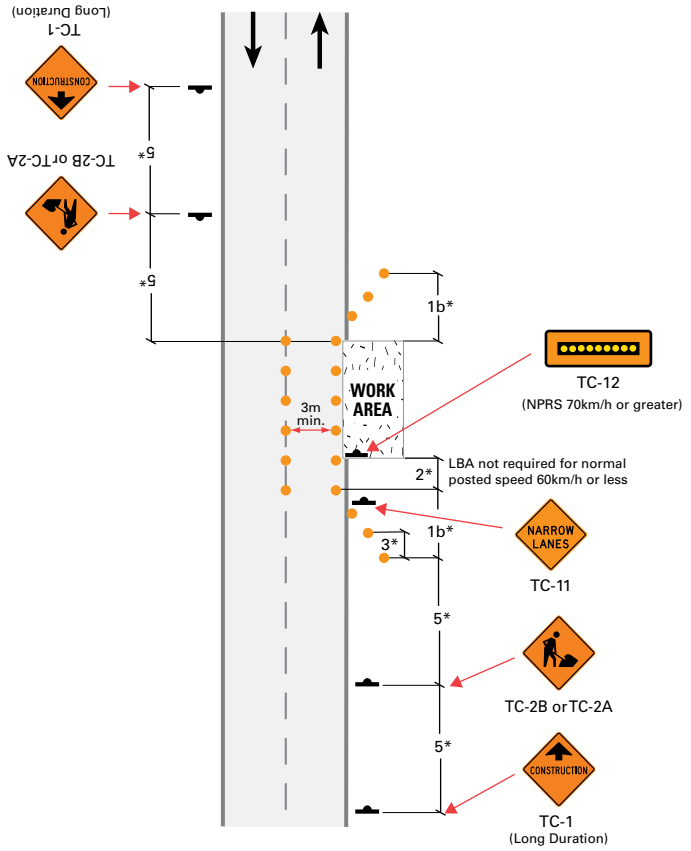
NOTES

i) Termination taper optional.

ii) Encroachment in the left lane, mirror image for multi-lane divided road.

Figure TL-8 Lane Encroachment

- ☑ Two-Lane
- ☐ Multi-Lane
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) If Available Lane Width (ALW) is less than 3m, use partial lane shift (See TL-9, TL-10) or lane closures (TL-20A, TL-20B, TL-21).

ii) Center line cones are optional and are to be used if lane keeping is an issue.

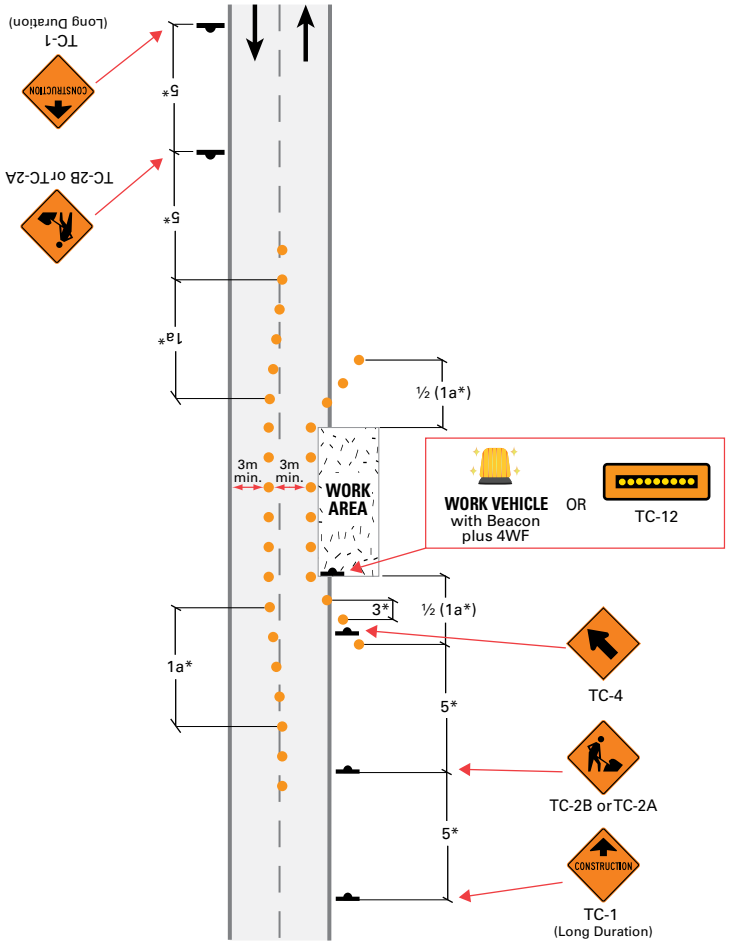
iii) On unpaved roads with low volume (<3000 vehicles per day):
- Where remaining roadway width is at least 6m, and ALW is less than 3m, use Rb-91, a distance 5* upstream of start of taper, and move the TC-1 and TC-2B an additional distance 5* upstream.

iv) Work area may or may not contain a work vehicle. See General Notes to Typical Layouts #4.

v) A work vehicle with a TC-12 may replace cones for Short Duration work where NPRS is under 70km/h.

Figure TL-9 Partial Lane Shift

- ☑ Two-Lane
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

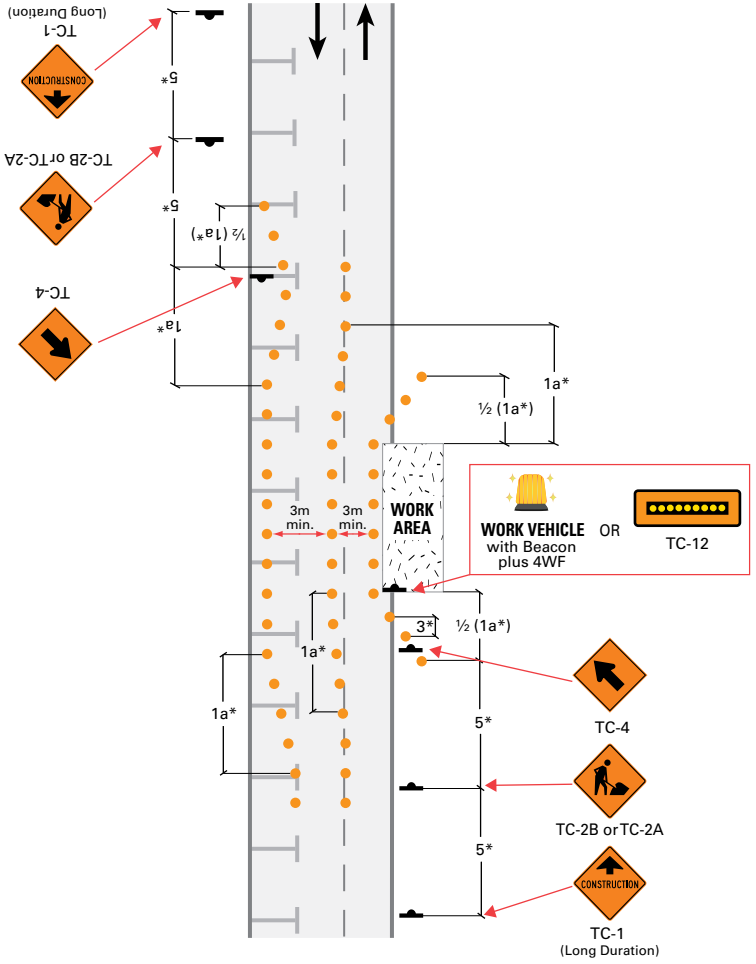
i) Remaining roadway must be at least 6m with a lane width of at least 3m in each direction.

ii) Traffic should not be shifted onto a surface texture different from the main roadway without a posted speed reduction.

iii) For Work Areas 50m or less.

Figure TL-10 Partial Lane Shift: Wide Platform

- ☑ Two-Lane
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) Remaining roadway must be at least 6m with a lane width of at least 3m in each direction.

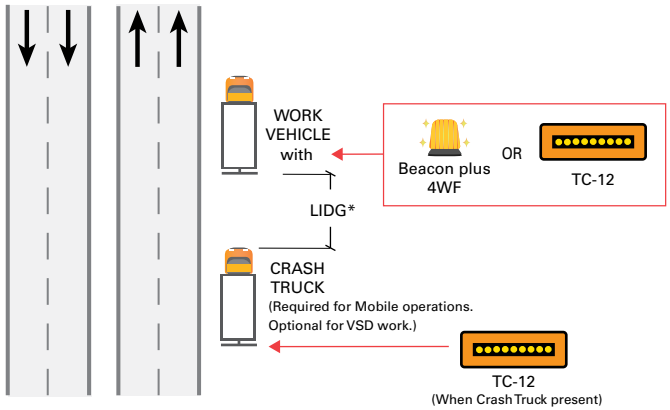
ii) Traffic should not be shifted onto a surface texture different from the main roadway without a posted speed reduction.

Figure TL-11 Shoulder Work

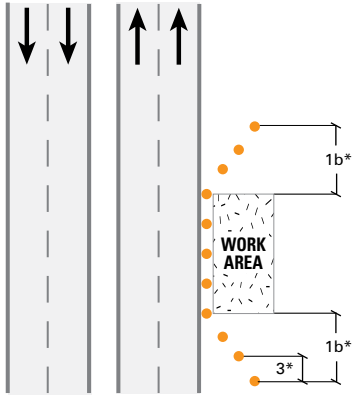
- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☑ **Freeway**

- ☑ **Mobile Operations**
- ☑ **Very Short Duration**
- ☐ Short Duration
- ☐ Long Duration

With work vehicle - Mobile or VSD



No work vehicle - VSD



* See *Table C*. For LIDG*, see *Table D*.

NOTES

i) Work on the left shoulder mirror image.

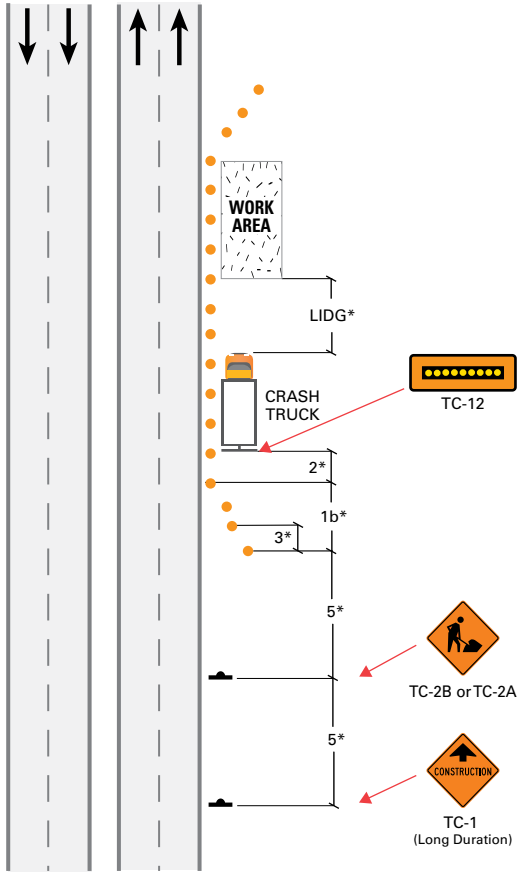
ii) Termination taper optional.

ii) Preferred option for VSD work is to have a work vehicle present..

Figure TL-12 Shoulder Work

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☑ **Freeway**

- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



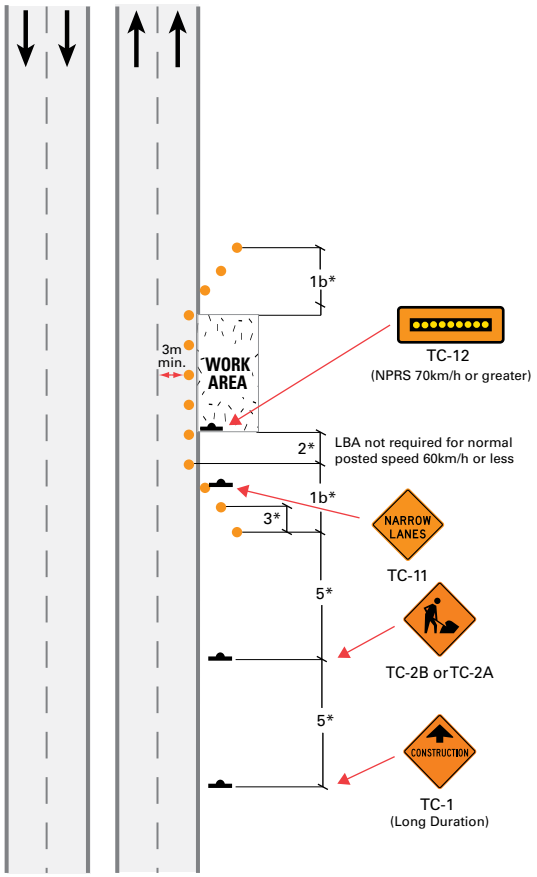
* See *Table C*. For LIDG*, see *Table D*.

NOTES

i) Work on the left shoulder mirror image.

Figure TL-14 Lane Encroachment

☐ Two-Lane	☐ Mobile Operations	
☑ **Multi-Lane**	☑ **Undivided Non-freeway**	☐ Very Short Duration
	☑ **Divided Non-freeway**	☑ **Short Duration**
	☐ Freeway	☑ **Long Duration**



NOTES

* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

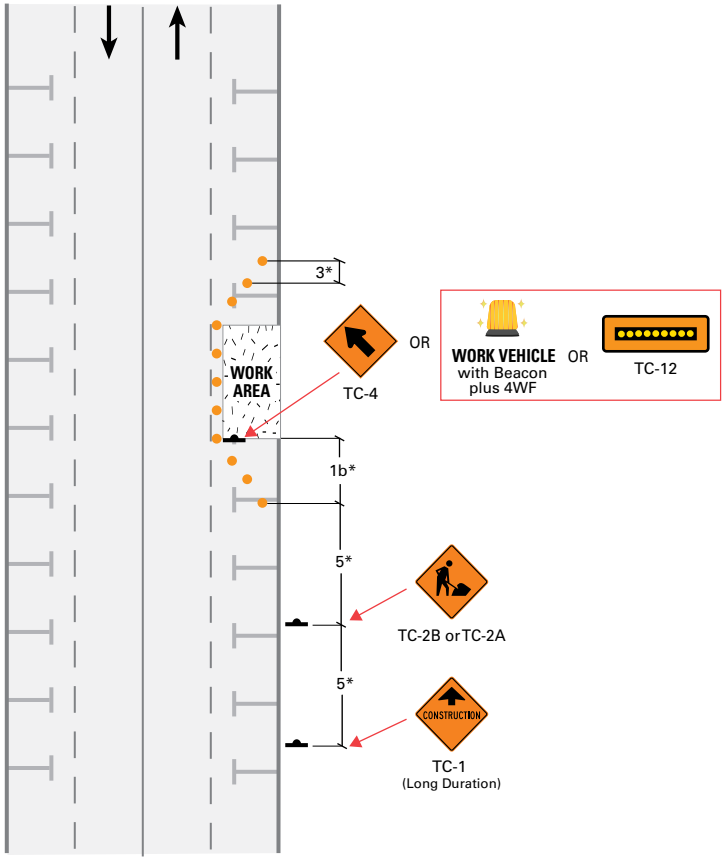
i) Encroachment in the left lane: mirror image of right lane (divided roads only).

ii) Work area may or may not contain a work vehicle. See General Notes to Typical Layouts #4.

iii) A work vehicle with a TC-12 may replace cones for Short Duration work where NPRS is under 70km/h.

Figure TL-16 Parking Lane Closed

☐ Two-Lane	☐ Mobile Operations	
☑ **Multi-Lane**	☑ **Undivided Non-freeway**	☑ **Very Short Duration**
	☑ **Divided Non-freeway**	☑ **Short Duration**
	☐ Freeway	☑ **Long Duration**



NOTES

* For Very Short and Short Duration, see *Table A*. For Long Duration, see *Table B*.

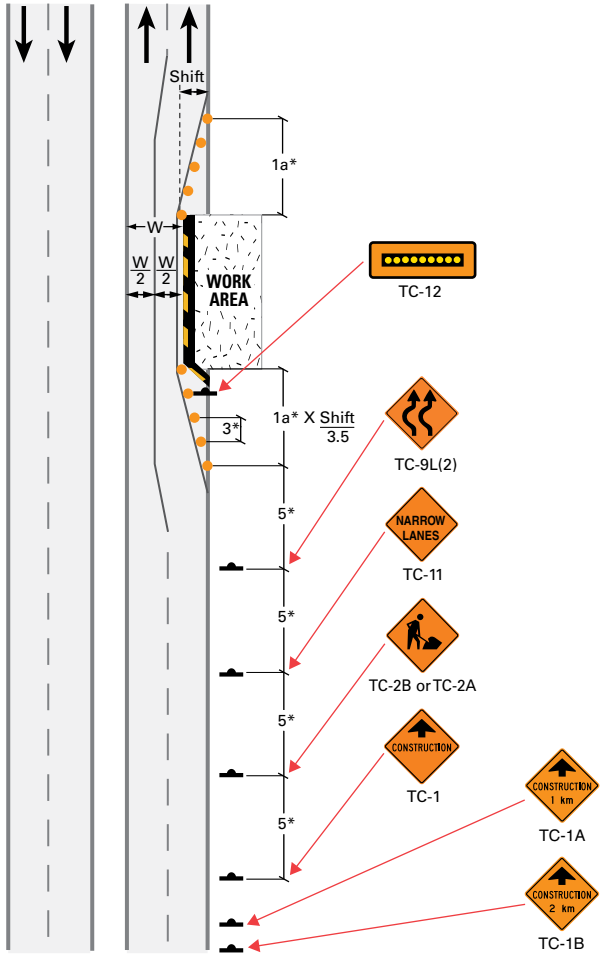
i) Placement of TC-1 or TC-2 may need to be adjusted if visibility is obstructed due to parked vehicles.

ii) For very short or short duration work, a work vehicle with Beacon/4WF or a TC-12 in bar mode can replace cones.

Figure TL-17 Partial Lane Shift: Narrow Lanes

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☑ **Freeway**

- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ **Long Duration**



* For Non-Freeways, see *Table B*. For Freeways, see *Table C*.

NOTES

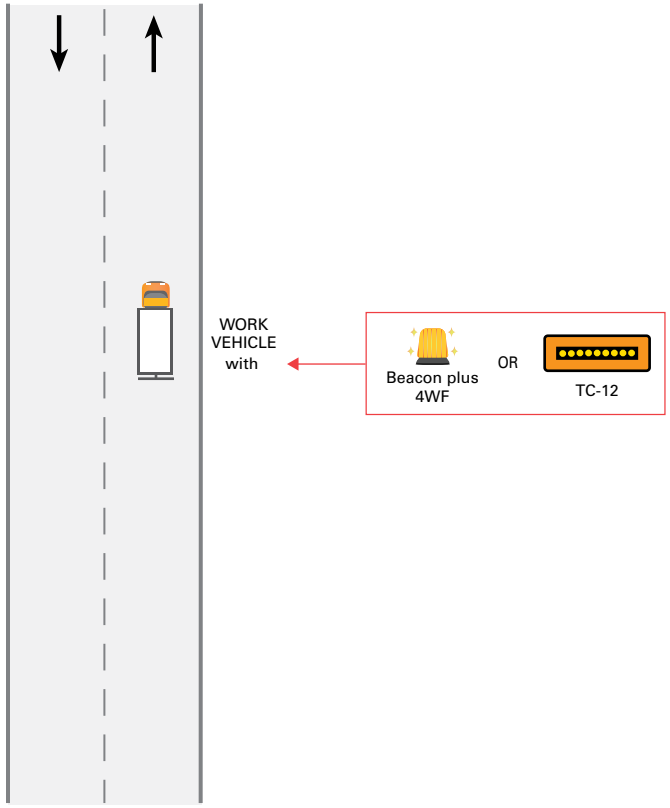
i) $\frac{W}{2}$ = 3m minimum (3.5m preferred on Freeways).

ii) For narrowed lanes exceeding 2 km, use a TC-16EL (ER) in place of the TC-9L(R). Add an additional TC16ER(EL) at the beginning of end taper.

Figure TL-18 Lane Closed or Occupied

- ☑ **Two-Lane**
- ☐ Multi-Lane
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☐ Freeway

- ☑ **Mobile Operations**
- ☐ Very Short Duration
- ☐ Short Duration
- ☐ Long Duration

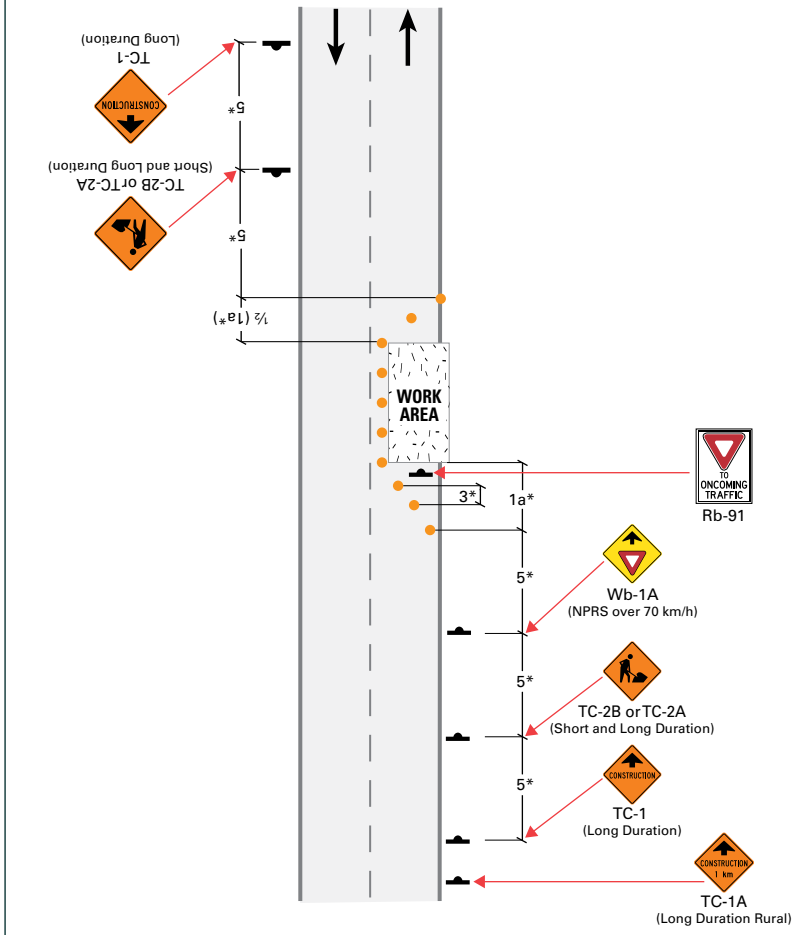


* See *Table A*.

