

2015 Interim TMM

Traffic Management Manual for Work on Roadways



Introduction of the
2015 Interim TMM

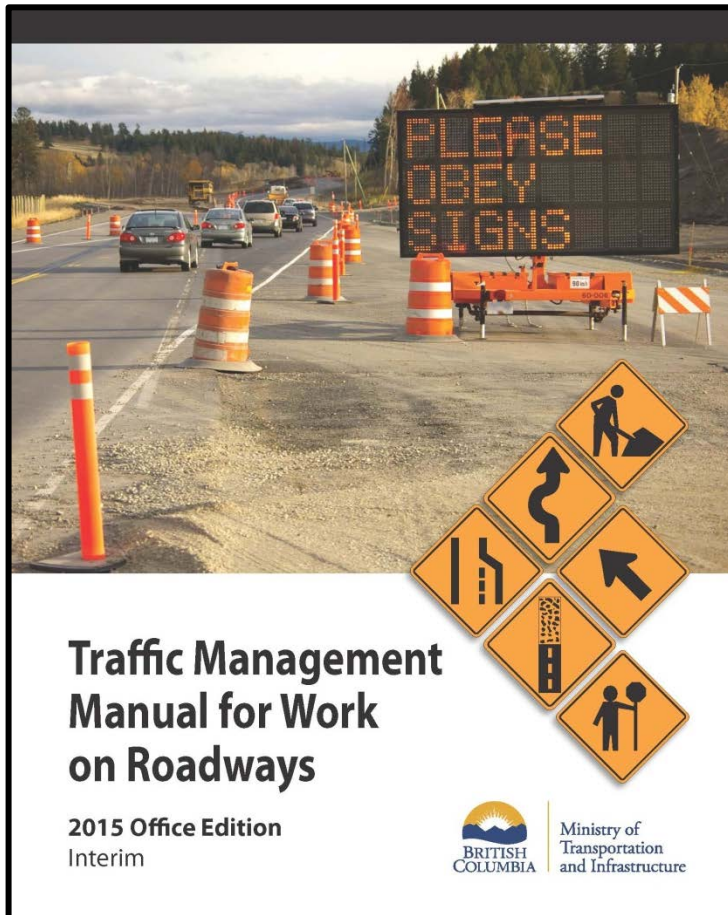
CSSE Conference - Vancouver
September 21, 2016



Ministry of
Transportation
and Infrastructure



Agenda



1. Review of structure
2. Changes or New Information
3. Notable Updates
4. No Changes
5. Other Helpful Information
6. Exercise Session
7. Additional Information
8. Questions



1. Structure

- **Part A – Traffic Management**
 - Section 1 – Introduction
 - Section 2 – Fundamentals
 - Section 3 – Traffic Management Plans