NOTES

Figure TL-19 — Lane Closed (Yield to Oncoming Traffic) — Low Volume Roads

- ☑ Two-Lane
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



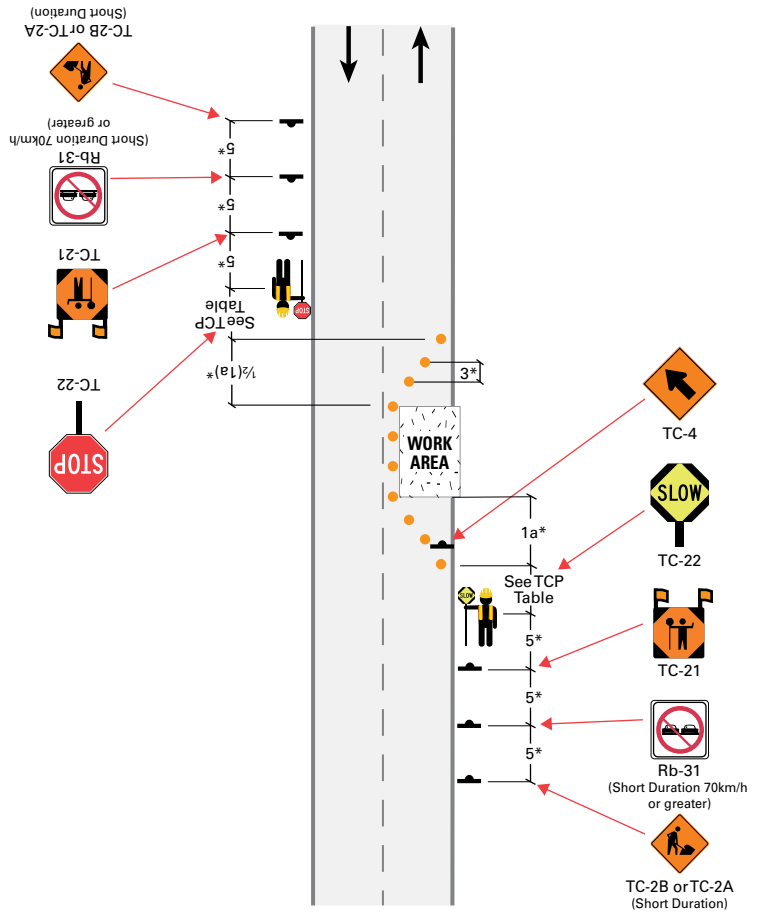
* For Very Short and Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) Use only on roads with low traffic volume (< 3000 vehicles per day).
ii) To be used for short length work areas (< 150m).
iii) May also be used on roads with no centreline.
iv) Use only where there is unobstructed visibility of oncoming traffic in both directions.
v) Work area may or may not contain a work vehicle. See General Notes to Typical Layouts #4. If work vehicle has a TC-12, it must be in bar mode.

Figure TL-20A — Lane Closed (Traffic Control Persons)

- ☑ Two-Lane
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ Very Short Duration
- ☑ Short Duration
- ☐ Long Duration



* See *Table A*.

NOTES

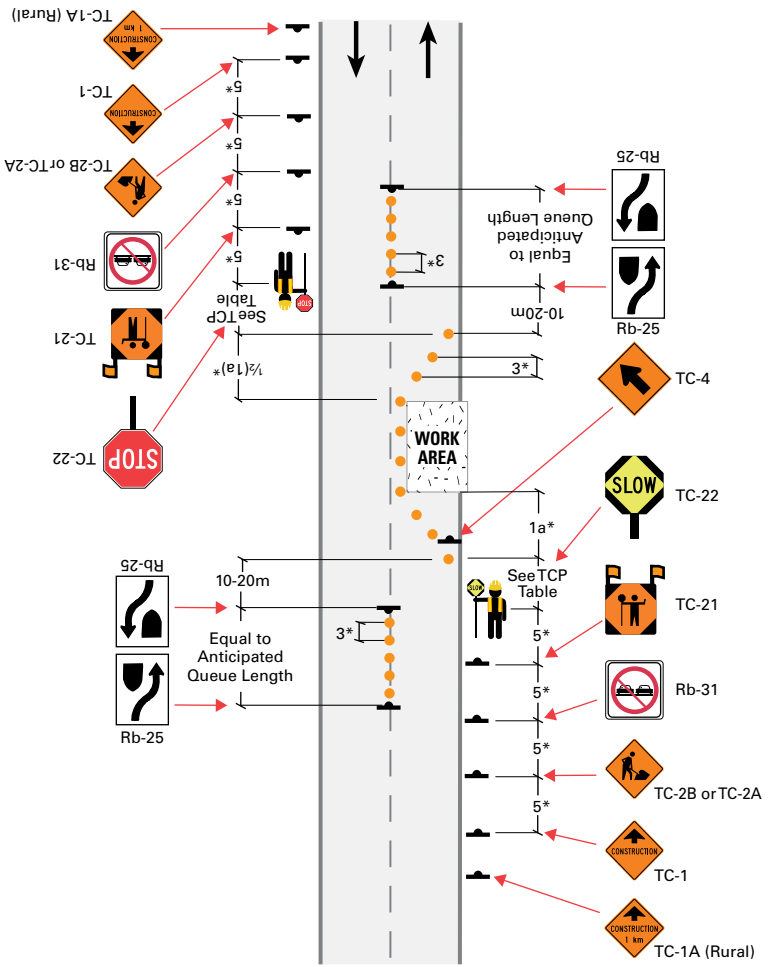
i) For low-volume roads (< 3000 vehicles per day) and visibility more than 150m beyond the end taper, the TCP and TC-21 may be eliminated for the direction that is not closed.

ii) For Very Short duration, work on low-volume roads with a normal posted speed less than 70km/h, the cones are not required.

iii) On high speed (70 km/h or greater) or where lane keeping/compliance is an issue, consider using TL-20B.

Figure TL-20B Lane Closed (Traffic Control Persons)

- ☑ **Two-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ **Long Duration**



* See *Table B*.

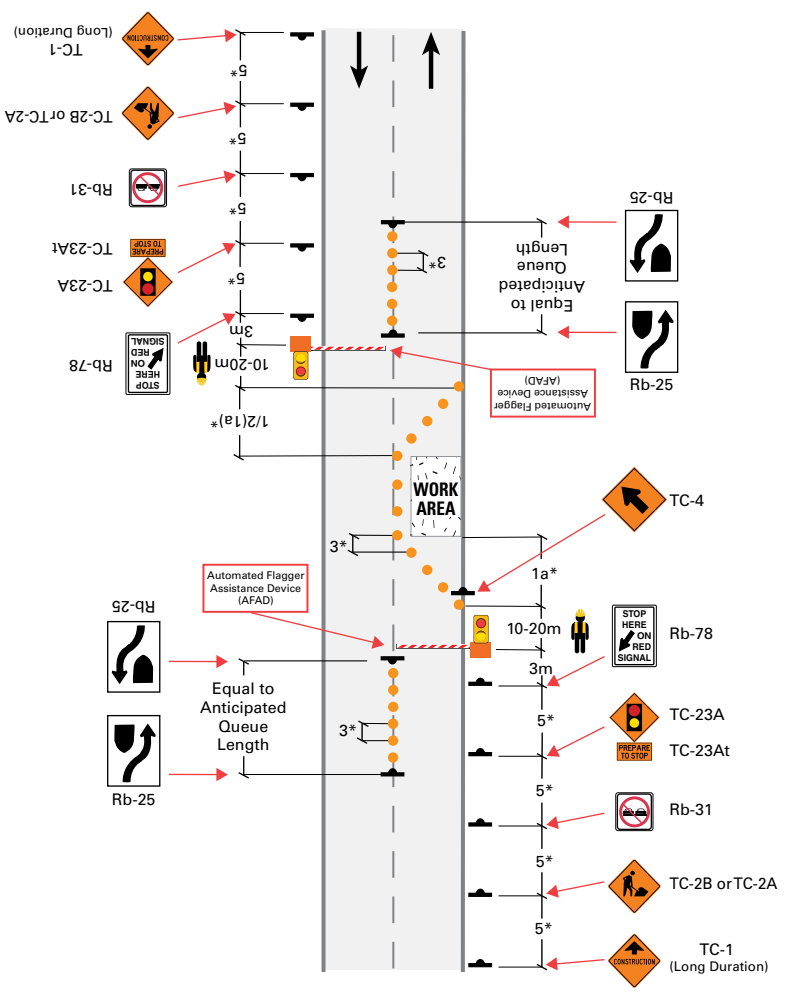
NOTES

i) For low-volume roads (< 3000 vehicles per day) and visibility more than 150m beyond the end taper, the TCP and TC-21 may be eliminated for the direction that is not closed.

ii) Centreline cones between RB-25 signs and RB-25 signs are optional and may be used in one or both directions if lane keeping becomes an issue.

Figure TL-20C Lane Closed (Automated Flagger Assistance Device)

- ☑ **Two-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*; For Long Duration, see *Table B*.

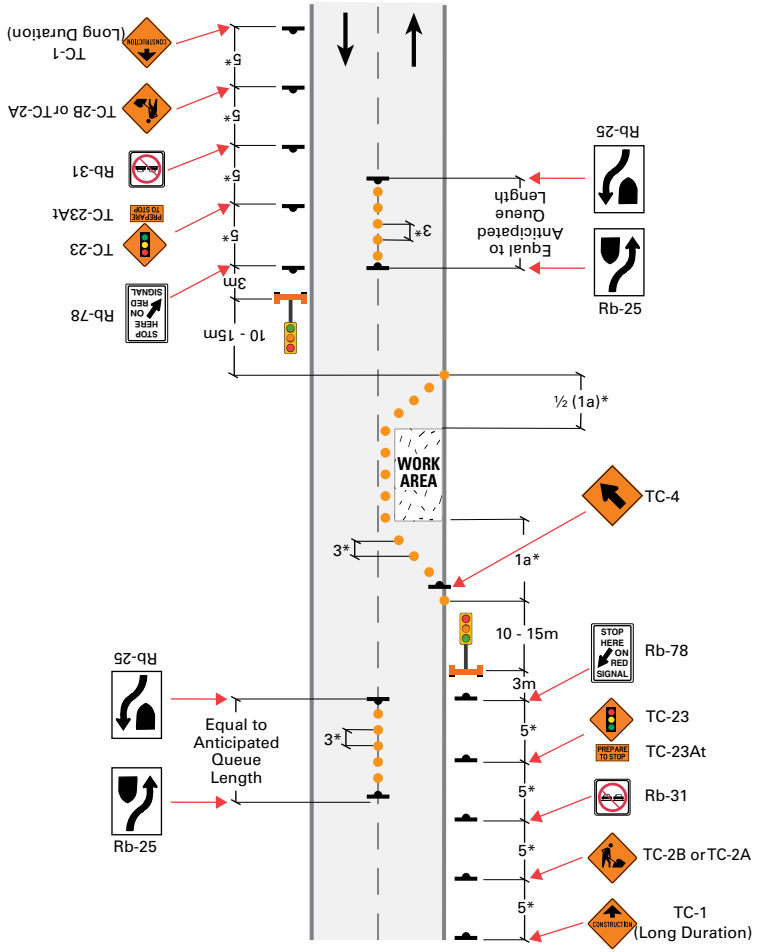
NOTES

i) TCP is required to control Automated Flagger Assistance Device and to have a paddle (TC-22) available in the event of failure.

Figure TL-21 Lane Closed (Portable Lane Control Signals)

- ☑ **Two-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway

- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☐ Long Duration



* See *Table A*.

NOTES

i) To determine the appropriate timing of the lane control signals, see Section 5.3.2 (Office Edition).

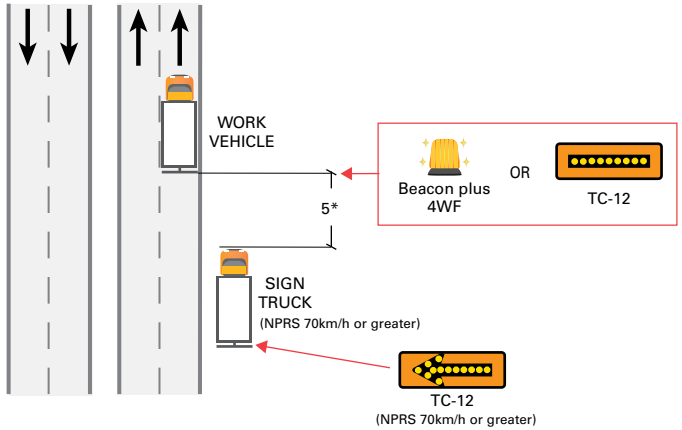
ii) Lane control signals are only to be used while the contractor is on site and on roads with NPRS of 60km/h or less. Portable signals that are to operate when no contractor is present or on roads with a NPRS of 70km/h or greater are Portable Temporary Traffic Control signals (PTTS) and require Road Authority approval of layout and signal timing. MTO applications require the completion of a PHM-125 (see OTM Book 12).

Figure TL-22 Lane Closed or Occupied

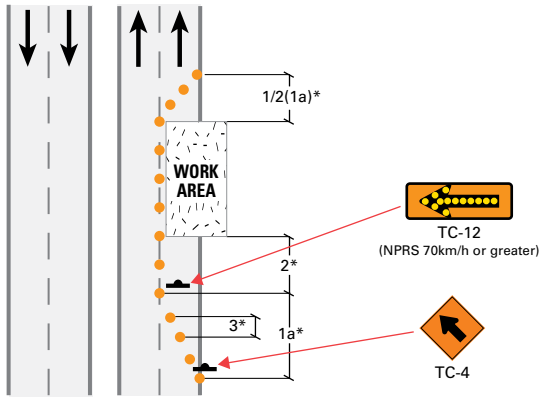
- ☐ Two-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☑ **Divided Non-freeway**
- ☐ Freeway

- ☑ **Mobile Operations**
- ☑ **Very Short Duration**
- ☐ Short Duration
- ☐ Long Duration

With work vehicle - Mobile or VSD



No work vehicle - VSD



* See *Table A*.

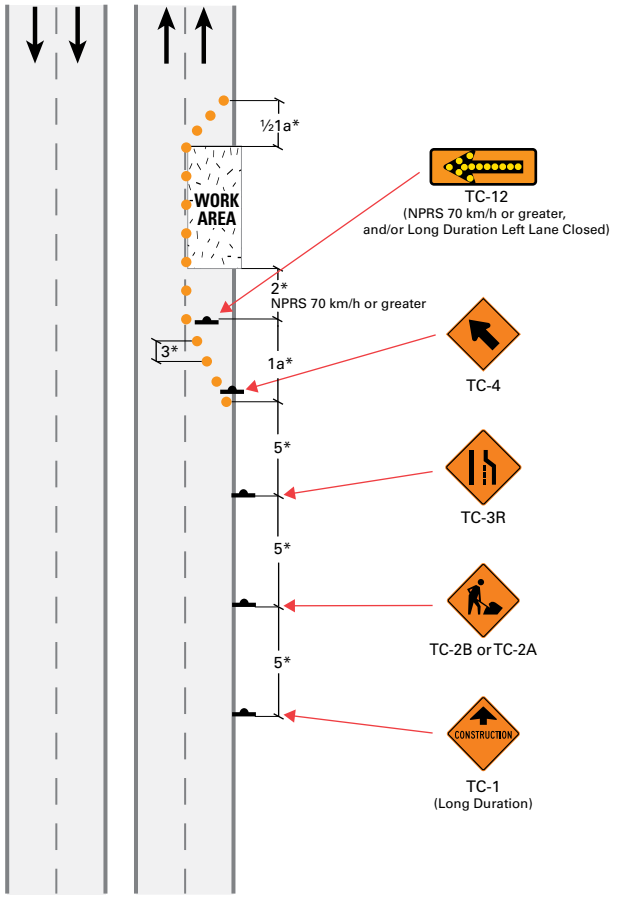
NOTES

i) Distance between sign truck and work vehicle may be adjusted to accommodate hills, curves, restricted visibility, or other site specific conditions.

ii) Left lane closed mirror image on divided roads only. Undivided or no shoulder see TL-25.

Figure TL-23 Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

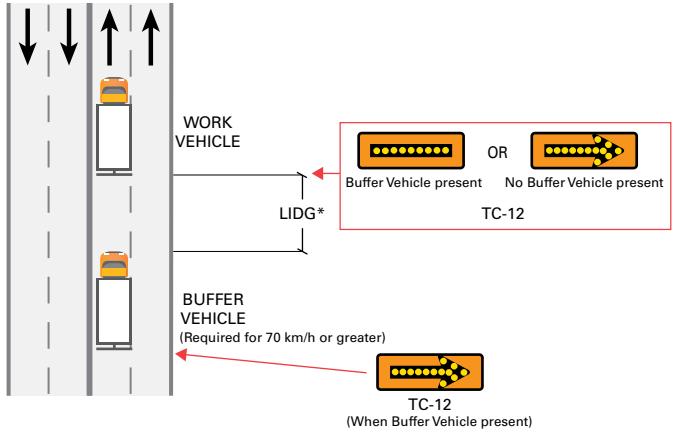
i) Left Lane Closed: mirror image for divided roads only. For Left lane closed, TC-3R, TC2A or A, TC-1 are to be repeated on opposite shoulder where NPRS is 70km/h or greater.

ii) For Left Lane Closed Undivided or with no shoulder, see TL-26.

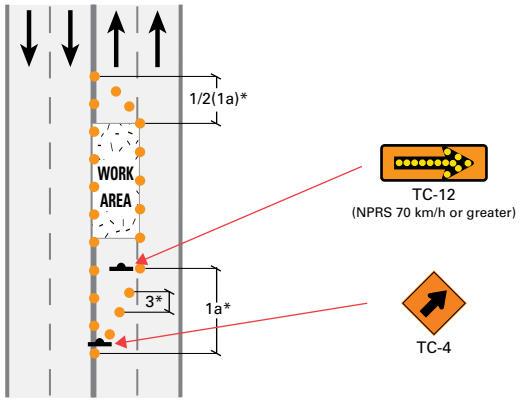
Figure TL-25 Left Lane Closed or Occupied - Undivided or No Shoulder

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☑ **Mobile Operations**
- ☑ **Very Short Duration**
- ☐ Short Duration
- ☐ Long Duration

With work vehicle - Mobile or VSD



No work vehicle - VSD



* See *Table A*. For LIDG*, see *Table D*.

NOTES

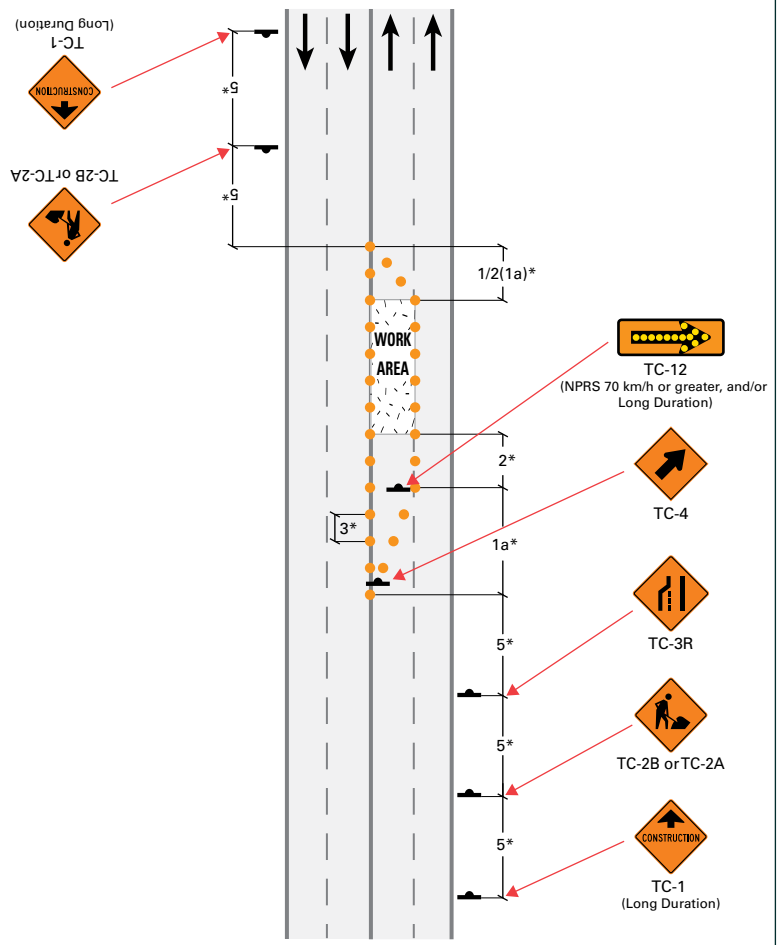
i) Distance between sign truck and work vehicle may be adjusted to accommodate hills, curves, restricted visibility, or other site specific conditions.

ii) Centreline delineation is not required on divided roads.

Figure TL-26 Left Lane Closed - Undivided or No Shoulder

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☐ **Divided Non-freeway**
  - ☐ Freeway

- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

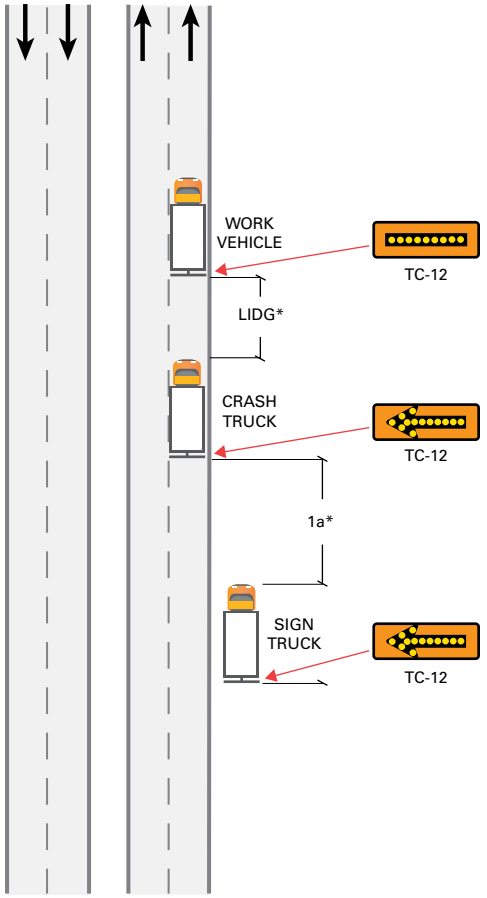
NOTES

i) Centreline delineation and advance warning signs on opposite direction (TC-1 & TC-2) are not required on divided roads.

Figure TL-27 Right or Left Lane Closed or Occupied

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☑ **Freeway**

- ☑ **Mobile Operations**
- ☐ Very Short Duration
- ☐ Short Duration
- ☐ Long Duration



* For Freeways, see *Table C*. For LIDG*, see *Table D*.

NOTES

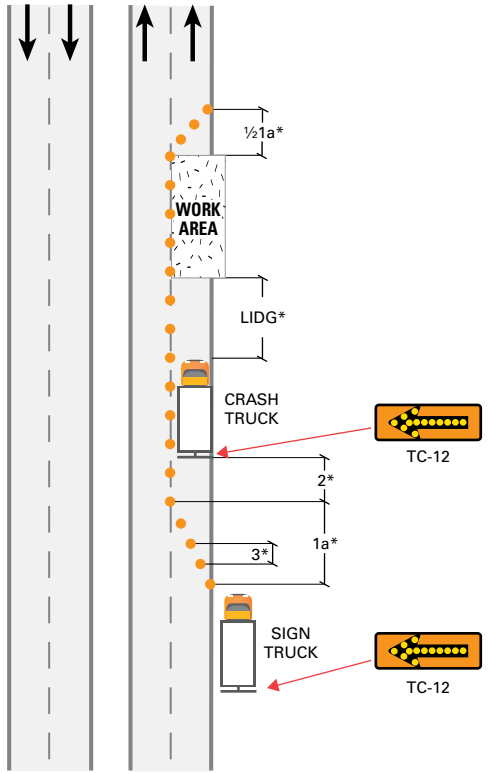
i) Distance between Sign Truck and Crash Truck may be adjusted to accommodate hills, curves, restricted visibility, or other site specific conditions.

ii) Left Lane Closed: mirror image of Right Lane Closed, where shoulder exists. Where no shoulder Sign Truck maybe eliminated and the TC-12 on the Work Vehicle should be in arrow mode. Optionally a Crash Truck with TC-12 in arrow mode can replace the Sign Truck and follow in the occupied lane.

Figure TL-28 Right or Left Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☑ **Freeway**

- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☐ Short Duration
- ☐ Long Duration



* For Freeways, see *Table C*. For LIDG*, see *Table D*.

NOTES

i) The Work Area may include work vehicles. All work vehicles in the Work Area (downstream of the Crash Truck) with an activated TC-12 must have the TC-12 in bar mode.

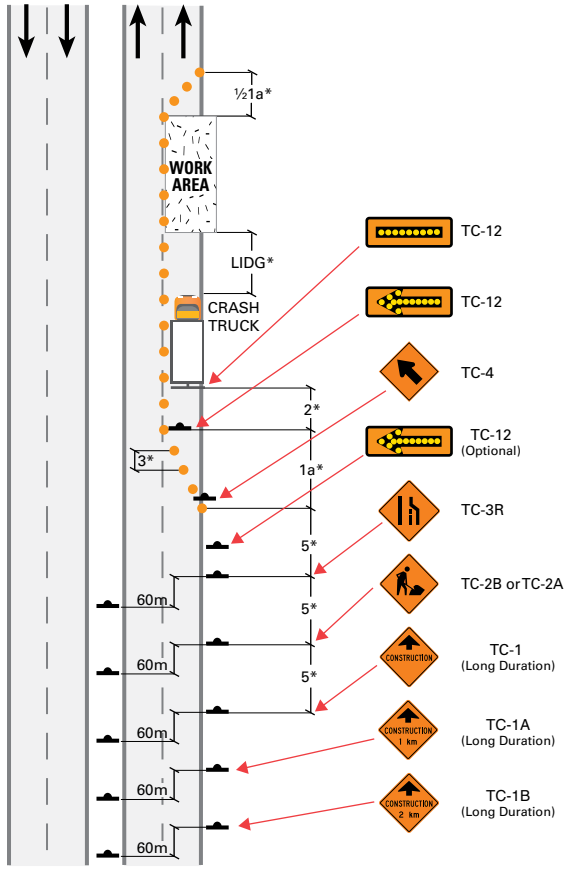
ii) Left Lane Closed: mirror image of Right Lane Closed.

iii) For HOV lane closure (or other legally limited lane use): lengthen 2* such that the transition taper is within the legal access/egress zone, and lengthen Work Area such that exit taper is within legal access/egress zone. Where not practicable, notify and/or have police present.

Figure TL-29 Right or Left Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☑ **Freeway**

- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Freeways, see *Table C*. For LIDG*, see *Table D*.

NOTES

i) Left Lane Closed: mirror image of Right Lane Closed.

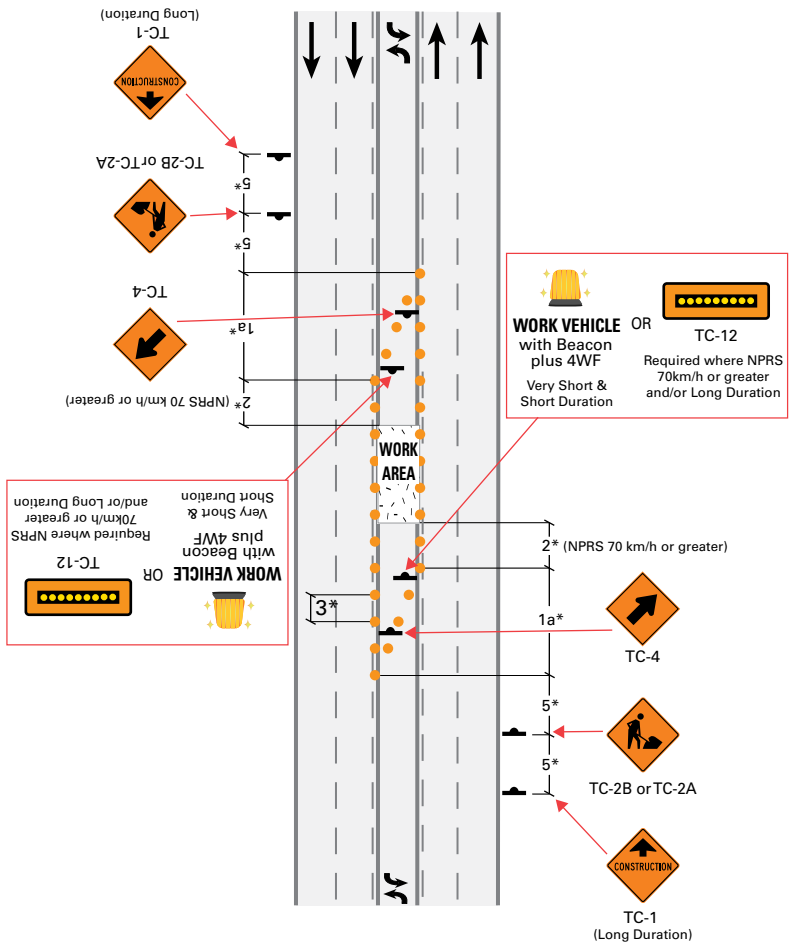
ii) Where signs cannot be accommodated in the median, provide additional signs on the right shoulder.

iii) The Work Area may include work vehicles. All work vehicles in the Work Area (downstream of the Crash Truck) with an activated TC-12 must have the TC-12 in bar mode.

iv) For HOV lane closure (or other legally limited lane use): lengthen 2* such that the transition taper is within the legal access/egress zone, and lengthen Work Area such that exit taper is within legal access/egress zone. Where not practicable, notify and/or have police present.

Figure TL-30 Two-Way Left Turn Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☑ **Long Duration**



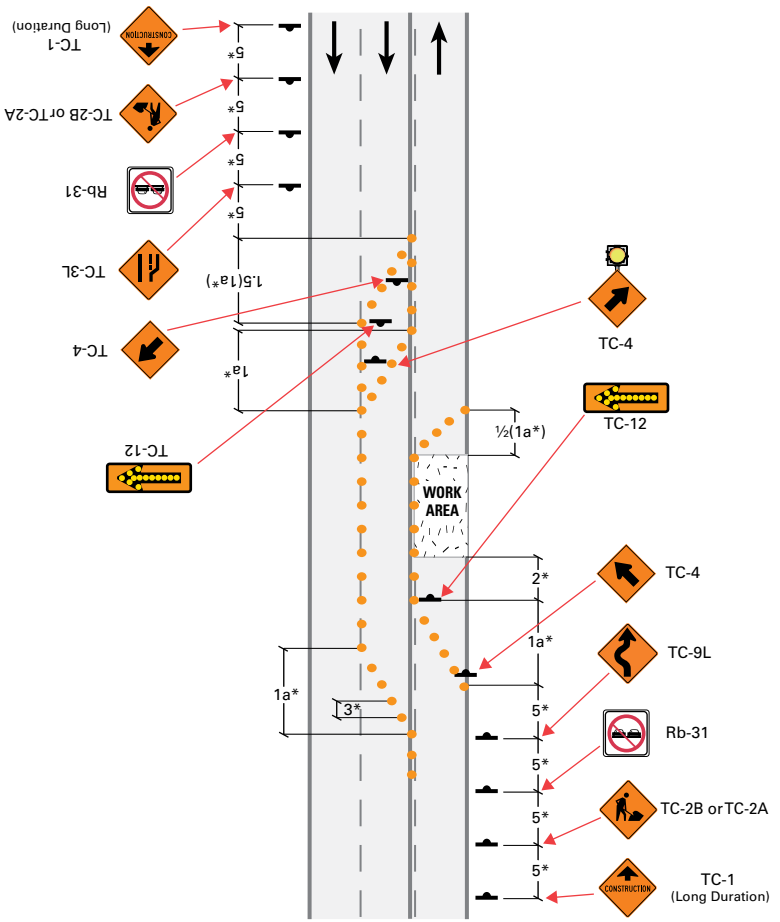
* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) Where TC-12s are used for Very Short Duration & Short Duration work, and the NPRS is less than 70km/h, cones are not required.

Figure TL-31 Passing Lanes: Single-Lane Direction Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

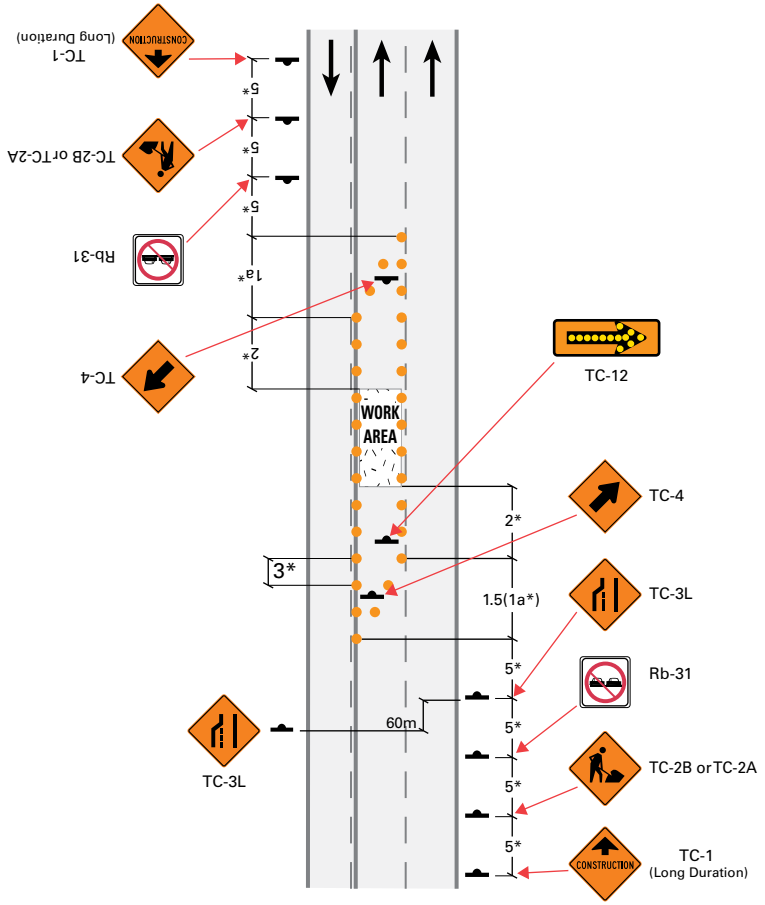
i) The added lane should be allowed to redevelop only if there is sufficient remaining lane length to permit safe passing.

ii) For high volume roads or Long Duration work longer than 5 days, the use of Temporary Concrete Barriers should be considered to separate opposing traffic.

iii) For Diversions exceeding 1km, use a TC-16EL(ER) in place of the TC-9L(R), and add an additional TC-16ER(EL) at the beginning of end taper.

Figure TL-32 Passing Lanes: Centre Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☐ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

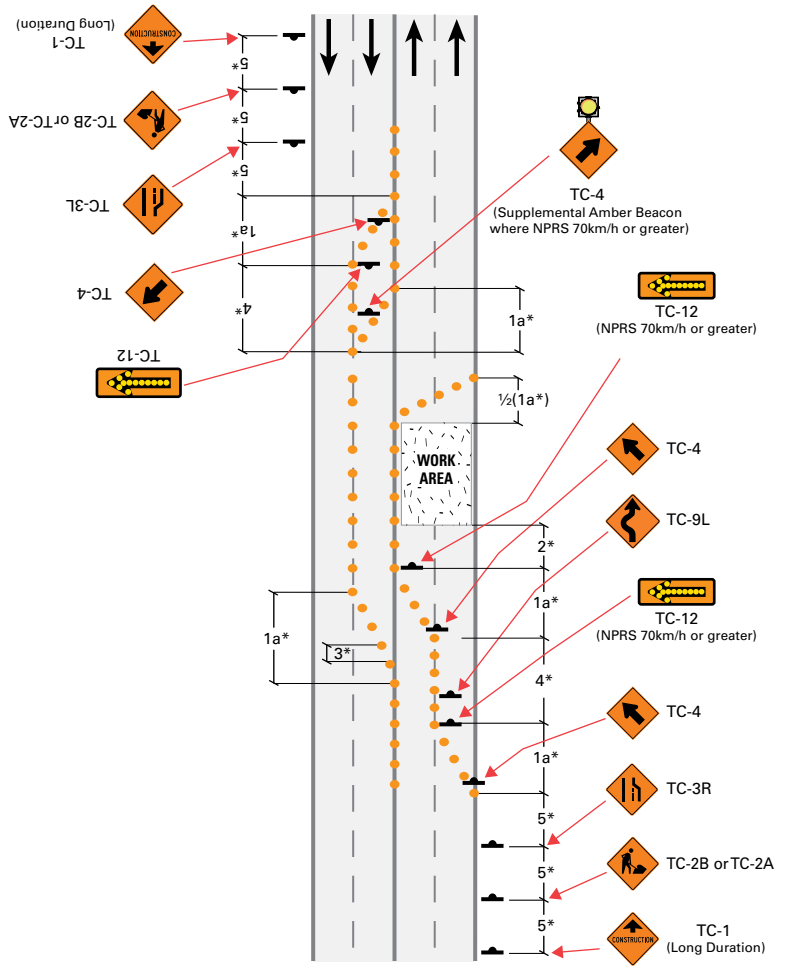
NOTES

i) The added lane should be allowed to redevelop beyond the Work Zone if there is sufficient remaining lane length to permit safe passing.

ii) For high volume roads or Long Duration work longer than 5 days, the use of Temporary Concrete Barriers should be considered to separate opposing traffic.

Figure TL-33 Four Lane Road: Two Lanes Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☐ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

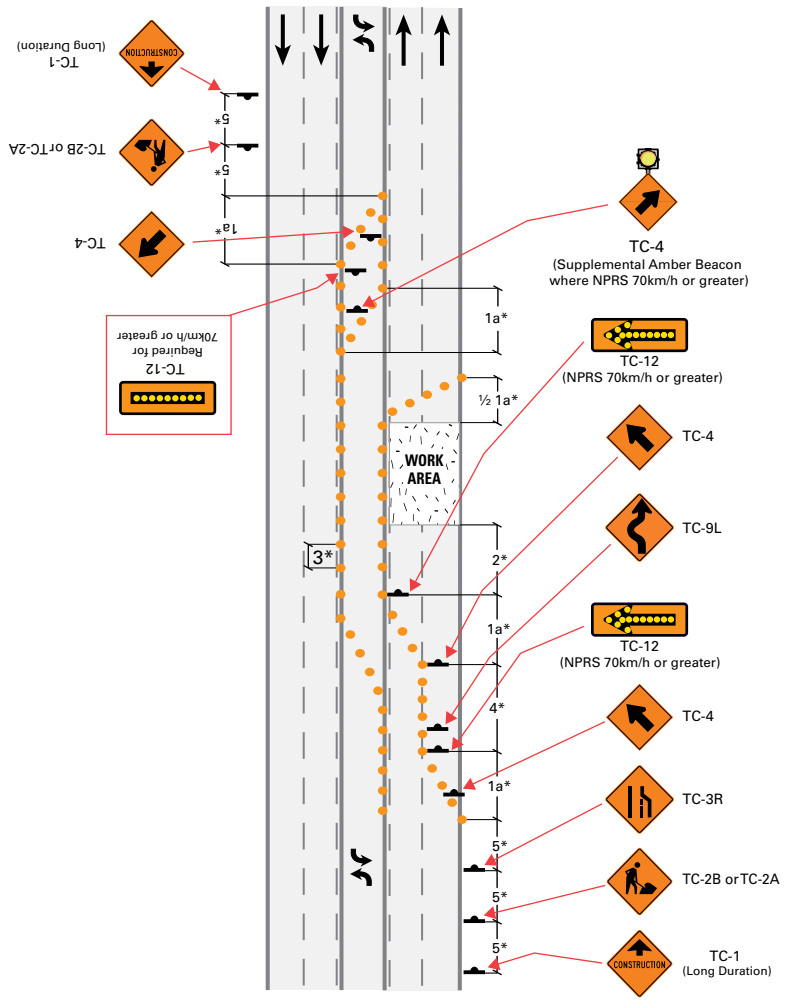
NOTES

i) For high volume roads or Long Duration work longer than 5 days, the use of Temporary Concrete Barriers should be considered to separate opposing traffic.

ii) For Diversions exceeding 1km, use a TC-16EL(ER) in place of the TC-9L(R), and add an additional TC-16ER(EL) at the beginning of end taper.

Figure TL-35 Five Lane Road: Two Through Lanes Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



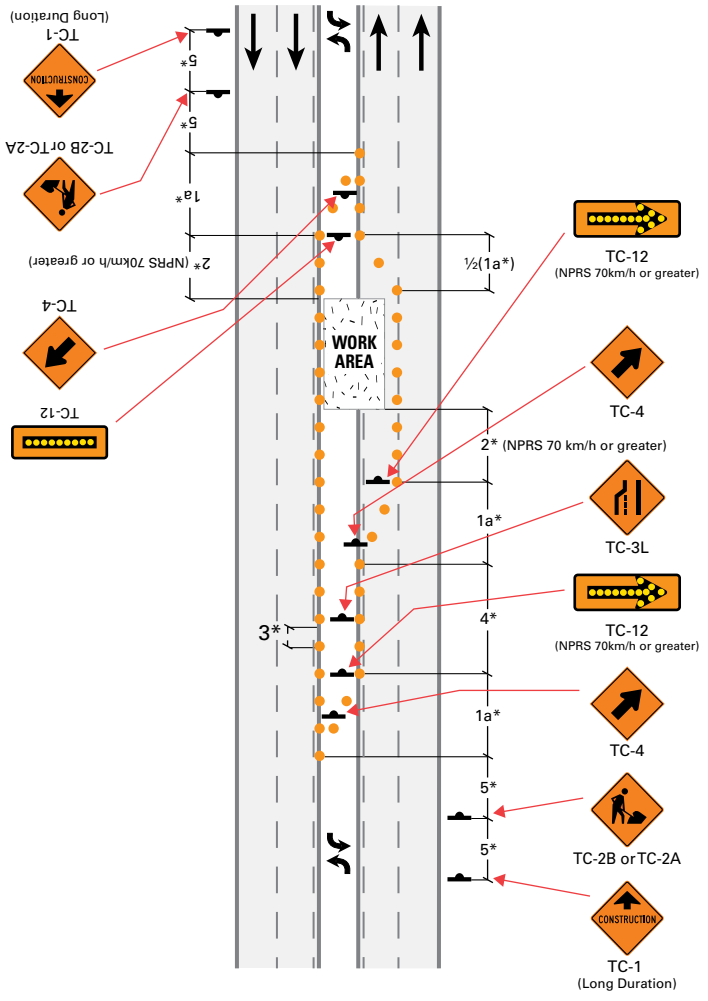
* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) For diversions, exceeding 1km, use a TC-16EL (ER) in place of the TC-9L (R) and add an additional TC-16ER (EL) at the beginning of end taper.

Figure TL-36 Five Lane Road: Through Lane and Left Turn Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**

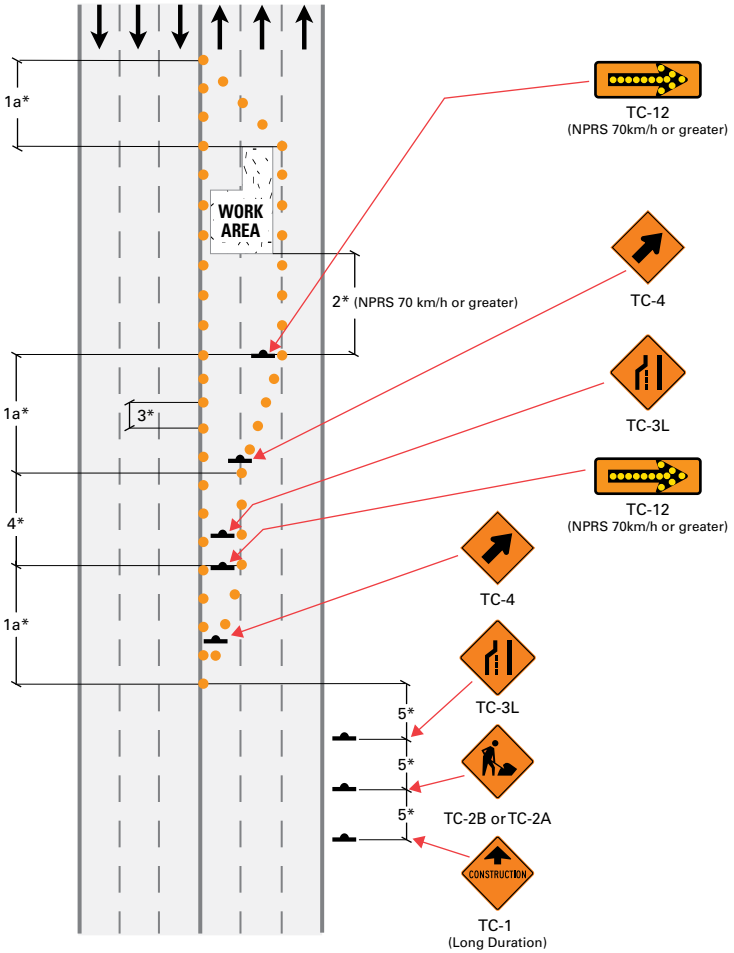


* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

Figure TL-37 Six Lane Road: Centre Lane or Two Lanes closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

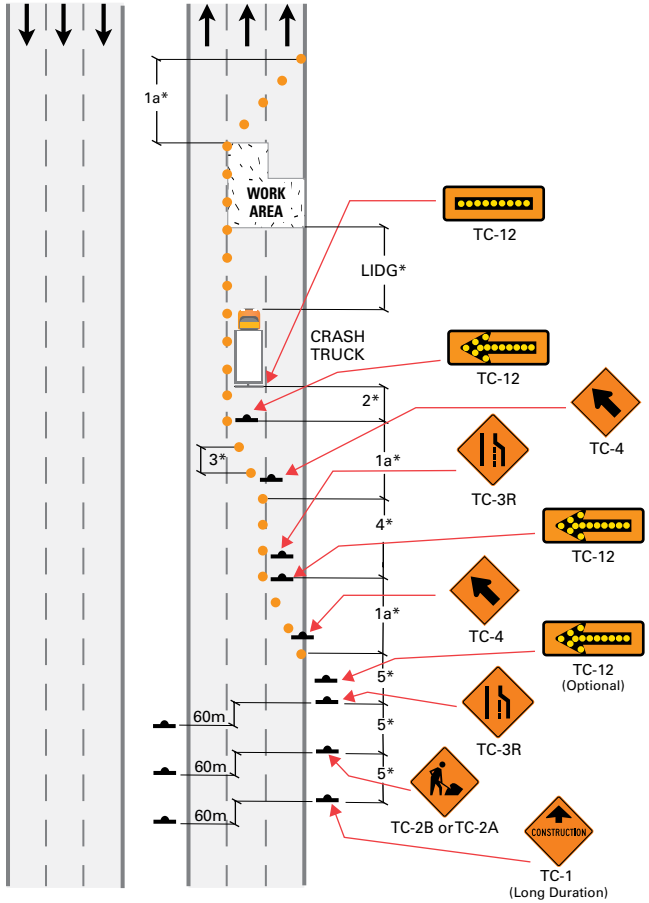
NOTES

i) Centreline delineation is not required on divided roads.

ii) Right Lanes closed mirror image, excpet for TC-3, TC-2 and TC-1.

Figure TL-38 Six Lane Road: Centre Lane or Two Lanes Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☑ **Freeway**
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Freeways, see *Table C*. For LIDG*, see *Table D*.