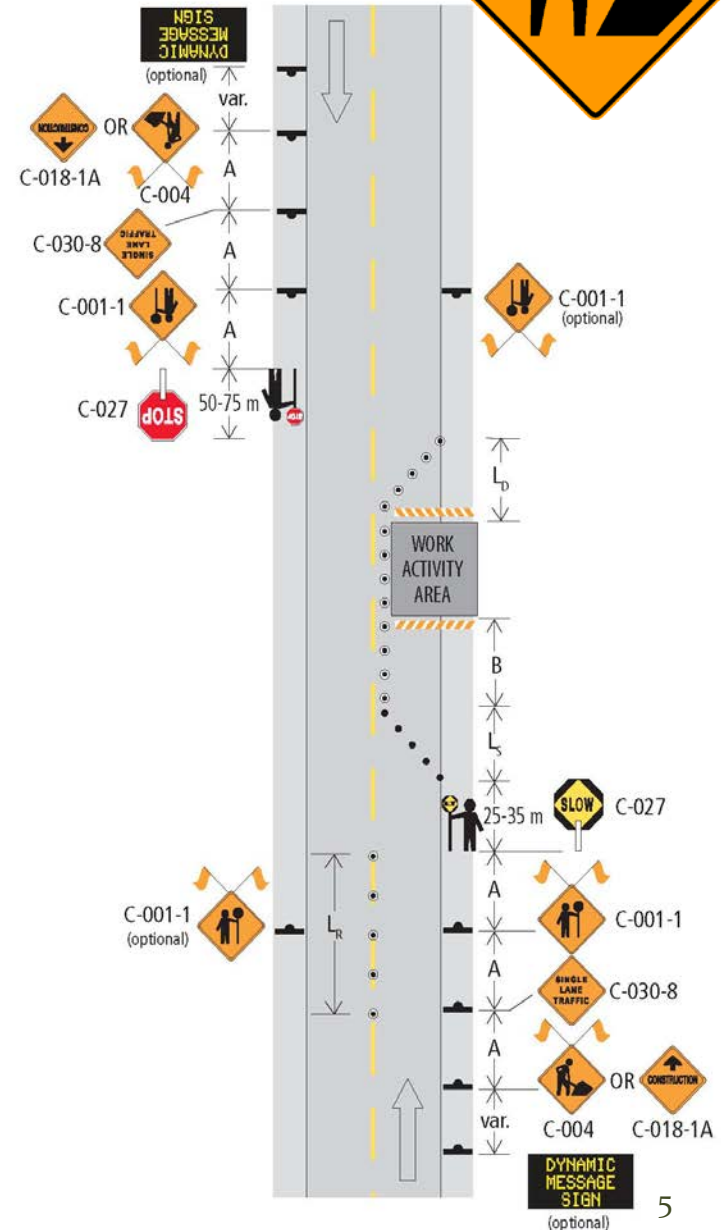
- **Part B – Traffic Control**
 - Section 4 – Traffic Control Devices
 - Section 5 – Traffic Control Persons
 - Section 6 – Layouts – General Instructions

- Section 7 to 19: Layouts

Categorized by Roadway type
(Two Lane, Two way, Multilane
undivided, etc)

or

Categorized by type of work
(Paving, Marking, Surveying, etc)



Layouts



Section 7: Traffic Control Layouts – Two-Lane, Two-Way Roadways



7.8 Lane Closure with TCPs – Single Lane Alternating – Short and Long Duration

Purpose:

This layout shows the appropriate positions of TCPs when they are controlling traffic for a lane closure on a two-lane, two-way roadway.

Standard:

- When used at night, the TCP station shall be illuminated with overhead lighting.
- Barricades are required at each end of the work activity area for long-duration work.

Guidance:

- The distance between the TCP and the Traffic Control Person Ahead C-001-1 sign should not exceed 150 metres.
- Where Crew Working – Maximum Speed C-002-2 signs establish a Temporary Speed Zone, the C-002-2 should be placed upstream of the C-004 or C-018-1.
- Thank You Resume Speed C-086-1 signs should be placed across from the Crew Working – Maximum Speed C-002-2 signs in the opposing lanes.

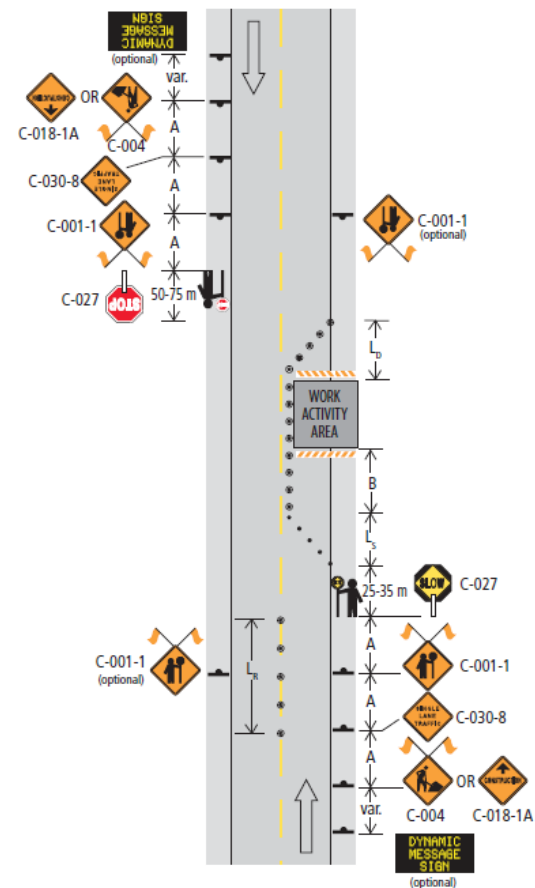
Options:

- An additional Traffic Control Person Ahead C-001-1 sign may be added to the far side of the road to provide queued drivers with increased awareness of the TCP position.
- The Flagger Ahead C-001-2 sign or Prepare to Stop C-029 sign may be used for additional advance warning where TCPs are stopping traffic.
- A Prepare to Stop C-029 sign may replace the Single Lane Traffic C-030-8 sign for other applications that require traffic to stop (e.g., equipment crossing road).