NOTES

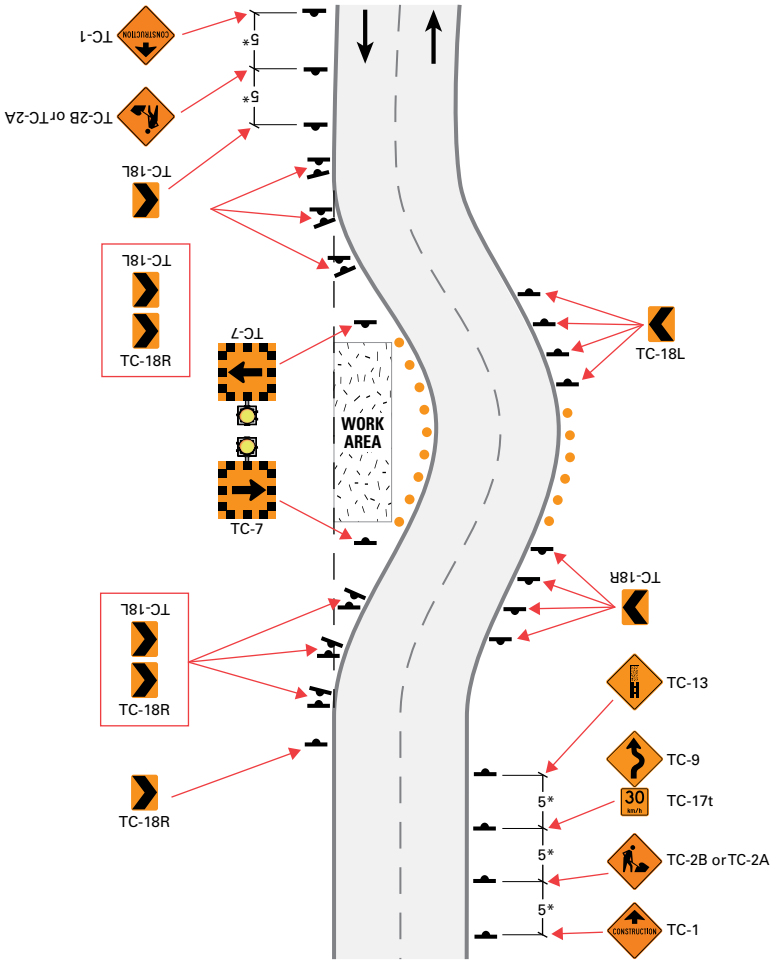
i) For long duration operations (longer than five days), Temporary Concrete Barriers must be used to separate the work area from traffic.

ii) Where signs cannot be accommodated in the median, provide additional signs on the right shoulder or oversize.

iii) Left lane closed: mirror image of right lane closed.

Figure TL-40 Roadside Diversion

- ☑ **Two-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ **Long Duration**



* See *Table B*.

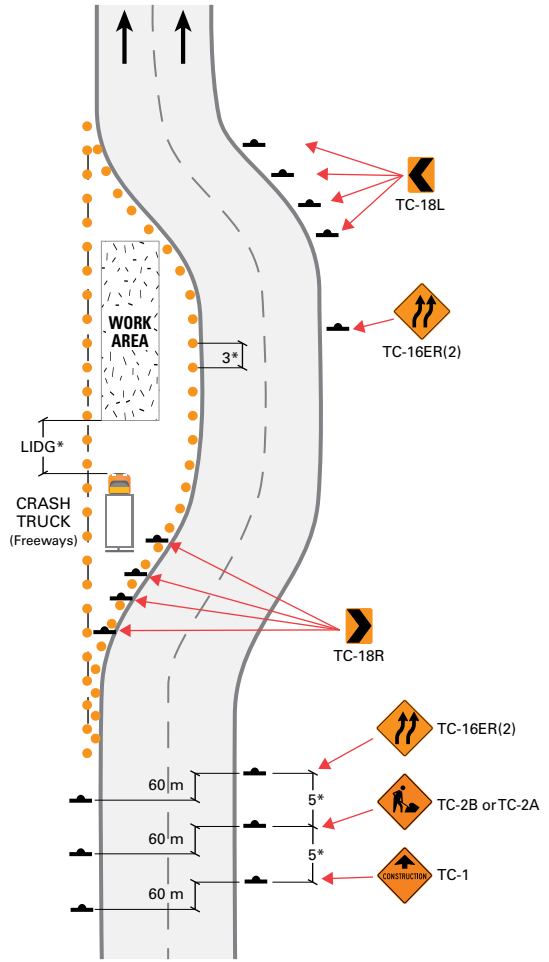
NOTES

i) Traffic should not be shifted onto a surface texture different from the main roadway without a speed reduction.

ii) If the diversion is paved, temporary pavement markings are required, including edgelines, and the TC-13 should not be used.

Figure TL-41 Lane Realignment

- ☐ Two-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☑ **Divided Non-freeway**
- ☑ **Freeway**
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ **Long Duration**



* For Non-Freeways see *Table B*, for Freeways see *Table C*.

NOTES

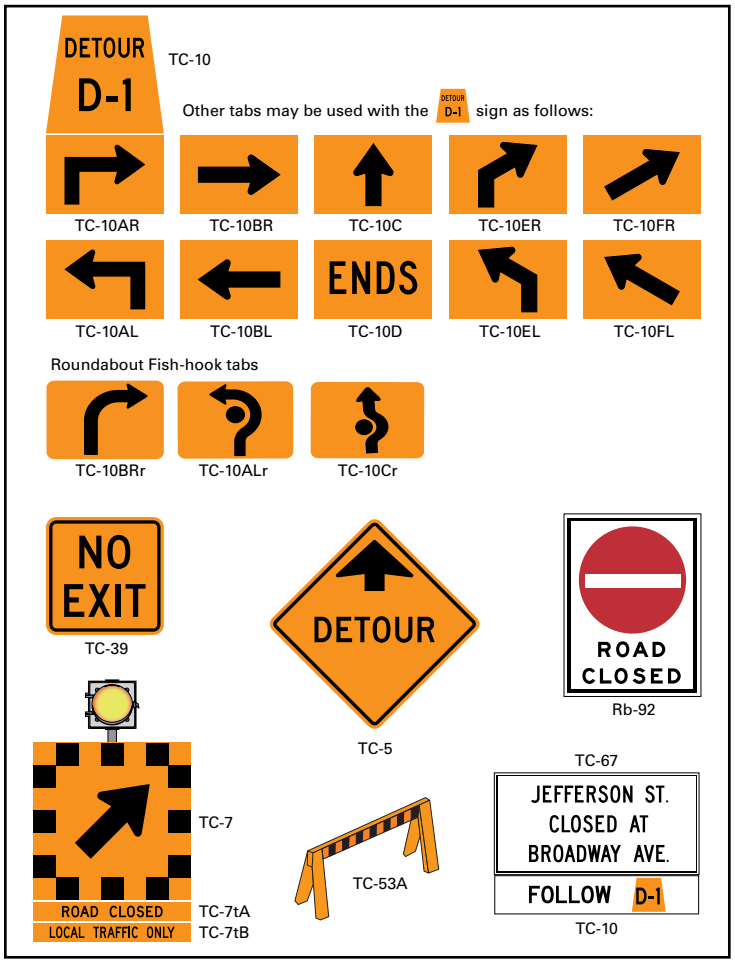
i) If Temporary Concrete Barriers are used, the crash truck is not required.

ii) TC-1A and TC-1B Advance Warning are required for freeways (not shown).

Figure TL-42(i) Detour: Alternative Roads

- ☑ Two-Lane
- ☑ Multi-Lane
  - ☑ Undivided Non-freeway
  - ☑ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ Long Duration

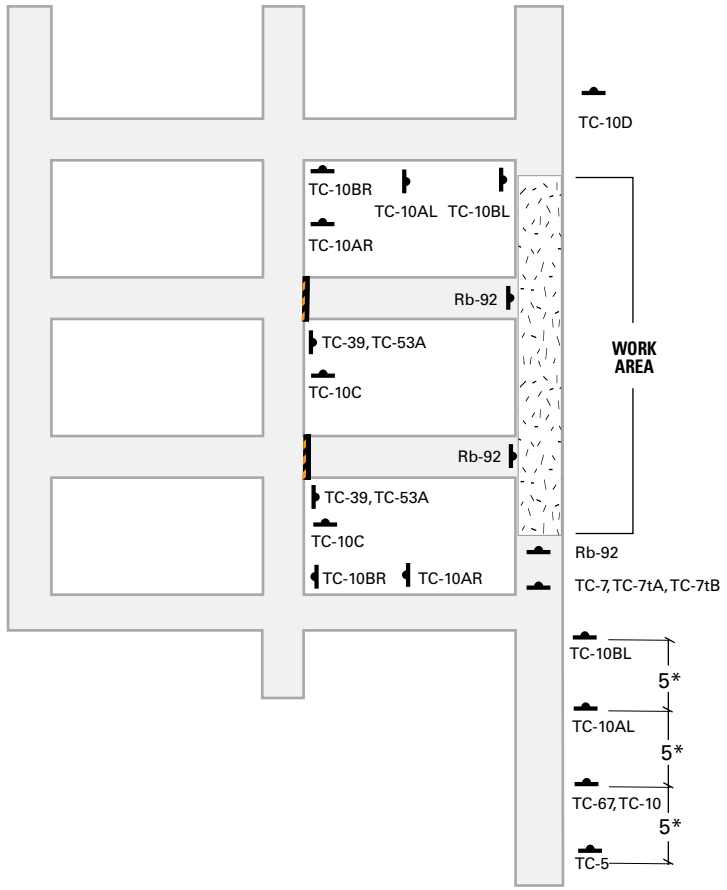
The following signs are to be used in the layout for Route Detours - see TL-42(ii).



NOTES

Figure TL-42(ii) Route Detour (Alternative Roads)

- ☑ Two-Lane
- ☑ Multi-Lane
  - ☑ Undivided Non-freeway
  - ☑ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short Duration see *Table A*, for Long Duration see *Table B*.

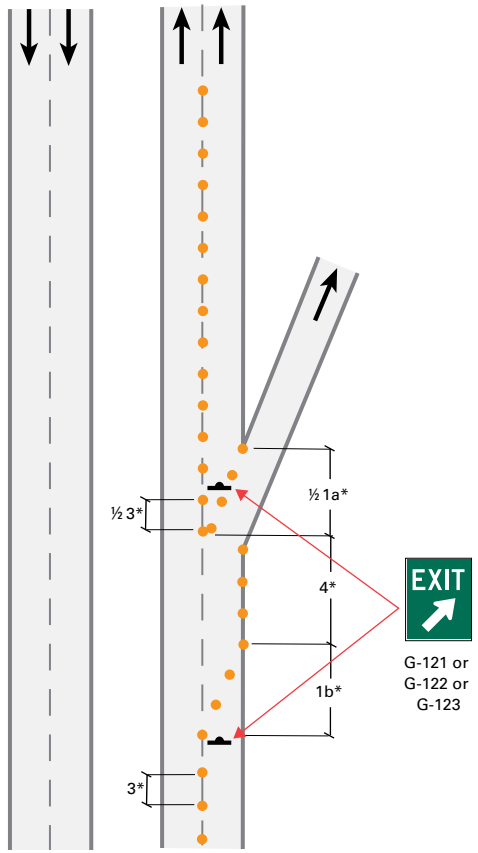
NOTES

i) See TL-42(i) for Sign Details.

ii) The same approach to signing is required in the opposite direction.

Figure TL-43 Lane Closed at Exit Ramp

☐ Two-Lane	☐ Mobile Operations	
☑ **Multi-Lane**	☑ **Undivided Non-freeway**	☐ Very Short Duration
	☑ **Divided Non-freeway**	☑ **Short Duration**
	☑ **Freeway**	☑ **Long Duration**



* Non-Freeways: For Short Duration, see *Table A*; For Long Duration, see *Table B*.
Freeways: See *Table C*.

NOTES

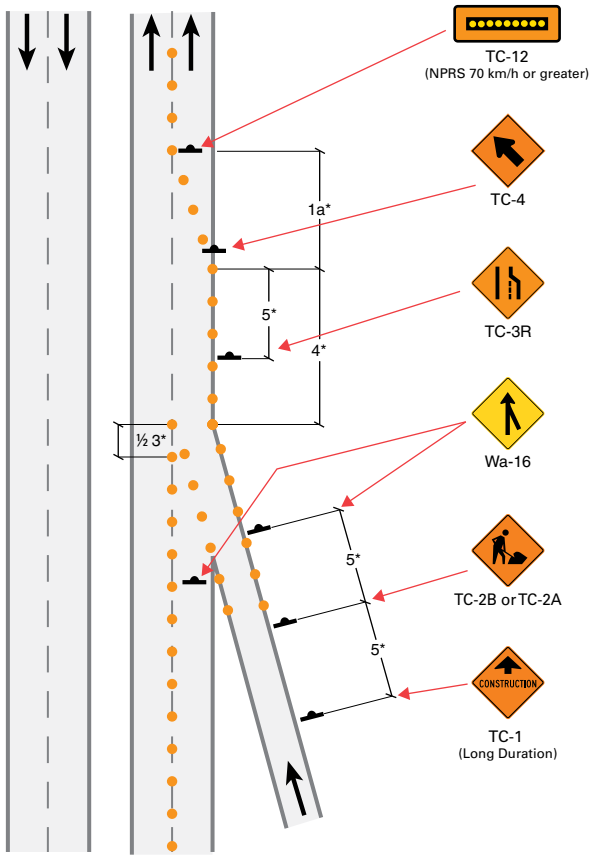
i) For Right Lane Closed, see Figure TL-29.

ii) In the immediate area of the Exit, Cone or Barrel spacings of half of those shown on Table A, B or C should be used.

iii) If a Deceleration Lane is present, the Normal Deceleration Lane is coned-off and the Closed Lane becomes the Deceleration Lane as shown.

Figure TL-44 Lane Closed at Entrance Ramp

☐ Two-Lane	☐ Mobile Operations	
☑ **Multi-Lane**	☑ **Undivided Non-freeway**	☐ Very Short Duration
	☑ **Divided Non-freeway**	☑ **Short Duration**
	☑ **Freeway**	☑ **Long Duration**



* Non-Freeways: For Short Duration, see *Table A*; For Long Duration, see *Table B*.
Freeways: See *Table C*.

NOTES

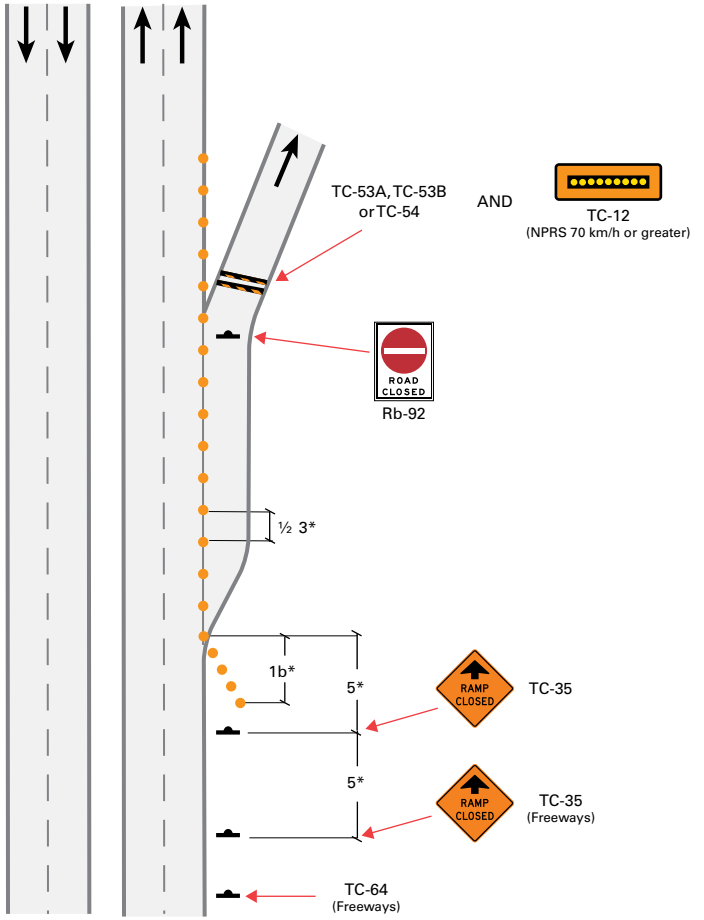
i) For Right Lane Closed, see Figure TL-29.

ii) Where space and work activities permit, the acceleration lane should be made as long as possible.

iii) In the immediate area of the Entrance, Cone or Barrel spacings of half of those shown on Table A, B or C should be used.

Figure TL-45 Ramp Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☑ **Freeway**
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* Non-Freeways: For Short Duration, see *Table A*; For Long Duration, see *Table B*. Freeways: See *Table C*.

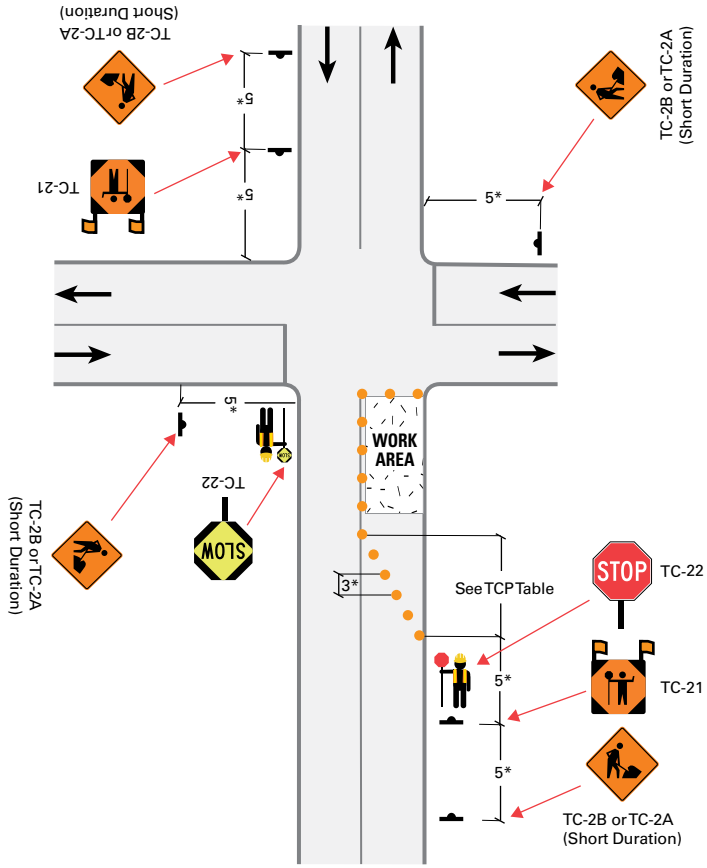
NOTES

i) Closed sign on Directional Guide Signs to be used for Long Duration only. For details, see OTM Book 8.

ii) See section 6 of the Office Edition for location of TC-64.

Figure TL-46 Intersection: Near-Side Lane Closed (TCP)

- ☑ **Two-Lane**
- ☐ Multi-Lane
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration



* See *Table A*.

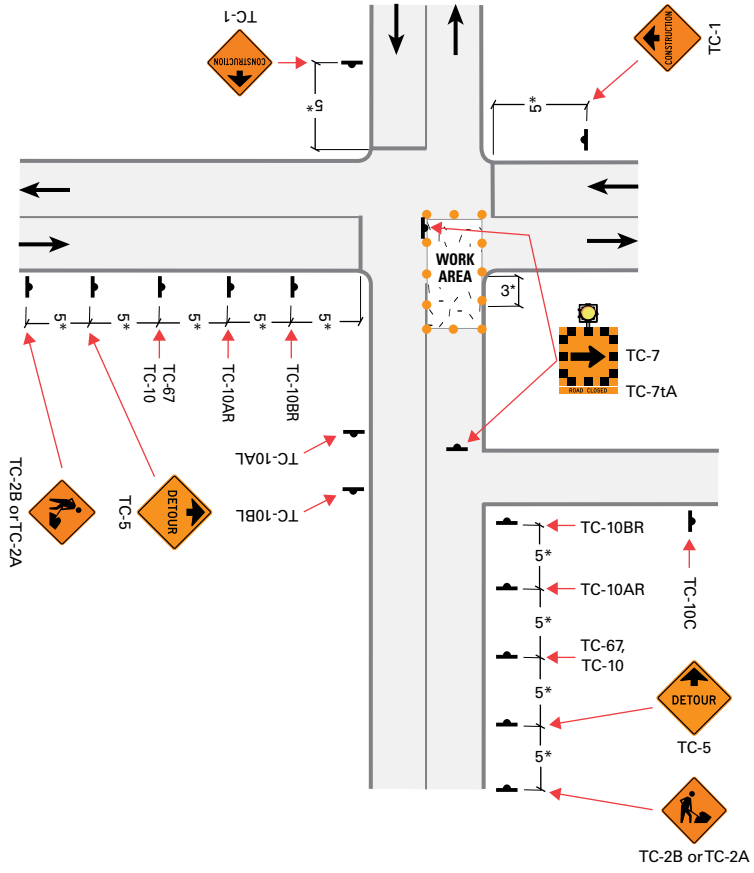
NOTES

i) For Remote Control Device, see Figure TL-20B.

ii) When traffic volumes are high or when the intersection is signalized, consult the road authority to determine whether police assistance is required. Care should be taken by the TCP to coordinate

Figure TL-47 Work in Intersection: Near-Side Lane Closed (Detour)

- ☑ **Two-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☐ Short Duration
- ☑ **Long Duration**



* See *Table B*.

NOTES

i) If space permits, use TC-53A's or TC-53B's to surround the Work Area, otherwise reduce space between TC-54's.

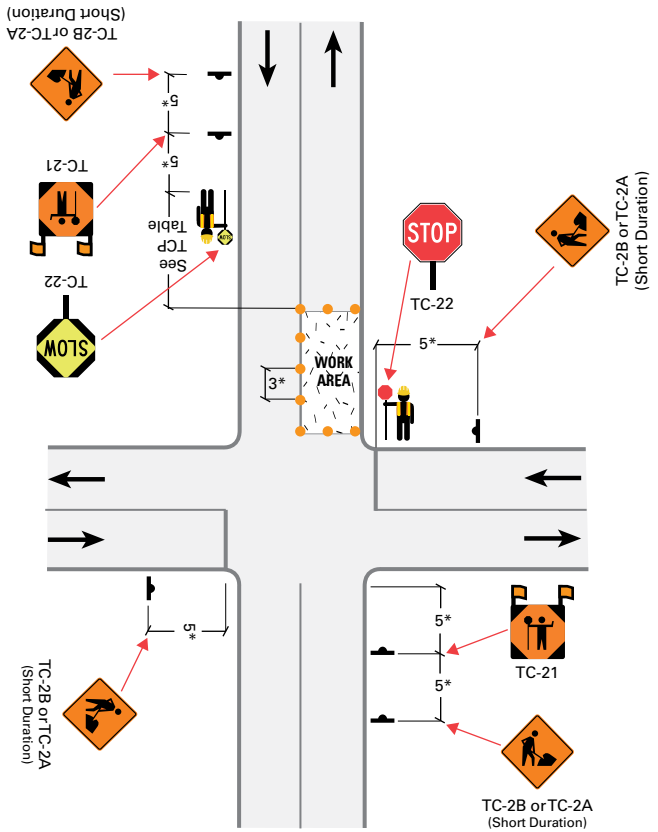
ii) This layout is to be used if an Alternate Route Detour is available; if not, TCP's are required and the layout shown in Figure TL-48 should be used.

iii) It may be necessary to prohibit some turning movements.

iv) See TL-42(i) & TL-42(ii) for Detour signs and layout.

Figure TL-48 Intersection: Far-Side Lane Closed (TCP)

- ☑ **Two-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration



* See *Table A*.

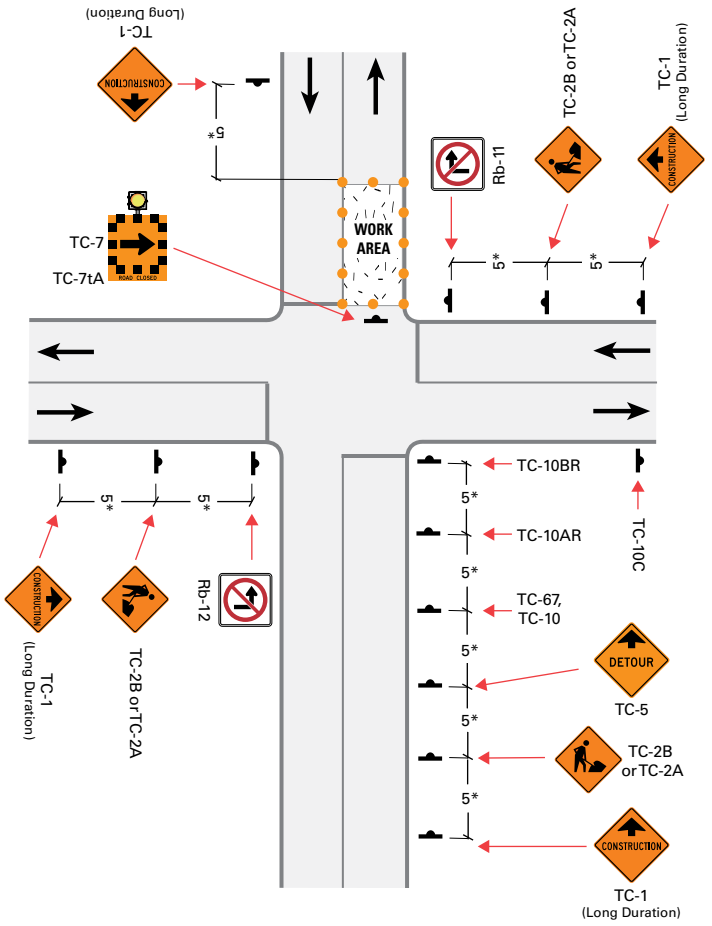
NOTES

i) For Remote Control Device, see Figure TL-20B.

ii) When traffic volumes are high or when the intersection is signalized, consult the road authority to determine whether police assistance is required. Care should be taken by the TCP to coordinate with any Intersection Control such as Traffic Signals or Stop signs.

Figure TL-49 Intersection: Far-Side Lane Closed (Detour)

- ☑ Two-Lane
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) If space permits, use TC-53A's or TC-53B's to surround the Work Area, otherwise reduce space between TC-54's.

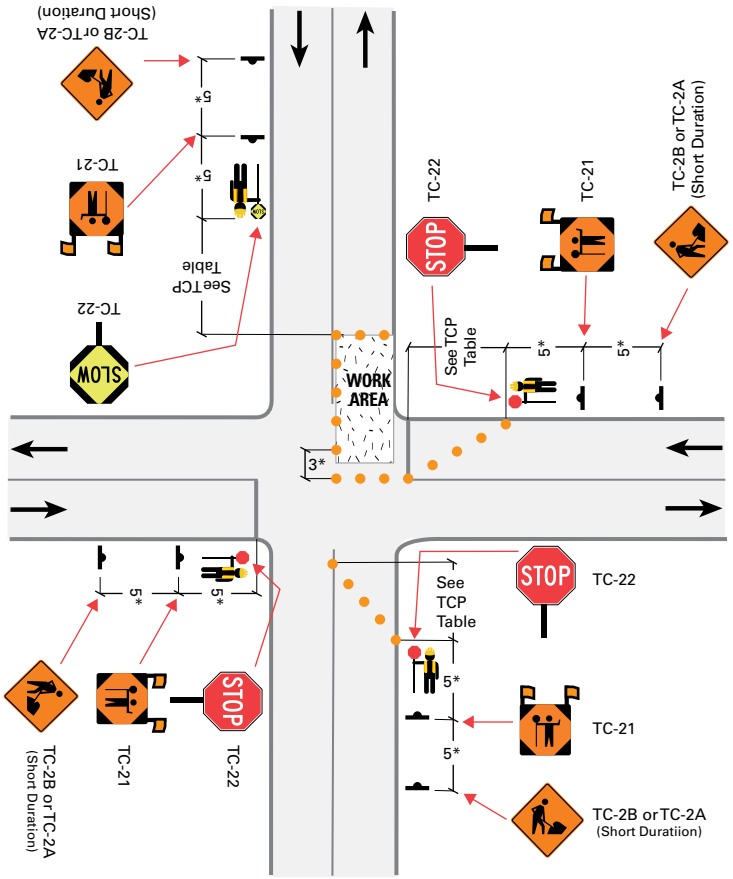
ii) This layout is to be used if an Alternate Route Detour is available; if not, TCP's are required and the layout shown in Figure TL-48 should be used.

iii) See TL-42(i) & TL-42(ii) for Detour signs and layout.

iv) Flasing Amber Light above TC-7 not to be used in intersections with active signals.

Figure TL-50 Work in Intersection: (TCP)

- ☑ Two-Lane
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ Very Short Duration
- ☑ Short Duration
- ☐ Long Duration



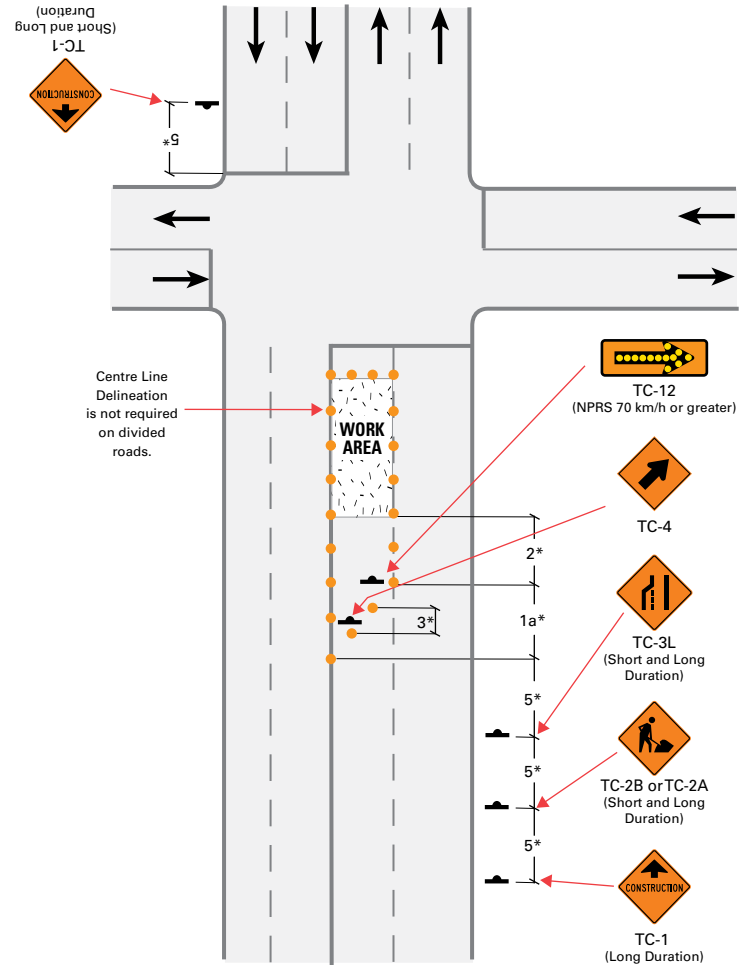
* See *Table A*.

NOTES

i) When traffic volumes are high or when the intersection is signalized, consult the road authority to determine whether police assistance is required. Care should be taken by the TCP to coordinate with any Intersection Control such as Traffic Signals or Stop signs.

Figure TL-51 — Intersection: Near-Side Right or Left Through Lane Closed

☐ Two-Lane	☐ Mobile Operations	
☑ **Multi-Lane**	☑ **Undivided Non-freeway**	☑ **Very Short Duration**
	☑ **Divided Non-freeway**	☑ **Short Duration**
	☐ Freeway	☑ **Long Duration**



* For Very Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

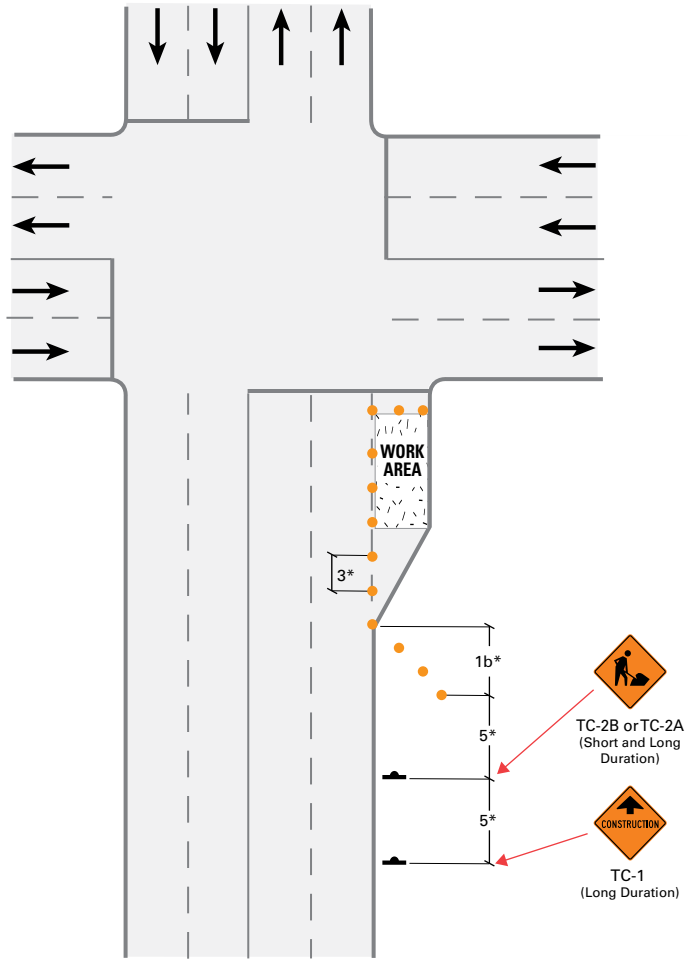
NOTES

i) Advanced Warning signs (TC-1) in opposite direction not required on divided roads.

ii) Right Through Lane closed mirror image (for cones, TC-12, TC-4).

Figure TL-52 — Intersection: Right Turn Lane Closed

☐ Two-Lane	☐ Mobile Operations	
☑ **Multi-Lane**	☑ **Undivided Non-freeway**	☑ **Very Short Duration**
	☑ **Divided Non-freeway**	☑ **Short Duration**
	☐ Freeway	☑ **Long Duration**

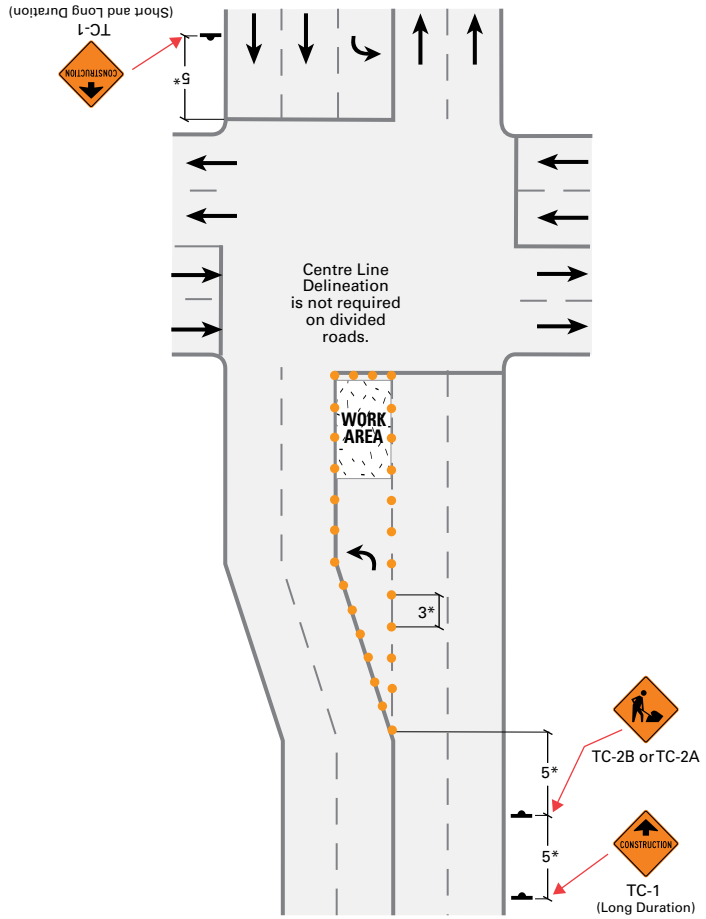


* For Very Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

Figure TL-53 Intersection: Left Turn Lane Closed

☐ Two-Lane	☐ Mobile Operations	
☑ Multi-Lane	☑ Undivided Non-freeway	☑ Very Short Duration
	☑ Divided Non-freeway	☑ Short Duration
	☐ Freeway	☑ Long Duration



* For Very Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

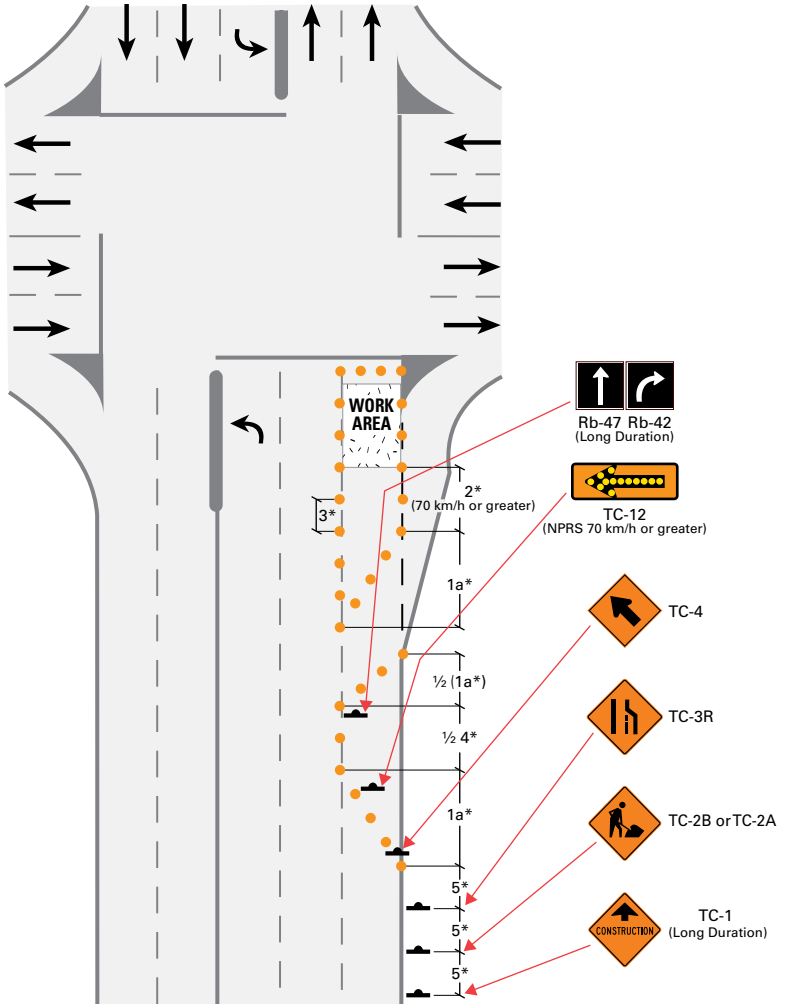
NOTES

i) Advanced Warning signs (TC-1) in opposite direction not required on divided roads.

ii) It may be necessary to prohibit left turns in the direction reduced to one lane.

Figure TL-54 Intersection : Lane Adjacent to Right Turn Lane Closed

☐ Two-Lane	☐ Mobile Operations	
☑ Multi-Lane	☑ Undivided Non-freeway	☐ Very Short Duration
	☑ Divided Non-freeway	☑ Short Duration
	☐ Freeway	☑ Long Duration



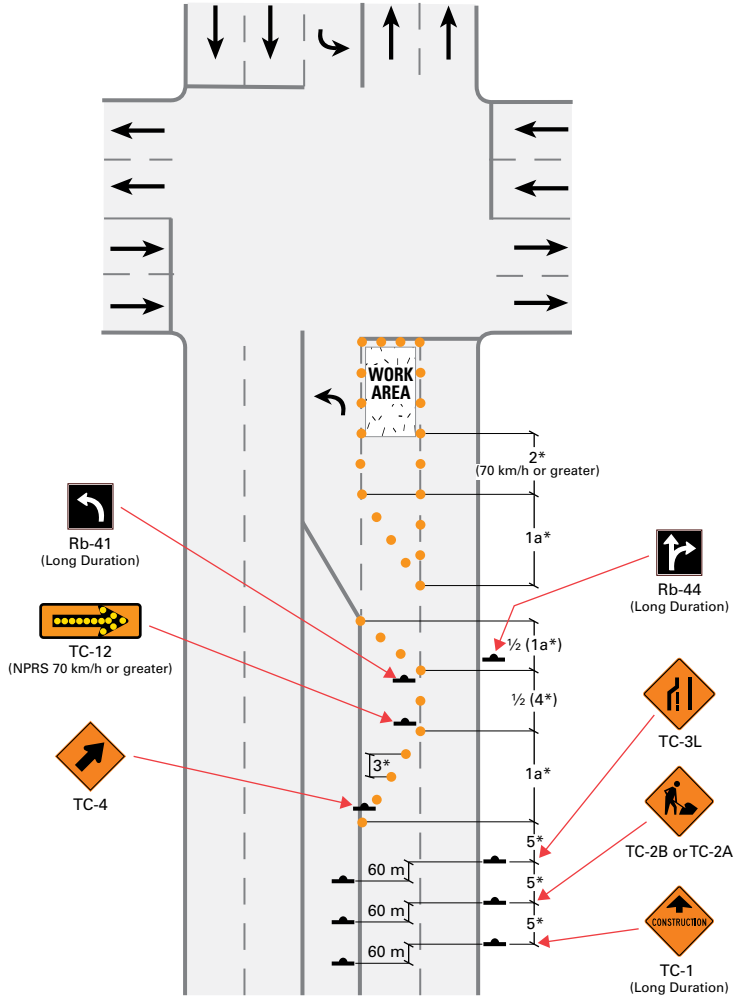
* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) If space permits, use TC-53A's or TC-53B's to surround the Work Area, otherwise reduce spacing between TC-54's.

Figure TL-55 Intersection: Lane Adjacent to Left Turn Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

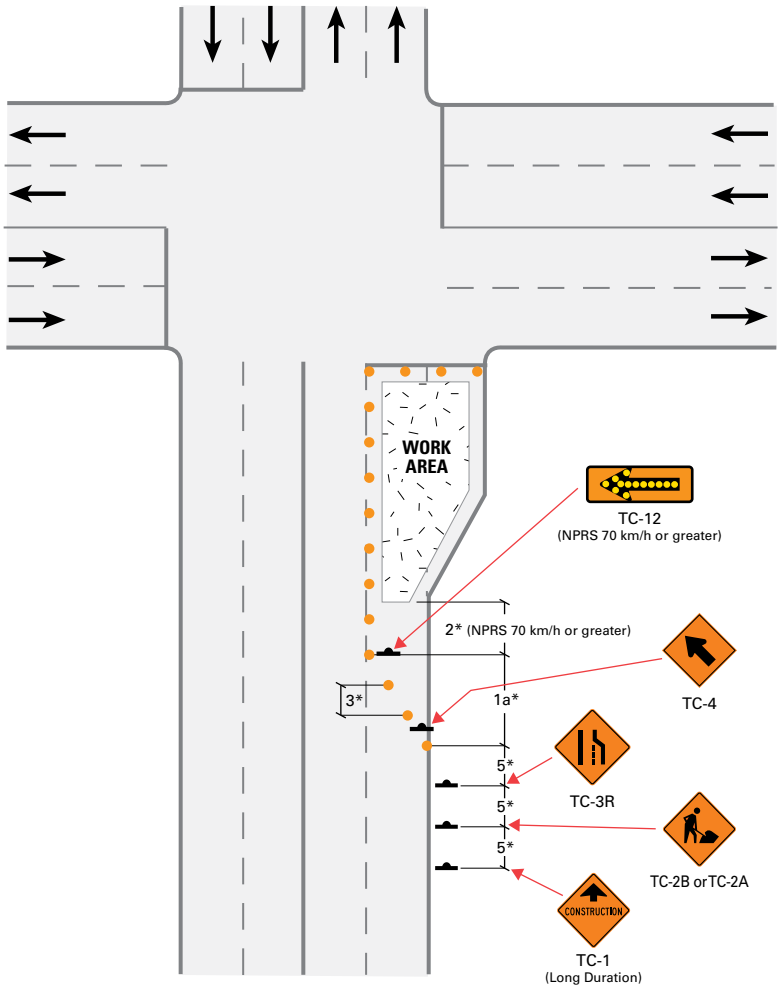
NOTES

i) Left side signing required for Long Duration on Divided Roads only.

ii) If space permits, use TC-53A's or TC-53B's to surround the Work Area, otherwise reduce spacing between TC-54's.

Figure TL-56 Intersection: Right Turn Lane & Adjacent Through Lanes Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☑ **Long Duration**



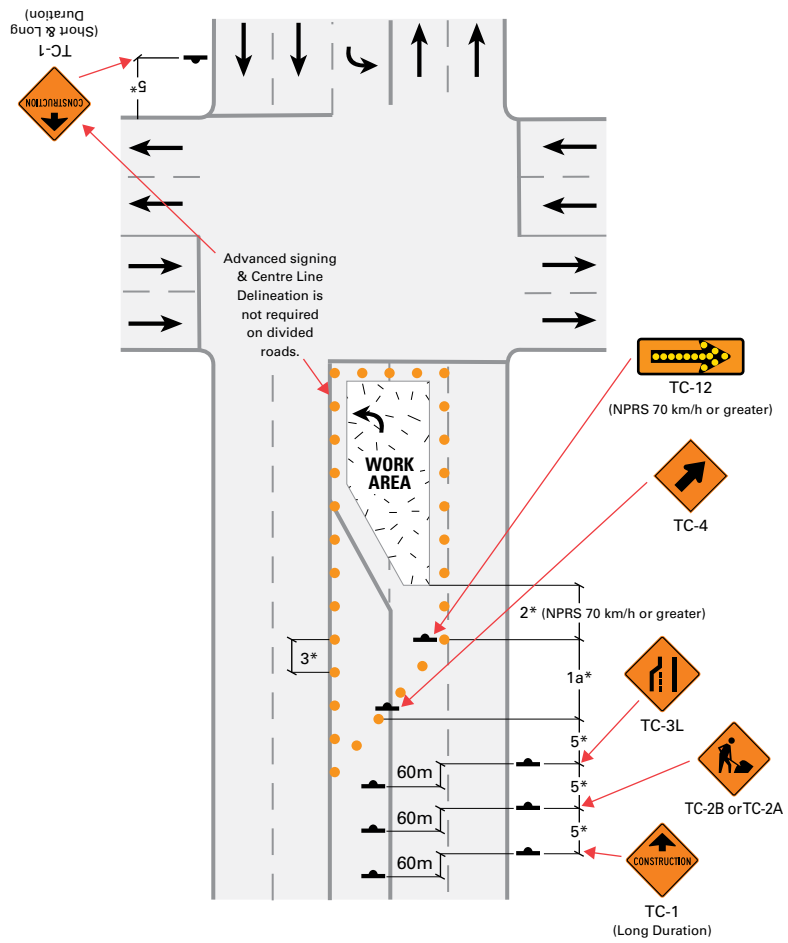
* For Very Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) If space permits, use TC-53A's or TC-53B's to surround the Work Area, otherwise reduce spacing between TC-54's.