Section 7: Traffic Control Layouts – Two-Lane, Two-Way Roadways



Figure 7.8: Lane Closure with TCPs – Single Lane Alternating – Short and Long Duration





- **Appendices**

- Glossary
- Commonly Used Construction Signs
- Traffic Management Plan Templates
- Traffic Management Audit Forms
- Lane Closure Request Forms
- Tables A to D: Device Spacing, Taper Lengths, Risk Assessment



2. Changes or New Information

- Traffic Management Plans
- High Speed Work
- Buffer Vehicle
- Shadow Vehicle



TMP Categories

- **Category 1** – previously Cat 1,2: minimal impact, simple terrain, two-lane highways, lower speeds and volumes.
- **Category 2** – previously Cat 3: speed, volume, complexity. Moderate impact due to characteristics or type of work.
- **Category 3** – previously Cat. 4,5: complex and significant impact, higher volumes and speeds, long duration, night work, mountainous, lane closures/detours
- Assess for appropriate Category – Sec. 3.3 Project Category Determination
 - Engineering Signoff may be required on Category 2, is mandatory on Category 3



TMP Documentation

- **Category 1:**

- Traffic Control Plan
(use TMP Category 1 form or equivalent)

- **Category 2:**

- Traffic Control Plan
- Implementation Plan

- **Category 3:**

- Traffic Control Plan
- Public Information Plan
- Incident Management Plan
- Implementation Plan

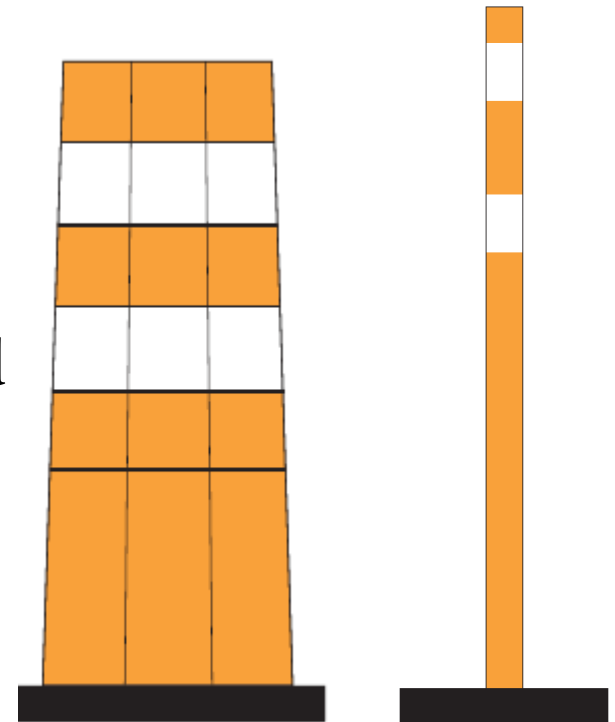
Other plan documentation may be required depending on project specifications

High Speed Work



Channelizing devices

- Drums - have replaced tubes on the leading tapers
- Tubes are used to delineate lanes
- Exceptions to use a reduced standard are shown as OPTION in Layouts (lower speed, shoulder work, limited space)