Figure TL-57 Intersection: Left Turn & Adjacent Thru Lanes Closed

- ☐ Two-Lane
- ☑ Multi-Lane
- ☑ Undivided Non-freeway
- ☑ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Very Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

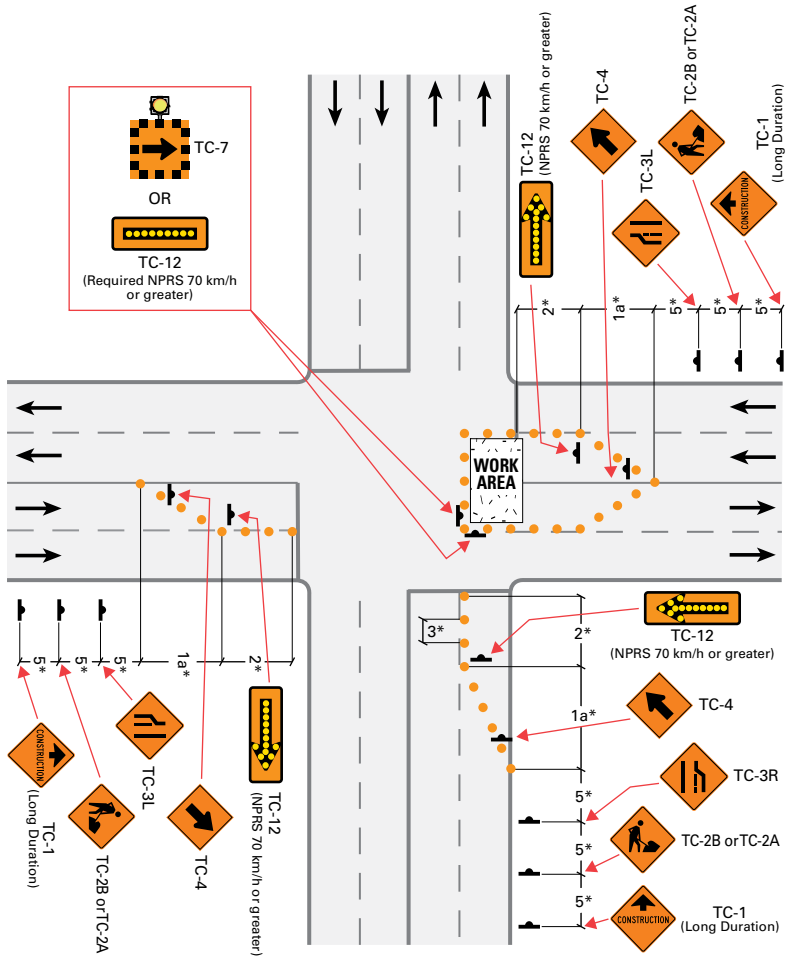
i) Left side signing required for long duration on divided roads only.

ii) If space permits, use TC-53A or TC-53B to surround the Work Area. Otherwise, reduce spacing between TC-54's.

iii) It may be necessary to prohibit left turns in the direction reduced to one lane.

Figure TL-58 Work in Intersection: Right Lane Closed

- ☐ Two-Lane
- ☑ Multi-Lane
- ☑ Undivided Non-freeway
- ☑ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

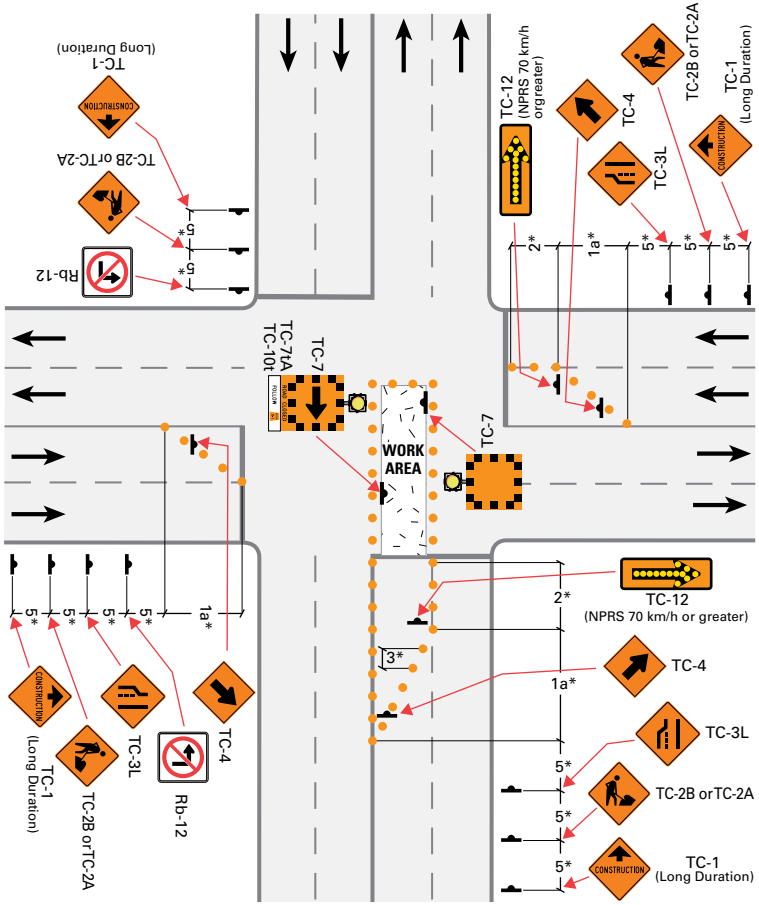
i) If space permits, use TC-53A's or TC-53B's to surround the Work Area. Otherwise, reduce spacing between TC-54's.

ii) It may be necessary to prohibit certain turning movements.

iii) Flasing Amber Light above TC-7 not to be used in intersections with active signals.

Figure TL-59 Work in Intersection: Left Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) If space permits, use TC-53A's or TC-53B's to surround the Work Area. Otherwise, reduce spacing between TC-54's.

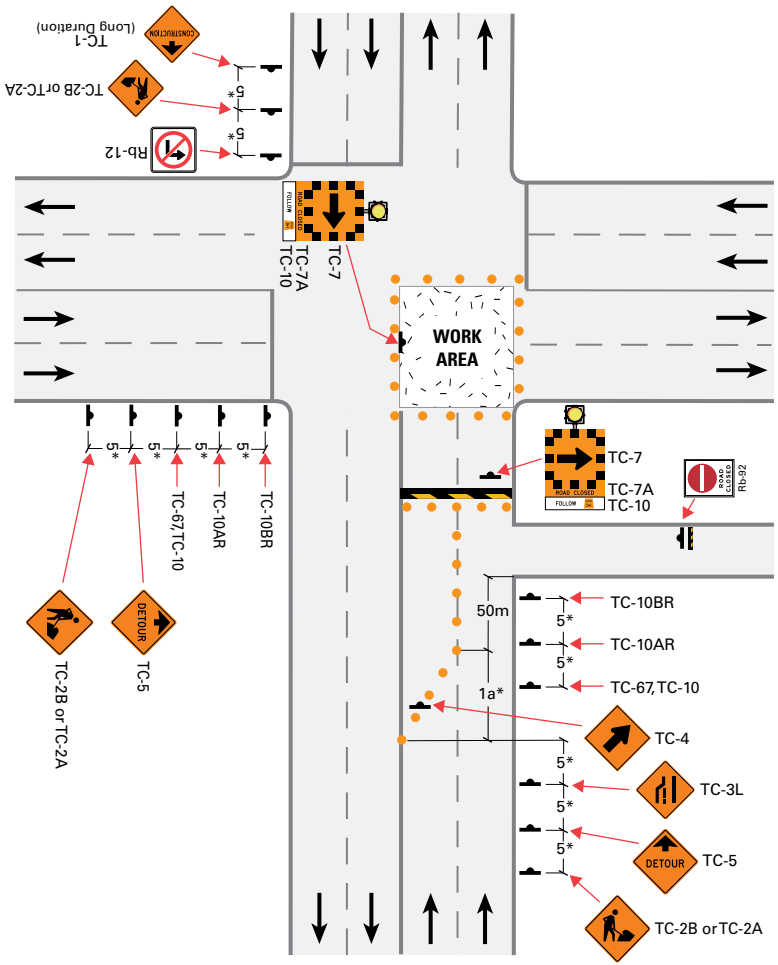
ii) It may be necessary to prohibit additional turning movements.

iii) Flasing Amber Light above TC-7 not to be used in intersections with active signals.

iv) See Figure TL-42B "Route Detour", for applicable layout.

Figure TL-60A Work in Intersection: Road Closed (Detour) - Option 1

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

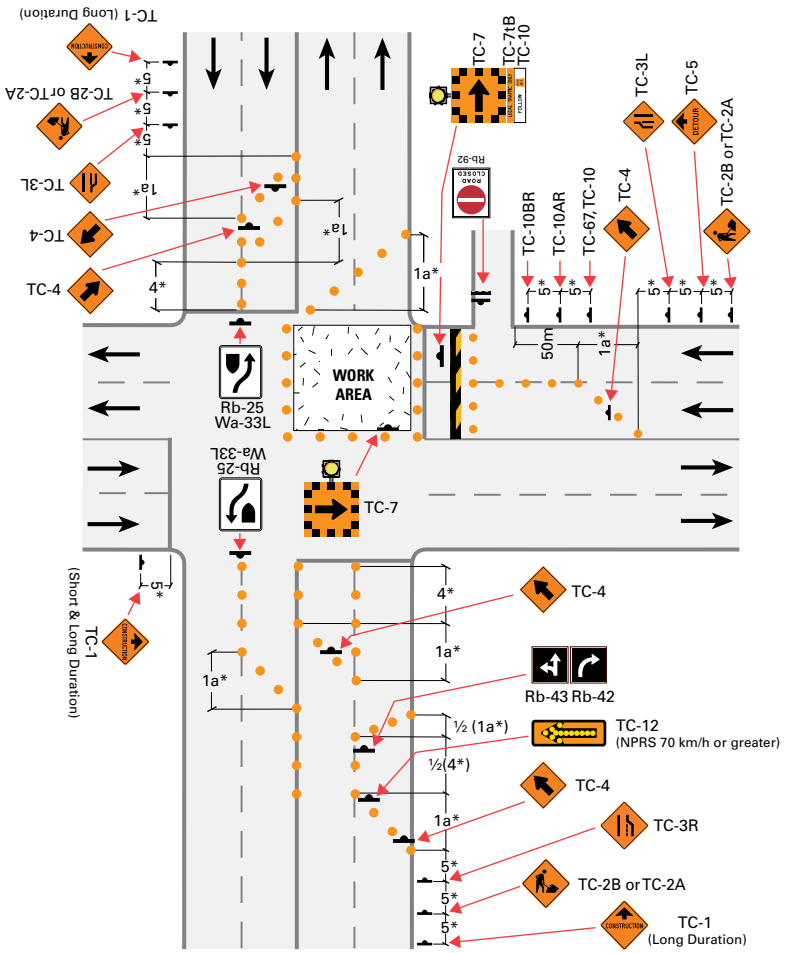
i) If space permits, use TC-53A's or TC-53B's to surround the Work Area. Otherwise, reduce spacing between TC-54's.

ii) See Figure TL-42(ii) "Route Detour", for applicable layout.

iii) Flasing Amber Light above TC-7 not to be used in intersections with active signals.

Figure TL-60B Work in Intersection: Two Lanes Closed - Option 2

- ☐ Two-Lane
- ☑ Multi-Lane
  - ☑ Undivided Non-freeway
  - ☑ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) If space permits, use TC-53A's or TC-53B's to surround the Work Area. Otherwise, reduce spacing between TC-54's.

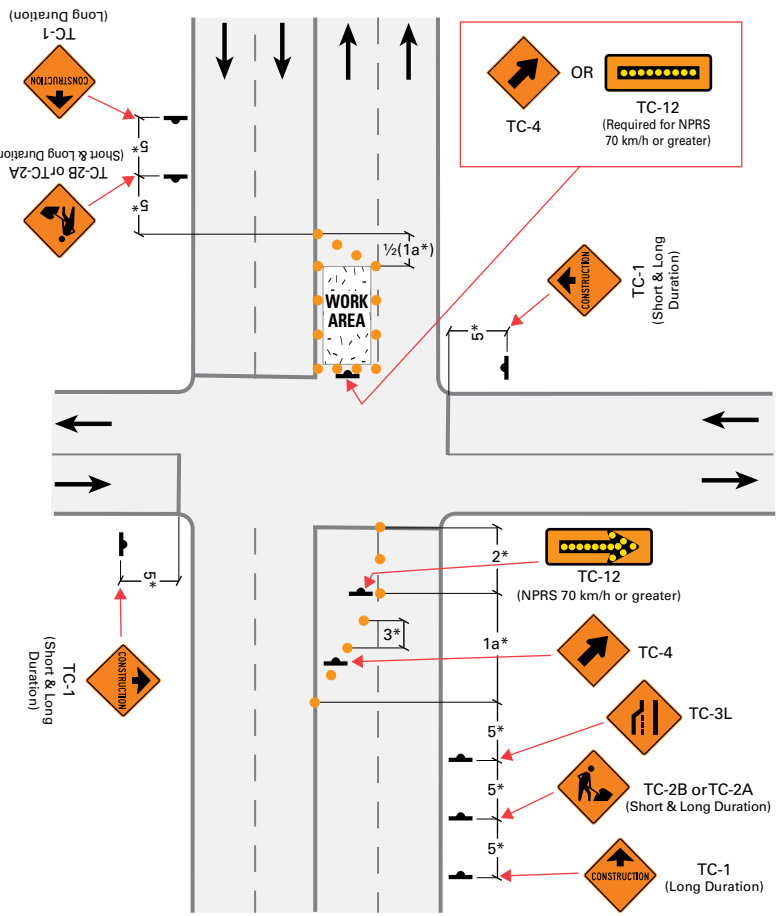
ii) See Figure TL-42(ii) "Route Detour", for applicable layout.

iii) Flasing Amber Light above TC-7 not to be used in intersections with active signals.

iv) It may be necessary to prohibit certain turning movements.

Figure TL-61 Intersection: Far-Side Lane Closed

- ☐ Two-Lane
- ☑ Multi-Lane
  - ☑ Undivided Non-freeway
  - ☑ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☑ Very Short Duration
- ☑ Short Duration
- ☑ Long Duration



* For Short or Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

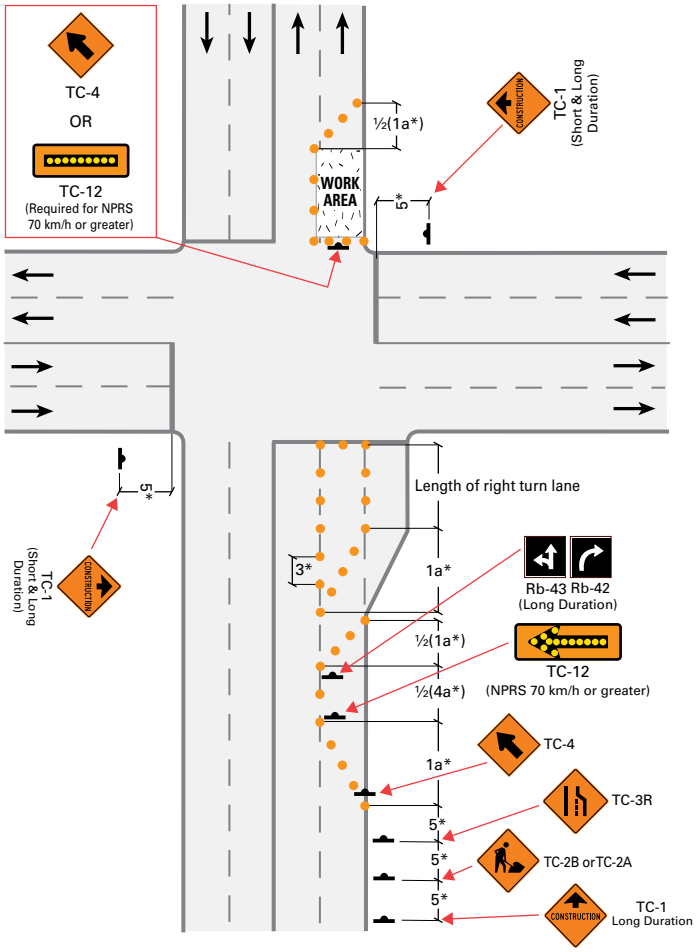
i) Right Lane Closed is mirror image (Advance signs (TC-1 & TC-2) not required in opposing direction).

ii) Measures should be taken to make sure on-street parking is not allowed next to the Work Area or Taper.

iii) On Divided Road Advance signs, (TC-1 & TC-2), not required in opposing direction.

Figure TL-62 Intersection: Right Turn Lane (Far-Side Right Lane Closed)

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

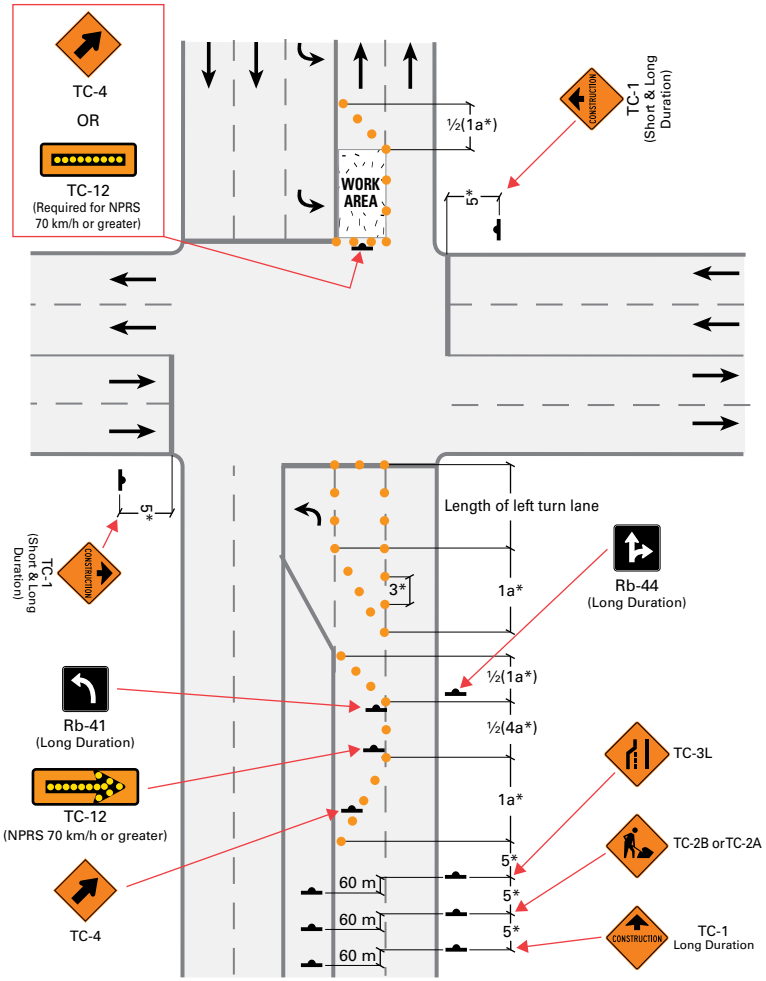
i) If space permits, use TC-53A's or TC-53B's to surround the Work Area otherwise, reduce spacing between TC-54's.

ii) It may be necessary to prohibit certain turning movements.

iii) It may be necessary to prohibit right turn truck movements.

Figure TL-63 Intersection: (Left Turn Lane Open) Far-Side Left Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

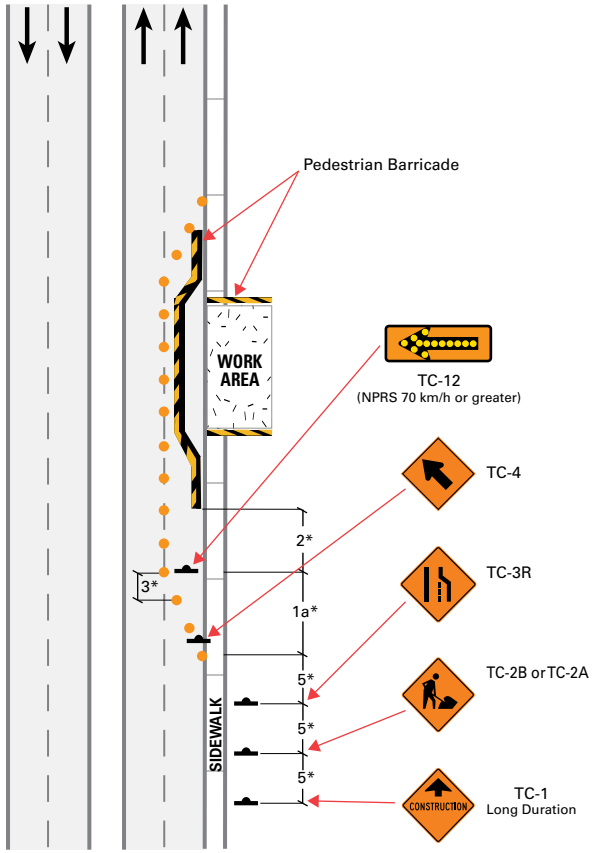
i) If space permits, use TC-53A's or TC-53B's to surround the Work Area otherwise, reduce spacing between TC-54's.

ii) Repeated Left side signing required for Long Duration on Divided Roads only.

iii) It may be necessary to prohibit right turn truck movements.

Figure TL-64 Pedestrian Accommodation: Mid-Block Sidewalk Detour onto Roadway

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

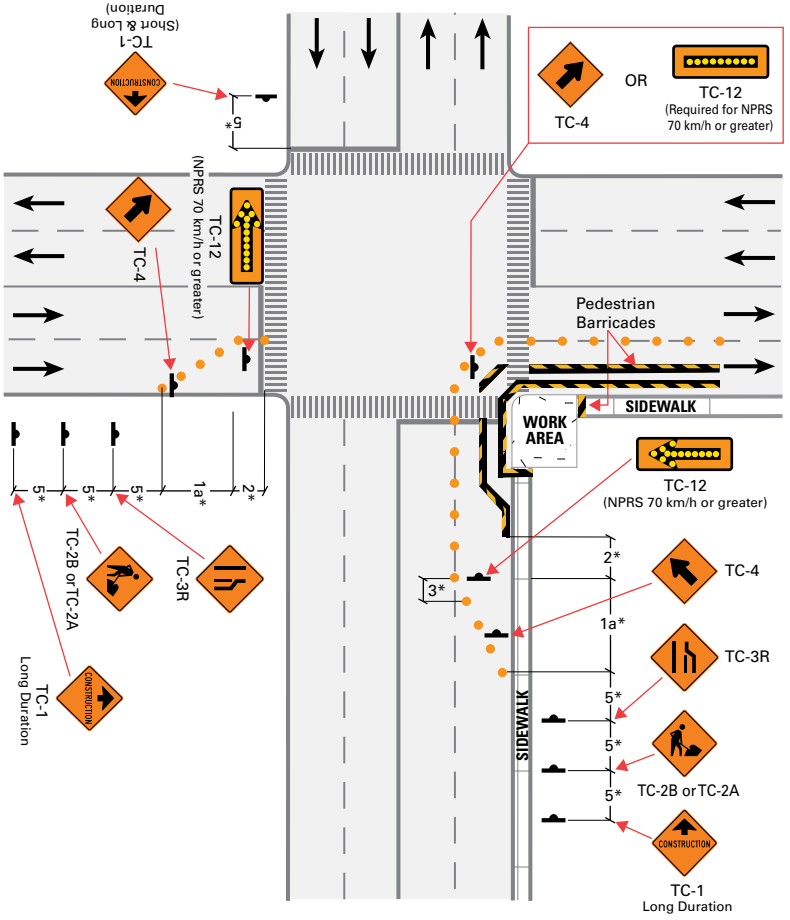
i) For Sidewalk Closures of Long Duration, a Boardwalk & Railing should be provided instead of Pedestrian Barricades.

ii) If close to a Sidewalk, Pedestrians can be directed to the opposite side of the street with a TC-40 & TC-40t installed at the Crosswalk.

iii) Minimum Width of the Temporary Walkway is 1.2 m.

Figure TL-65 Pedestrian Accommodation: Intersection Sidewalk Detour onto Roadway

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

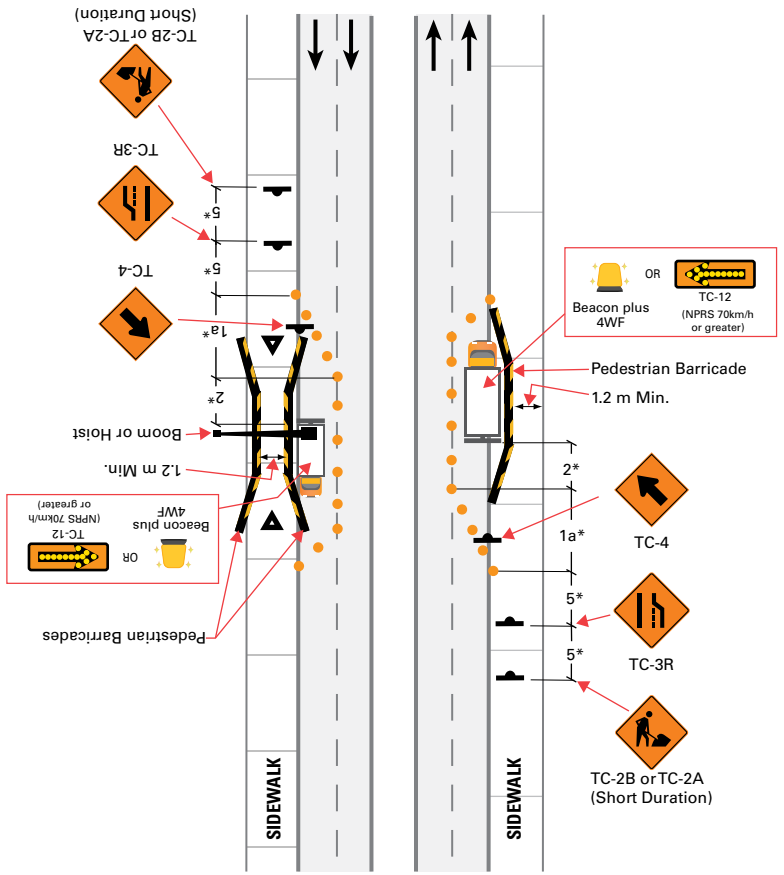
i) For Sidewalk Closures of Long Duration, a Boardwalk & Railing should be provided instead of Pedestrian Barricades.

ii) Minimum Width of the Temporary Walkway is 1.2 m.

Figure TL-66 Pedestrian Accommodation: Vehicle Encroachment on Road/Sidewalk

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway

- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration



* See *Table A*.

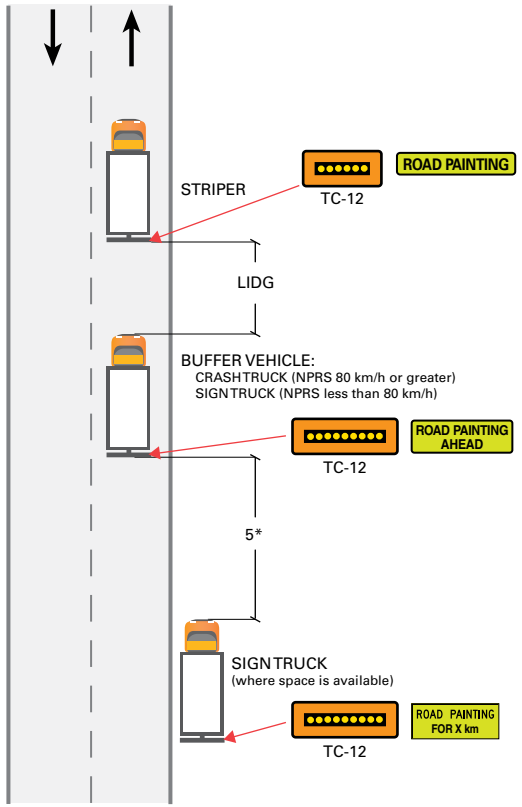
NOTES

i) ⚠ Location of Pedestrian Controllers if required (e.g. use of booms or hoists). Pedestrian passage under boom is acceptable when boom is not in motion and when hoisting is not underway. Where activities at a work area could endanger the public (e.g. trenches, excavation), pedestrian barricades must be used.

Figure TL-67 Zone Painting (non-coning paint)

- ☑ **Two-Lane**
- ☐ Multi-Lane
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☐ Freeway

- ☑ **Mobile Operations**
- ☐ Very Short Duration
- ☐ Short Duration
- ☐ Long Duration



* See *Table A*.

NOTES

i) MTO requirements illustrated. Other Road Authorities may not require a BUFFER VEHICLE on Low Volume roads with NPRS less than 80 km/h. A BUFFER VEHICLE (Crash Truck or Sign Truck) must be used on High Volume roads and/or where the NPRS is 80 km/h or higher.

ii) Where shoulder is intermittent, SIGN TRUCK should turn off TC-12 and drive with Traffic Flow until shoulder becomes available.

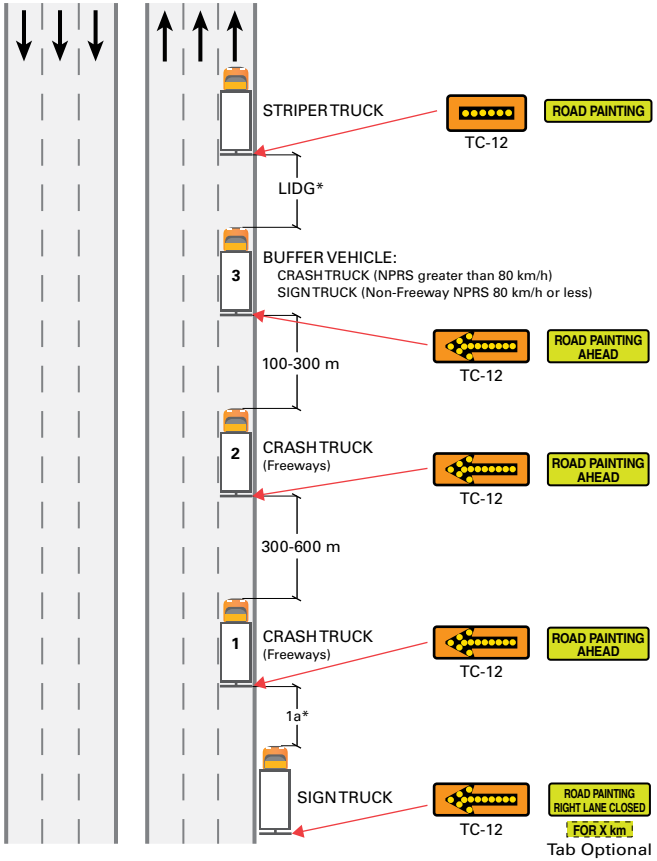
iii) The distance between SIGN TRUCK and BUFFER VEHICLE may be adjusted to accommodate hills, curves, restricted visibility, or other specific conditions.

iv) Alternately the SIGN TRUCK on the shoulder may have a programmable VMS displaying approved message warning of line painting operations ahead..

Figure TL-68 Zone Painting: Right or Left Lane Closed (non-coning paint)

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☑ **Freeway**

- ☑ **Mobile Operations**
- ☐ Very Short Duration
- ☐ Short Duration
- ☐ Long Duration



* For Non-Freeways, see *Table A*. For Freeways, see *Table C*. For LIDG, see *Table D*.

NOTES

i) MTO requirements illustrated. Other Road Authorities may not require a "ROAD PAINTING" information signs or additional CRASH TRUCK #1.

ii) SIGN TRUCK may be replaced by an approved equivalent VMS.

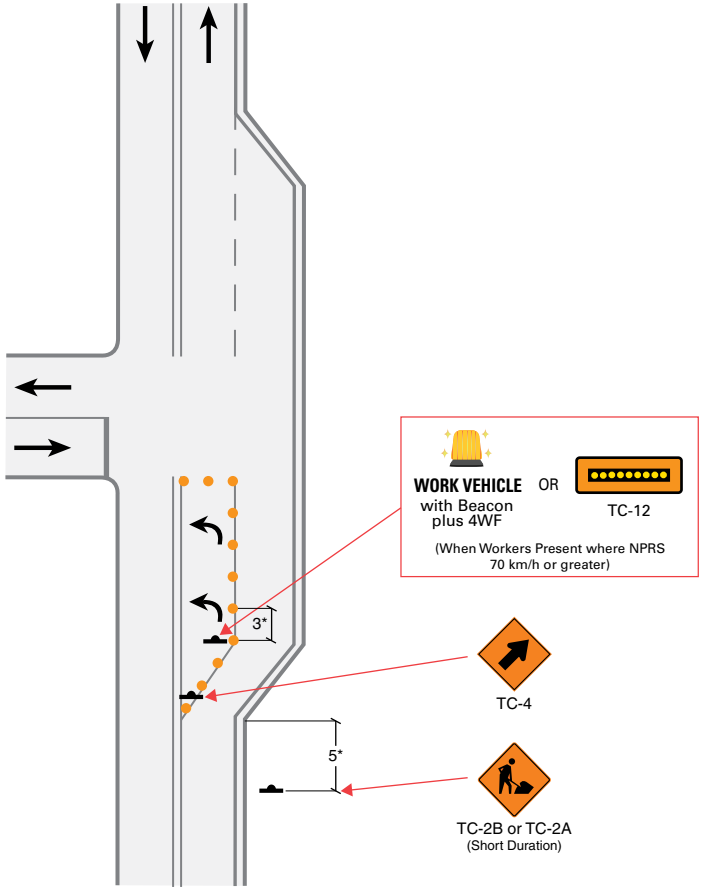
iii) Left lane closed mirror image on multi-lane non-freeways where the SIGN TRUCK should follow on the same side shoulder as the closure. On freeways, or where no left shoulder is available the SIGN TRUCK must follow on the right shoulder with TC-12 in bar mode.

iv) The distance between SIGN TRUCK and BUFFER VEHICLE may be adjusted to accommodate hills, curves, restricted visibility, or other specific conditions.

Figure TL-69 Zone Painting: Intersection Turn Arrows

- ☑ **Two-Lane**
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway

- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration



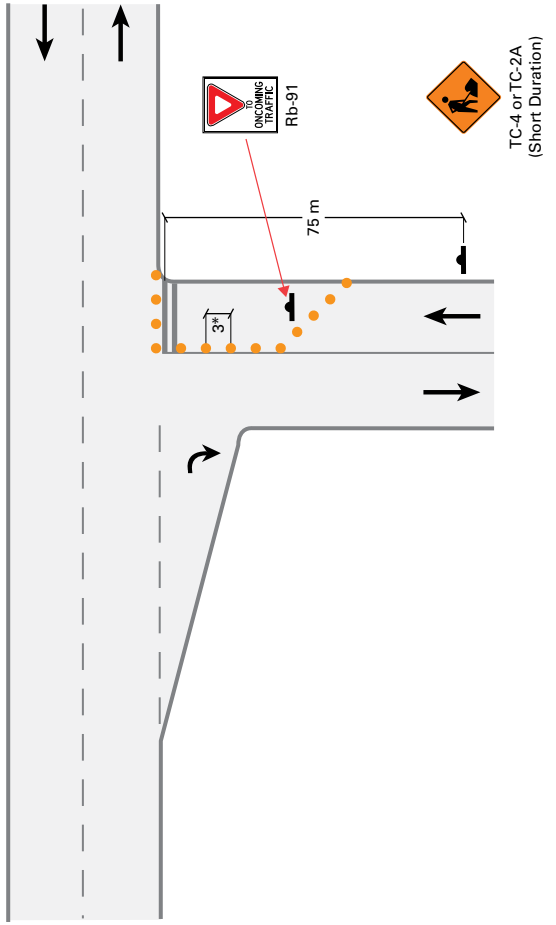
* See *Table A*.

NOTES

i) Centerline Delineation required if workers present.

Figure TL-70 Zone Painting: Intersection Stoplines and Crosswalks

- ☑ **Two-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration



* See *Table A*.

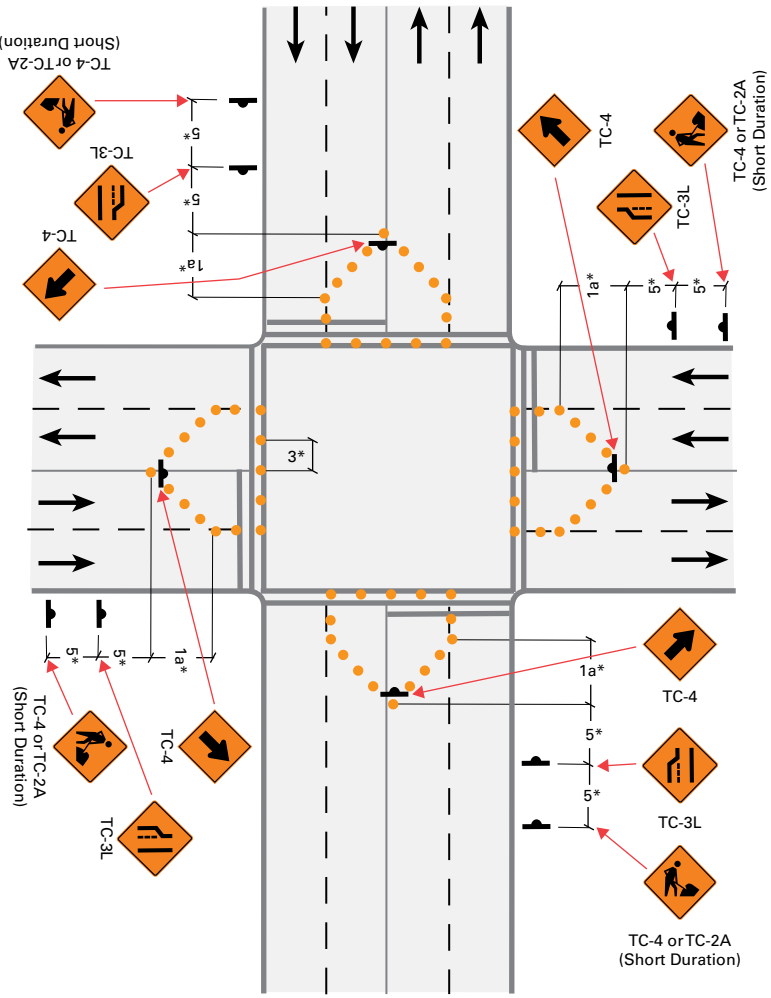
NOTES

i) Use only on roads with Low Traffic Volume (<3000 vehicles per day) and Low Speed (<70 km/h). Otherwise consider the use of TCP's.

ii) It may be necessary to paint the Stopline and Crosswalks in sections to maintain Traffic Flow.

Figure TL-71 Zone Painting: Intersection Left Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☑ **Divided Non-freeway**
- ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration

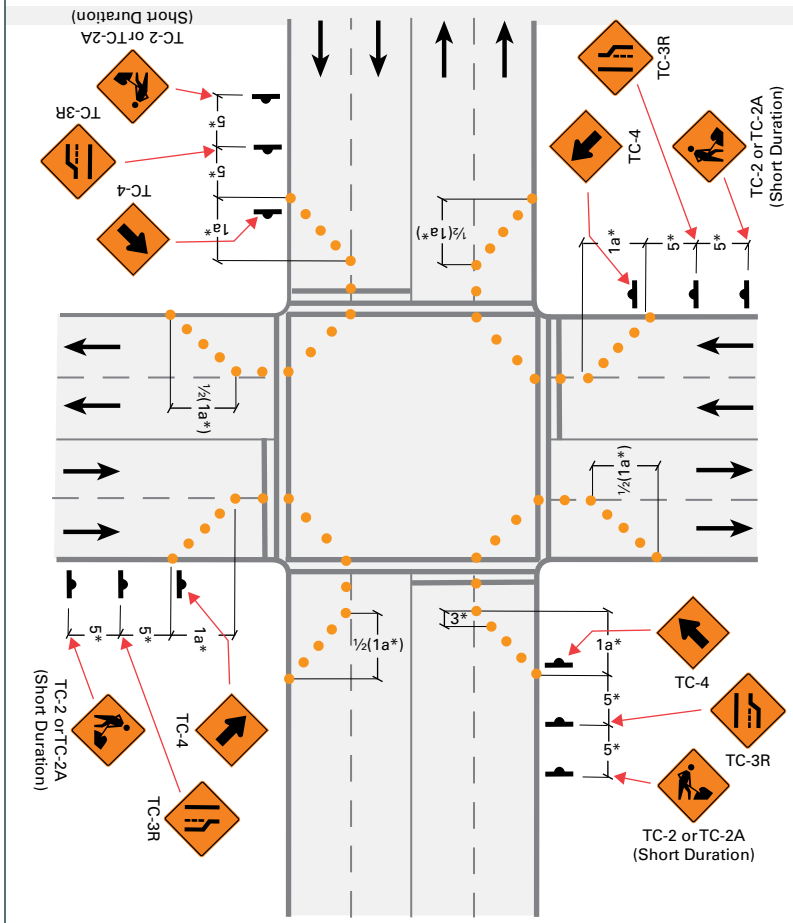


* See *Table A*.

NOTES

Figure TL-72 Zone Painting: Intersection Right Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration

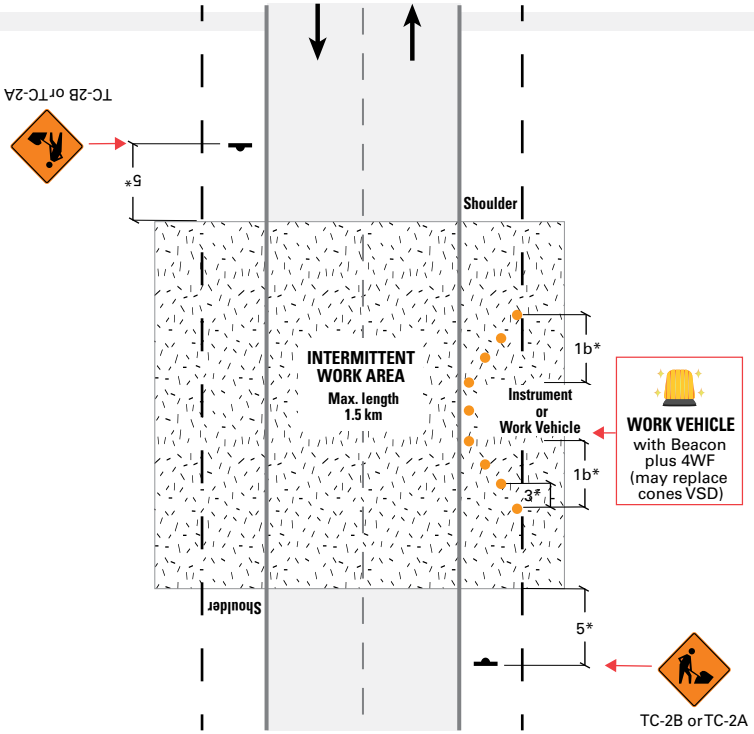


* See *Table A*.

NOTES

Figure TL-73B Intermittent Work

- ☑ **Two-Lane**
- ☐ Multi-Lane
  - ☐ Undivided Non-freeway
  - ☐ Divided Non-freeway
  - ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☐ Long Duration



Where a worker/technician is moving throughout the intermittent work area with only brief stationary moments, for example a survey technician. A technician may intermittently and MOMENTARILY (NOT CONTINUOUSLY) enter the travelled lanes of the roadway ONLY if sight lines in both directions exceed 250m where NPRS is greater than 80km/h, 200m where the NPRS is between 60km/h and 80km/h or 150m where the NPRS is 60km/h or less. Any worker/technician/equipment that occupies the live lane continuously, whether moving or stationary, is considered very short or short duration and the appropriate typical layouts must be used. The duration of work equals continuous or total of intermittent work on shoulders.

* See *Table A*.

NOTES

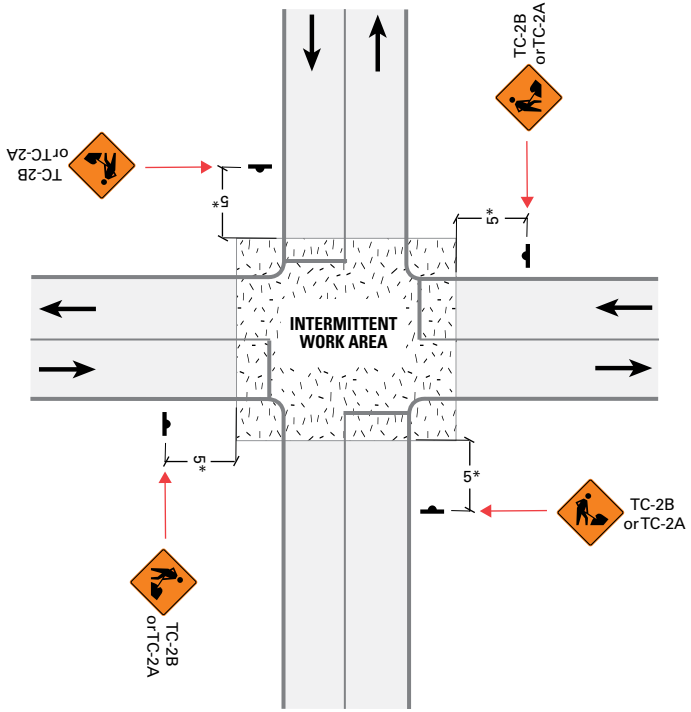
i) Termination taper optional.

ii) Work area may or may not contain a work vehicle. See General Notes to Typical Layouts #4.

iii) A work vehicle with a TC-12 may replace cones for VSD or SD work.

Figure TL-75 Intermittent Work: Intersection

- ☑ Two-Lane
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ Very Short Duration
- ☑ Short Duration
- ☐ Long Duration



Where a worker/technician is moving throughout the intermittent work area with only brief stationary moments, for example a survey technician. A technician may intermittently and MOMENTARLY (NOT CONTINUOUSLY) enter the travelled lanes of the roadway ONLY if sight lines in both directions exceed 250m where NPRS is greater than 80km/h, 200m where the NPRS is between 60km/h and 80km/h or 150m where the NPRS is 60km/h or less. Any worker/technician/equipment that occupies the live lane continuously, whether moving or stationary, is considered very short or short duration and the appropriate typical layouts must be used. The duration of work equals continuous or total of intermittent work on shoulders.

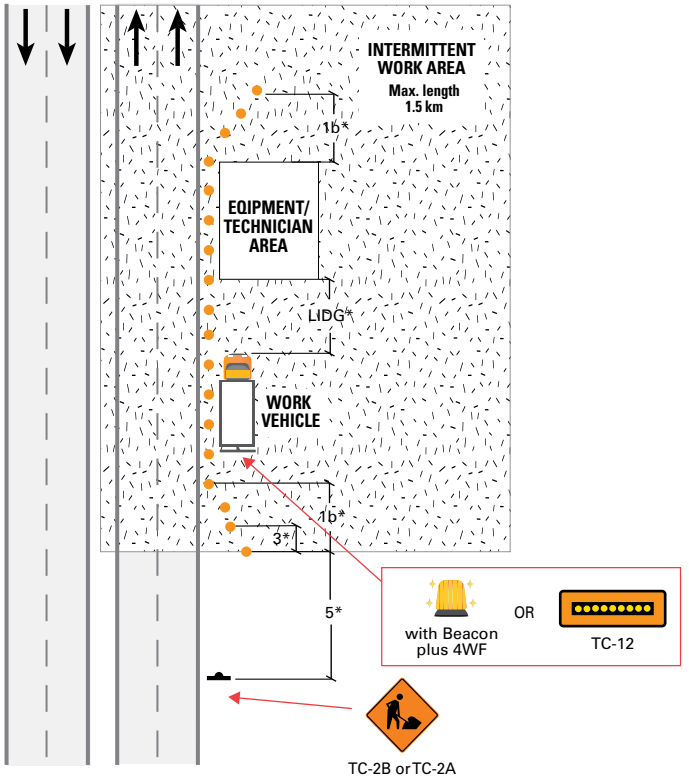
* See *Table A*.