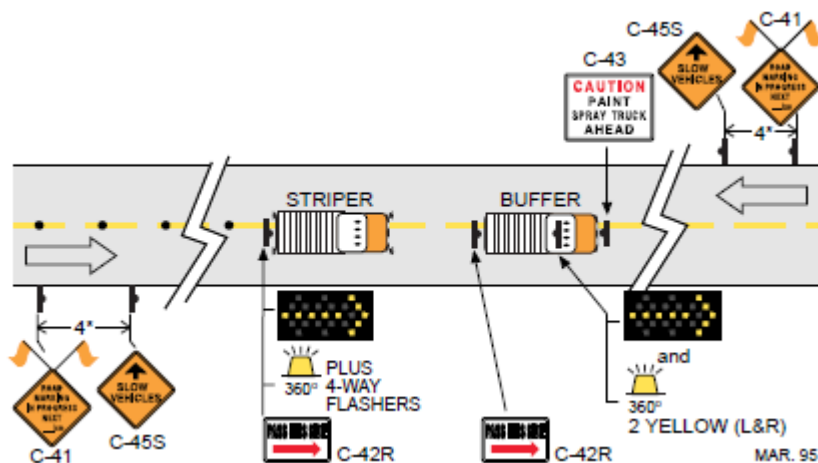


Taper lengths increased

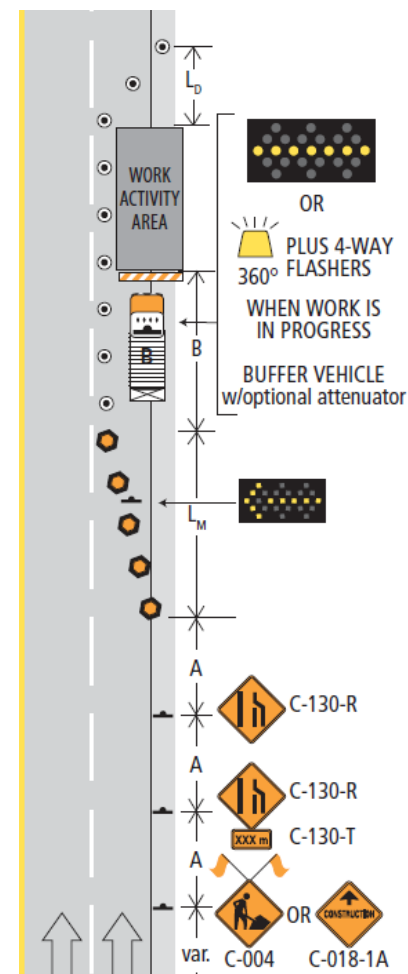


Buffer Vehicle

- 1999:



- 2015:

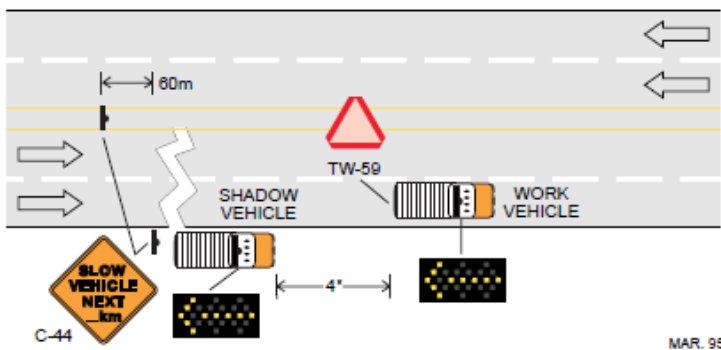




Shadow Vehicle

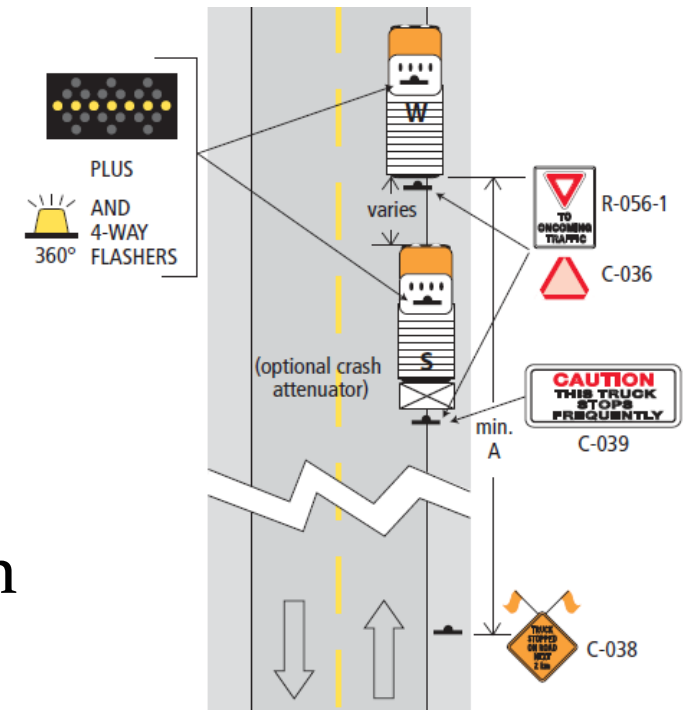
1999:

- Continuously slow moving work as a mobile advance warning device. Placed as far off the travel lane as practical



2015:

- Increased use for High Speed High Volume





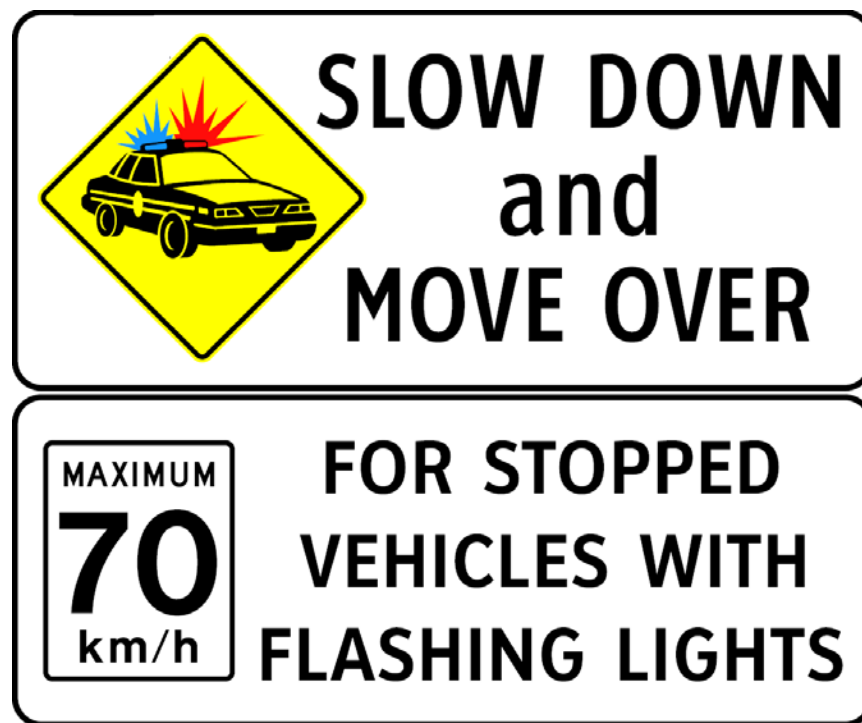
3. Notable Updates

1. Slow Down Move Over
2. Signs
3. References for 'Cones'
4. Other devices and technologies
5. TCPs
6. Treatment of drop offs
7. Layouts



Slow Down Move Over

Slow Down Move Over Legislation



Ref: Section 2.4 Management of Speed

Signs



C-019



C-030-5AR



C-082



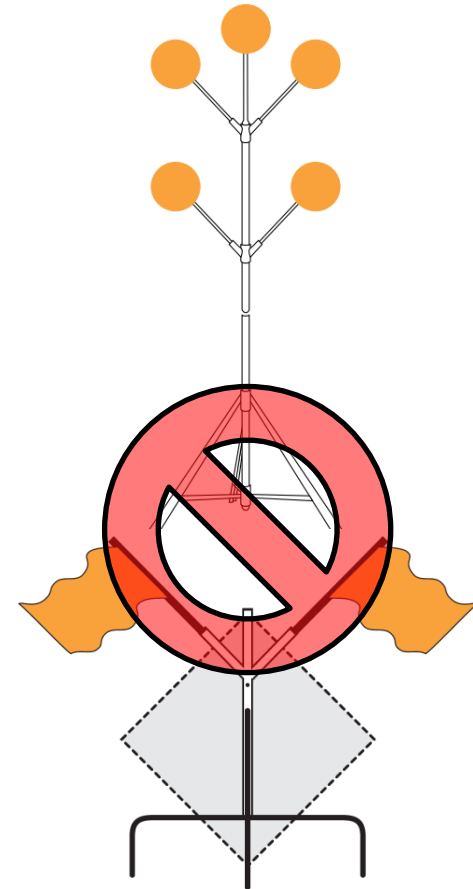
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Cones