NOTES

i) Any equipment or work vehicles that continuously occupy the shoulder should comply with TL-5.

Figure TL-76 Intermittent Work

- ☐ Two-Lane
- ☑ Multi-Lane
- ☑ Undivided Non-freeway
- ☑ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☑ Very Short Duration
- ☑ Short Duration
- ☐ Long Duration



Where a worker/technician is moving throughout the intermittent work area with only brief stationary moments, for example a survey technician. A technician may intermittently and MOMENTARLY (NOT CONTINUOUSLY) enter the travelled lanes of the roadway ONLY if sight lines in both directions exceed 250m where NPRS is greater than 80km/h, 200m where the NPRS is between 60km/h and 80km/h or 150m where the NPRS is 60km/h or less. Any worker/technician/equipment that occupies the live lane continuously, whether moving or stationary, is considered very short or short duration and the appropriate typical layouts must be used. The duration of work equals continuous or total of intermittent work on shoulders.

* See *Table A*. For LIDG*, see *Table D*.

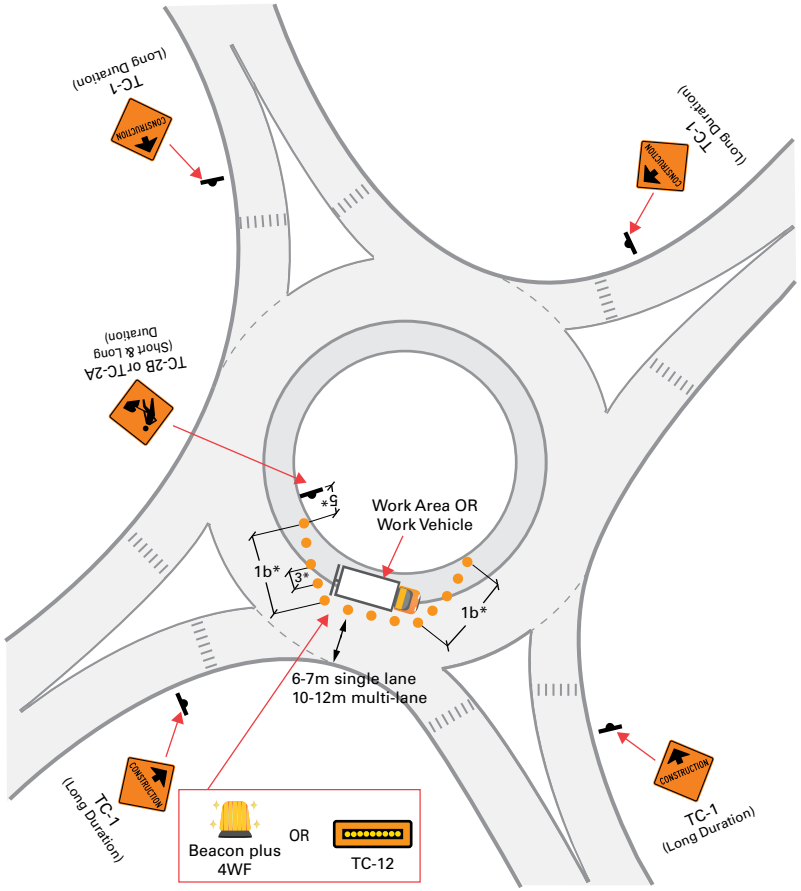
NOTES

i) Cones not required for Very Short Duration work.

ii) A work vehicle with a TC-12 may replace cones for Very Short or Short Duration work.

Figure TL- 85 Roundabout: Encroachment

- ☑ **Single-Lane**
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☑ **Divided Non-freeway**
- ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

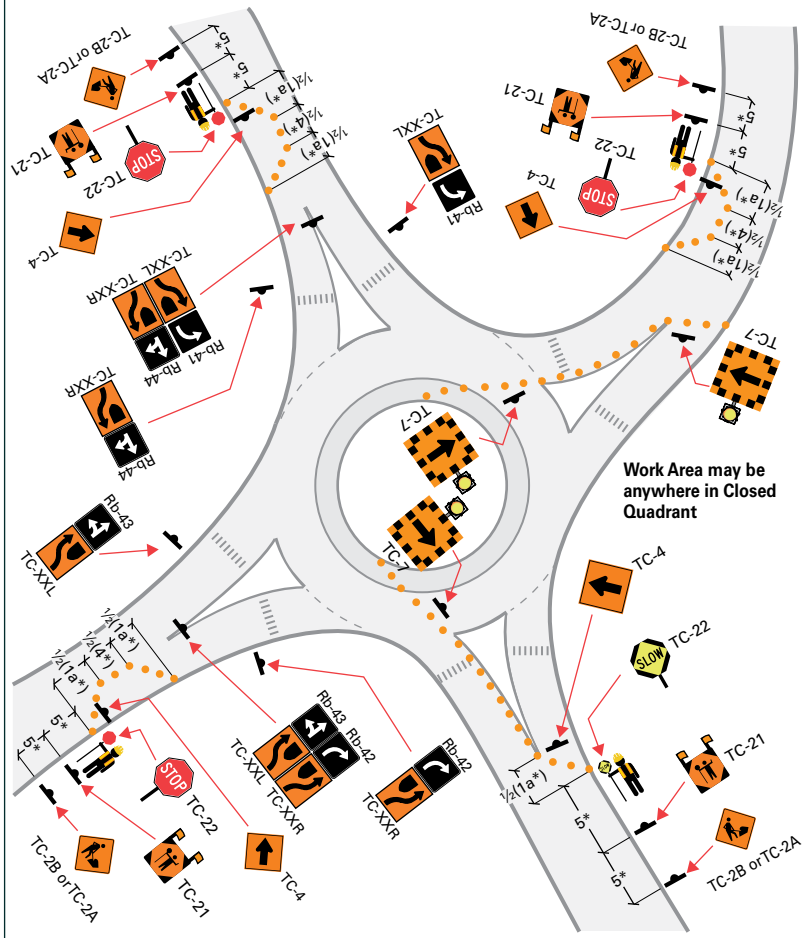
i) It may be necessary to leave a wider lane width if there is a high truck percentage.

ii) On Single-lane road, total width of 6 m must be maintained. On Multi-lane roads, total lane width of 10 m must be maintained. If minimum lane widths can not be maintained then see lane closure TLs.

iii) For Very Short Duration, Cones are not required if a Work Vehicle with Beacon/4WF or TC-12 is present.

Figure TL- 86 Roundabout: Quadrant Closed (Traffic Control Persons)

- ☑ **Single-Lane**
- ☐ Multi-Lane
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) TCP's must be in communication with each other to ensure only one entrance has a TC-22 showing SLOW at any time.

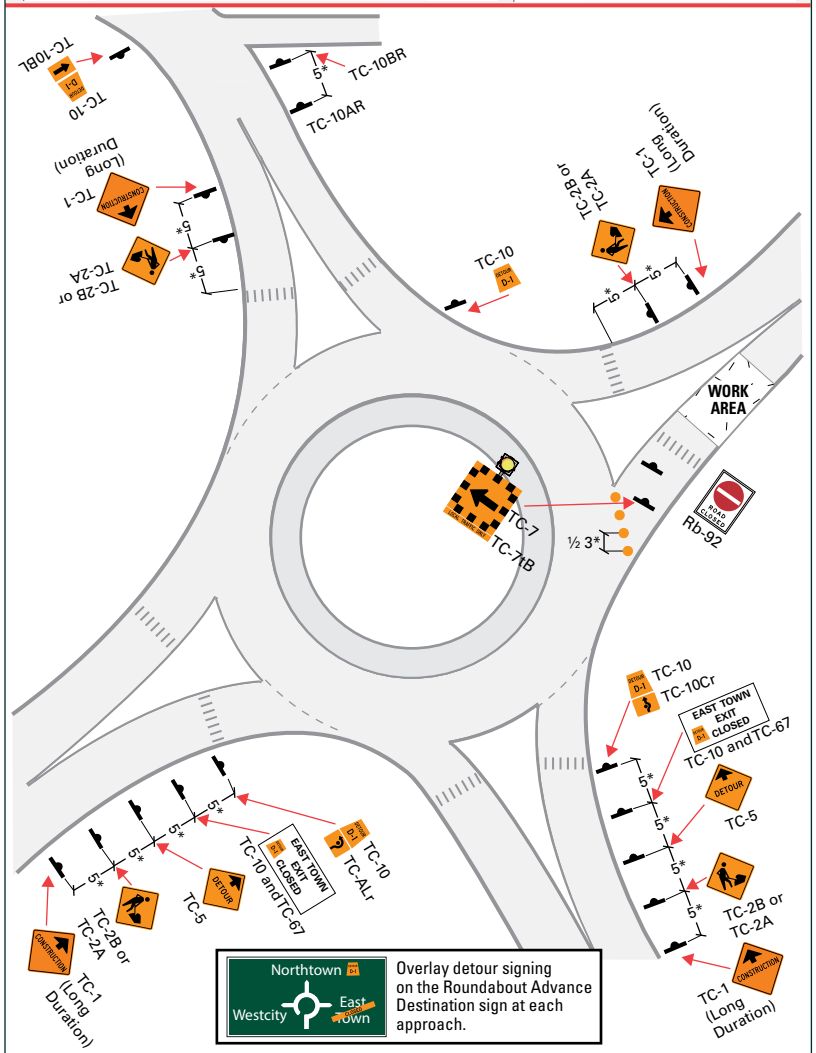
ii) Roundabout must be cleared before next entrance has SLOW indication.

iii) For Long Duration a TC-1 is required 5* in advance of the TC-2 on each approach and for Long Duration with a NPRS 70 km/h or greater and/or Rural a TC-1A is also required.

iv) Use of AFADs or PLCS NOT permitted.

Figure TL- 87 Roundabout: One Exit Closed (Detour)

- ☑ **Single-Lane**
- ☑ **Multi-Lane**
- ☐ Undivided Non-freeway
- ☐ Divided Non-freeway
- ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



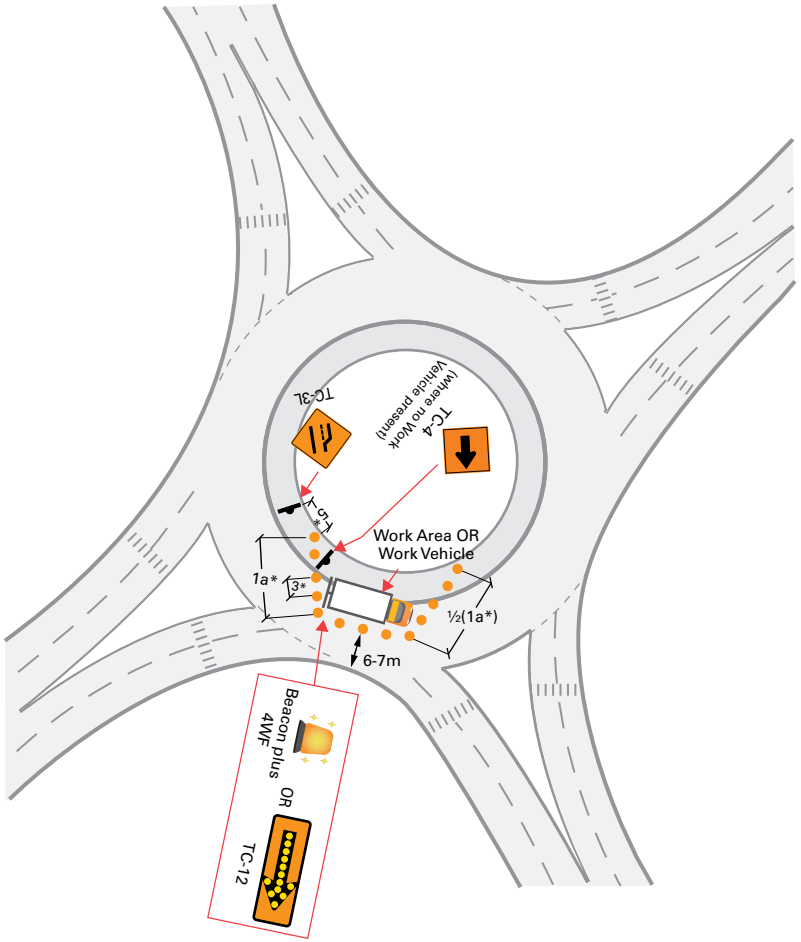
* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) See TL-42 for Detour signing in advance and beyond the Roundabout.

Figure TL- 88 Roundabout: Inside Lane Closed

- ☐ Single-Lane
- ☑ **Multi-Lane**
- ☑ **Undivided Non-freeway**
- ☑ **Divided Non-freeway**
- ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☐ Short Duration
- ☐ Long Duration



* See *Table A*.

NOTES

i) It may be necessary to leave a wider lane width if there is a high truck percentage.

Figure TL- 89 Roundabout: Inside Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

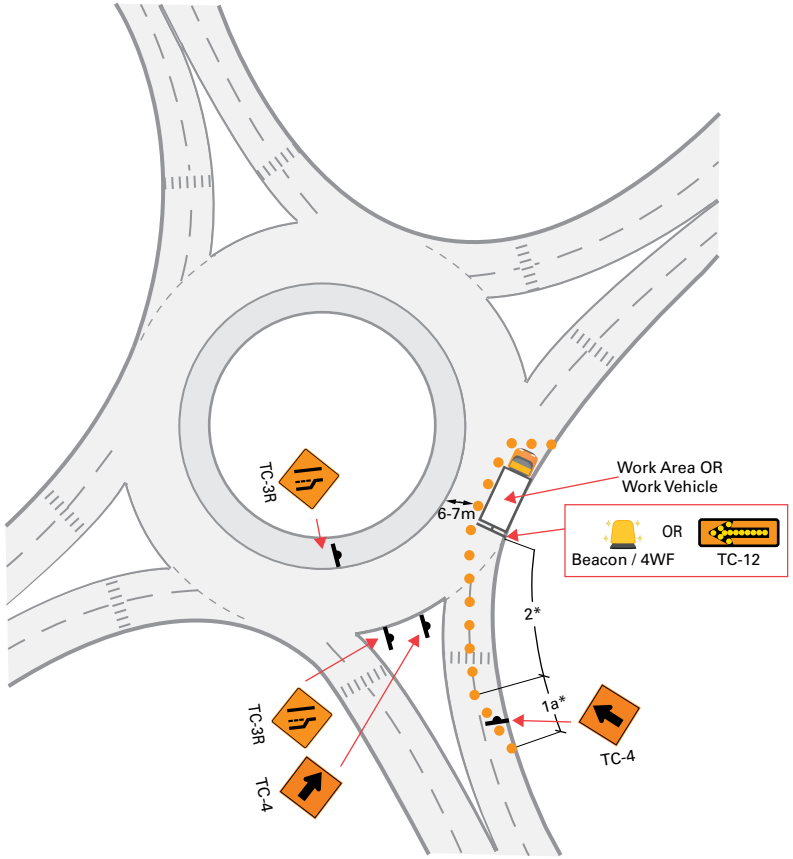
NOTES

i) It may be necessary to leave a wider lane width if there is a high truck percentage.

ii) Work Area may be anywhere in the Inside Lane. All entrances must be reduced to one lane.

Figure TL- 90 Roundabout: Outside Lane Closed

- ☐ Single-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☐ Short Duration
- ☐ Long Duration



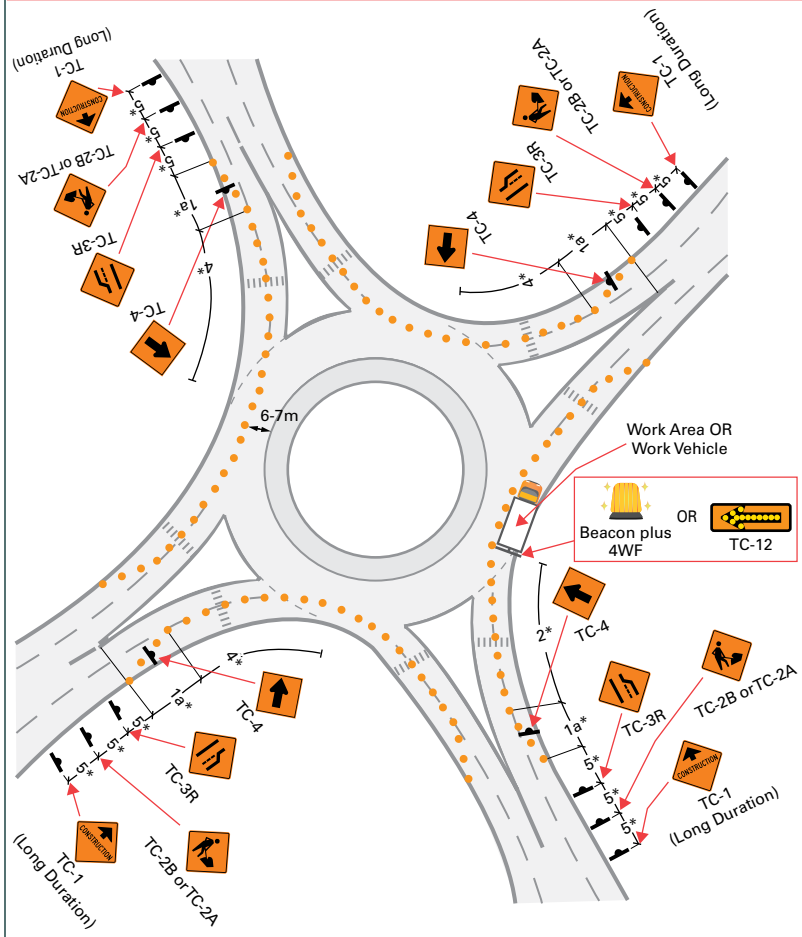
* See *Table A*.

NOTES

i) It may be necessary to leave a wider lane width if there is a high truck percentage.

Figure TL- 91 Roundabout: Outside Lane Closed

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

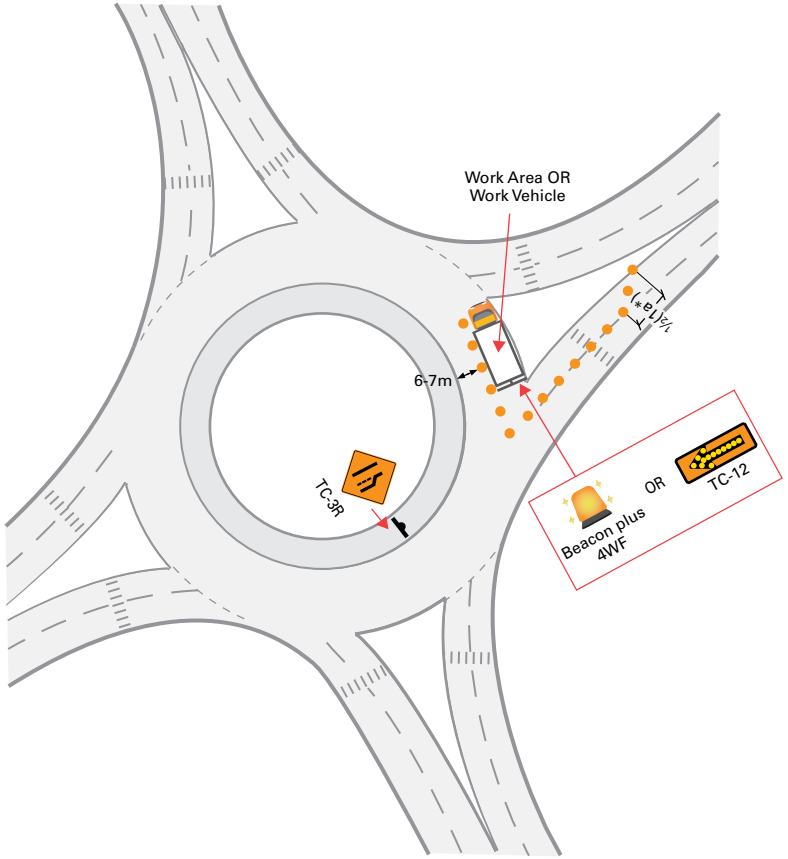
NOTES

i) It may be necessary to leave a wider lane width if there is a high truck percentage.

ii) Work Area may be in any of the Closed Quadrants. All entrances and exits must be reduced to one lane.

Figure TL- 92 Roundabout: Outside Lane or Left Exit Closed at Island

- ☐ Single-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☑ **Very Short Duration**
- ☐ Short Duration
- ☐ Long Duration



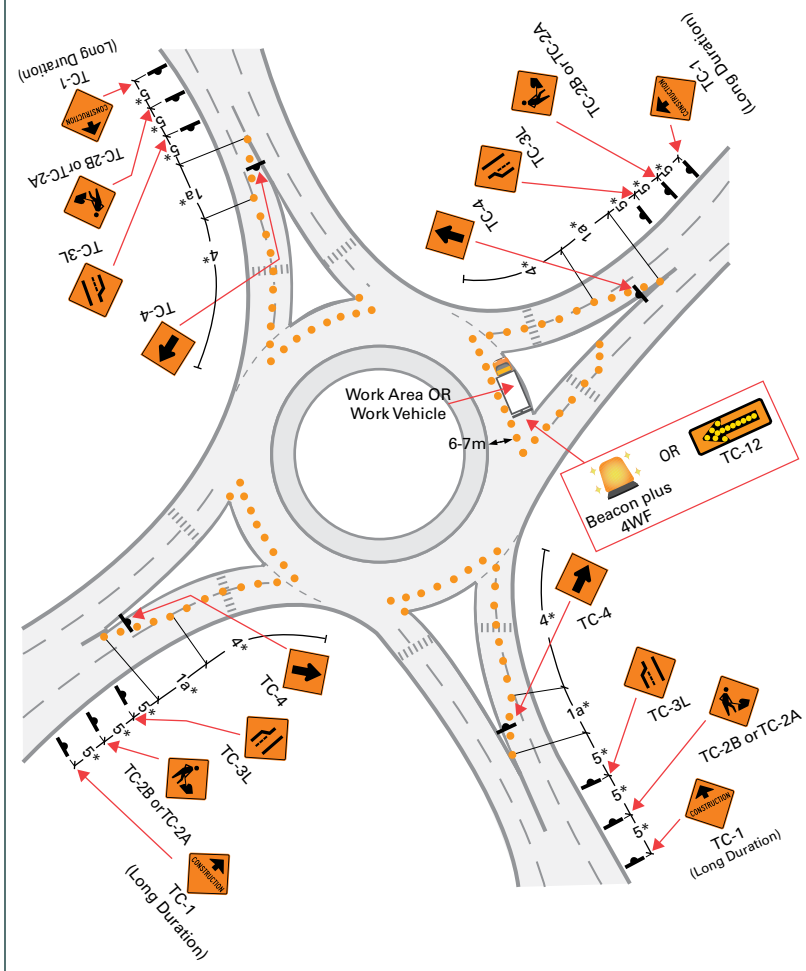
* See *Table A*.

NOTES

i) It may be necessary to leave a wider lane width if there is a high truck percentage.

Figure TL- 93 **Roundabout:** Outside Lane or Left Exit Closed at Island

- ☐ Two-Lane
- ☑ **Multi-Lane**
  - ☑ **Undivided Non-freeway**
  - ☑ **Divided Non-freeway**
  - ☐ Freeway
- ☐ Mobile Operations
- ☐ Very Short Duration
- ☑ **Short Duration**
- ☑ **Long Duration**



* For Short Duration, see *Table A*. For Long Duration, see *Table B*.

NOTES

i) It may be necessary to leave a wider lane width if there is a high truck percentage.

ii) All entrances must be reduced to one lane.