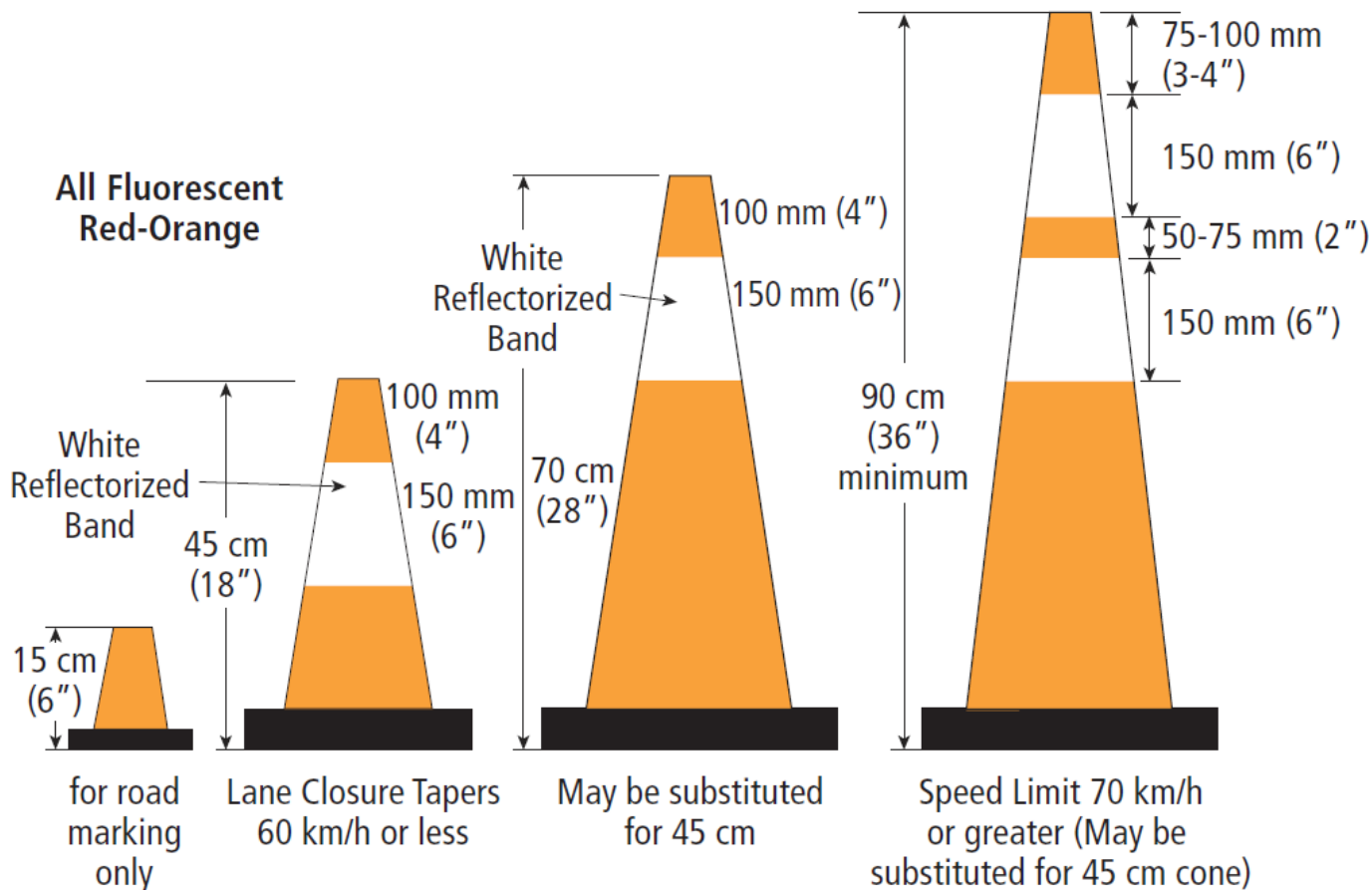


Figure 4.8: Cones



Additional Devices

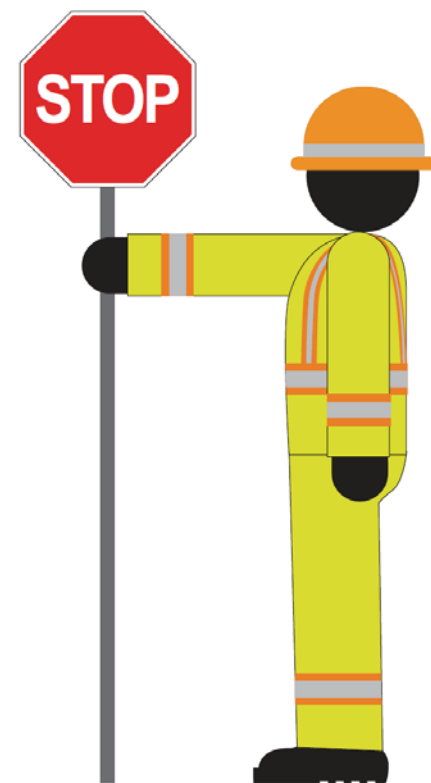
- Temporary Lane Separators & Longitudinal Channelizing Devices
- Temporary Stop Bars, Transverse Rumble Strips & Automated Flagging Assistance Devices
- Vehicle Mounted Crash Attenuators & Work Zone Fencing





Traffic Control Persons

- 2015 TMM includes expanded information on:
 - Roles & Responsibilities of TCS & TCP (5.1)
 - Use of TCPs in Work Zones (5.2)
 - Minimum Requirements for TCPs (5.3)
 - TCP Positioning and Signals (5.6)
 - Prohibitions (5.7.3)
 - Overhead lighting at night (4.9)





4. No Changes (but often asked)

1. Sign and Device Retro-Reflectivity
2. Emergent and Brief Duration Work
3. Urban, Low Speed Work



Retro-Reflectivity

Since T09-05 and now included in the new Manual:

Construction Signs and Devices

- ASTM Type 9 for all flat, rigid surfaces
- ASTM Type 6 for all curved surfaces

Other Signs and Devices

- ASTM Level specified in Standard Sign Catalog



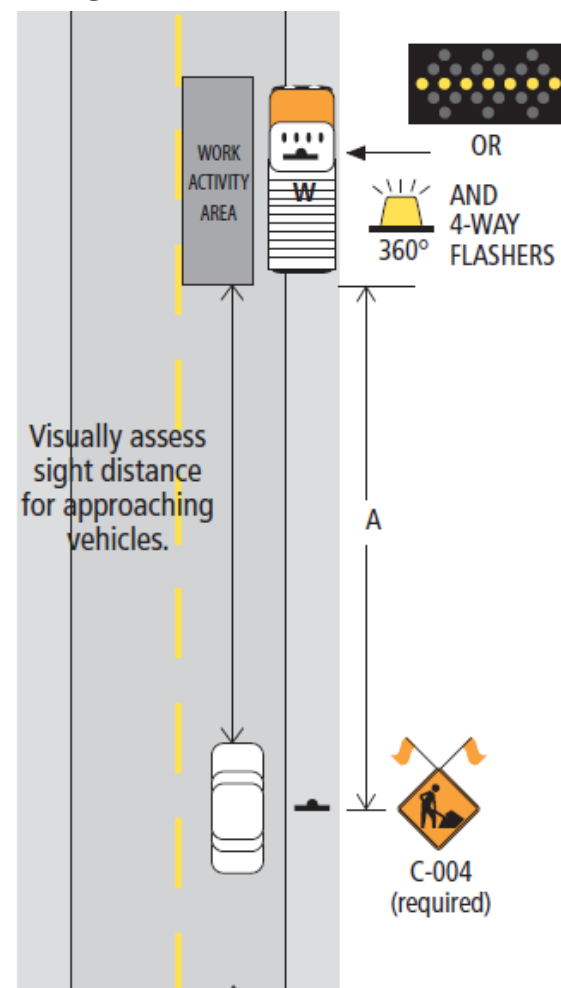


Emergent and Brief Duration

T-01/13 Amendment for Emergent and Brief Duration Work

- Emergent – unplanned, less than 5 minutes
- Brief – planned, less than 15 minutes.
- No change since the Technical Circular.

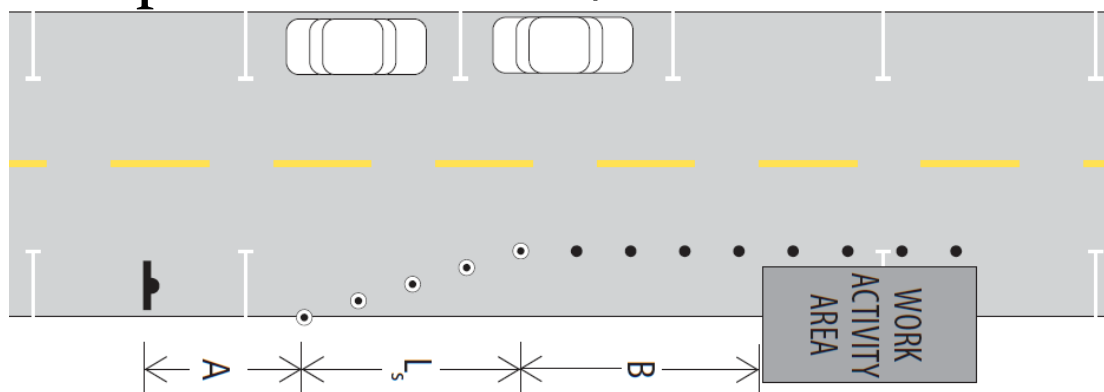
Figure 7.4 Brief Duration Work





Urban Low Speed Work

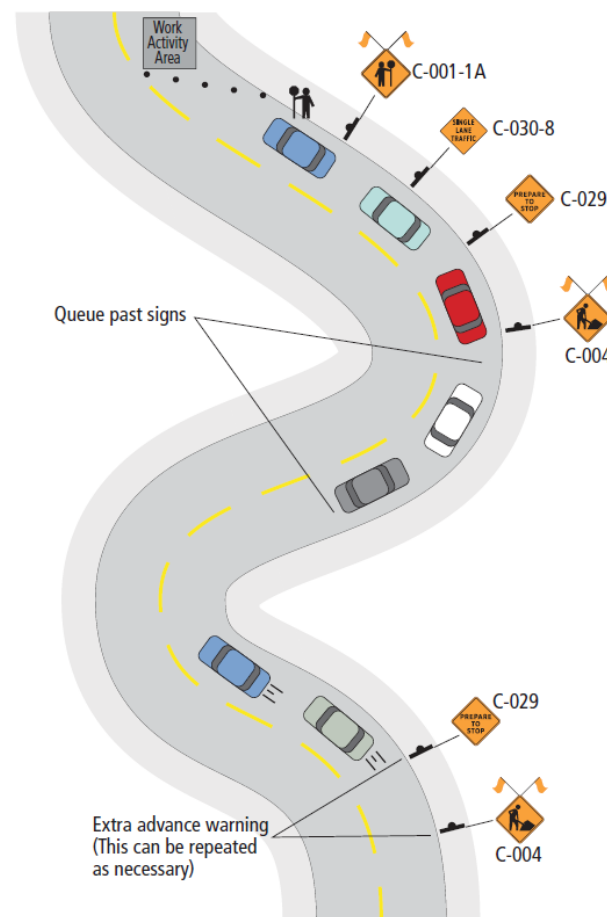
- Taper lengths and sign spacing match the 1999 Manual
- Most layouts have options for reduced standards for speeds of 60 km/h or less





5. Other Helpful Information

- Overlapping work zones
- Queue management techniques
- Installation and removal process
- Parts of the work zone
 - *Above items located in Section 6*





6. Exercise

Part 1

- Initial Project Category Assessment
- Project Risk Analysis and Final Category Determination

Part 2

- Draft a Category 1 TMP



**KEEP
CALM
AND
EXERCISE**



7. Additional Information

TMM can be found at:

<http://www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/trafficmanagementmanual>

Send questions and comments to:

MOTITMM@gov.bc.ca

- Updates may be released from time to time.
- The three year phase in period ends in 2019
- A FAQ page will also be established on our website



8. Questions

