

Cold Patching Guidelines and Diagrams

Following a number of enquiries related to the application of WATCM for cold patching activities, the NBDTI WATCM Technical Committee has further reviewed and discussed this particular activity. Recognizing that there are situations where a single stop is required for the application of cold mix on any volume/speed of highway, the Committee has agreed that the following additional guidance could be provided for use with Figures 7-21a and 8-7VS as follows:

Modifications to Figure 7-21a

When encountering a situation on **any 2-lane highway** where a single stop (less than 30 minutes duration) within an approximately 1km length of travel lane is required for the application of cold-mix asphalt and **MANUAL LABOUR ONLY** will be used in the filling of the pothole(s) – i.e. the worker can quickly and easily clear the travel lane when a vehicle approaches, Figure 7-21a shall be used with the following alterations:

- A Dedicated Traffic Observer **must** be used, positioned a safe distance in advance of the pothole location dependent on site conditions, always ensuring adequate line of sight between Observer and Worker.
- A Trail Vehicle with a 360° light (minimum) **must** be used, positioned a distance S (2S for speeds >80km/h or volumes >300vpd) in advance of the Dedicated Traffic Observer. These distances may be adjusted (i.e. increased) to account for site specific visibility conditions.
- Men Working sign **must** be installed on the back of the Trail Vehicle so as to provide advance warning to approaching motorists in the same direction of travel (temporary roadside signs are not required).
- Construction Zone Begins and Ends signage is not required.
- Expectations are that minimum travel lane width of 3.0 m is available in the lane where work is taking place. If this is not possible (i.e. no available alternative location for parking patching truck or Trail Vehicle), ensure that vehicles are positioned such as to provide the maximum travel lane width possible **AND** adequate sight distance of on-coming traffic in both directions.
- If available, additional Trail Vehicles (equipped with 360° amber light as a minimum) may also be used to provide advance warning.

The resultant Figure 7-21b is attached for reference.

Modifications to Figure 8-7VS

When encountering a situation on any multi-lane highway where a single stop (less than 30 minutes duration) within an approximately 1km length of travel lane is required for the application of cold-mix asphalt and **MANUAL LABOUR ONLY** will be used in the filling of the pothole, Figure 8-7VS shall be used with the following alterations:

- A Dedicated Traffic Observer **must** be used, positioned a safe distance in advance of the pothole location dependent on site conditions, always ensuring adequate line of sight between Observer and Worker.
- Buffer Vehicle is located distance B in advance of the Dedicated Traffic Observer, ensuring the Observer has adequate line of sight to on-coming traffic.
- Delineators are not required to be installed.

The Resultant Figure 8-7VSa is attached for reference.

Note:

Dedicated Traffic Observers are used to monitor oncoming traffic and warn worker(s) of potential hazards or threats during activities that require a worker to be on or near the travelled lane for only a very brief period. This means:

- They must be located in a position with a clear view of traffic – so they are **NOT** sitting in a vehicle
- The means which they will use to warn the workers MUST be determined before the work activity begins
- They are **NOT** engaged in any other activity while monitoring traffic

In addition, please ensure **ALL** Dedicated Traffic Observers have attended a WATCM awareness session, information available at:

- ENGLISH -
<https://www2.gnb.ca/content/dam/gnb/Departments/trans/pdf/en/RoadsHighways/WATCM/WATCM-Awareness-e.pdf>
- FRENCH -
<https://www2.gnb.ca/content/dam/gnb/Departments/trans/pdf/fr/routeautoroute/GSTRsensibilisation.pdf>

This additional guidance is provided on a trial basis, to be closely monitored and audited to ensure it is being applied appropriately. If it appears that inappropriate Technical Judgement is being applied and these alternative Traffic Control guidelines are being over-used, their use will be immediately stopped. Please remember that all measures identified in the WATCM are identified as MINIMUM requirements, and are recommended as the most appropriate traffic control for specific situations in an effort to ensure that all staff are able to return home safely at the end of the work day.

Feedback on these two modified diagrams is strongly encouraged, please send all feedback to WATCM-GSTR@gnb.ca .

NOTES:

1. Manual labor only. No compaction vehicles allowed.
2. Not for use during peak traffic hours
3. Dedicated Traffic Observer positioned within a safe distance dependent on site conditions.
4. A minimum 3.0m useable road width must be maintained in the lane in which work is taking place.
5. Not for use on Climbing Lanes.
6. The length of the Activity Area shall not exceed 1 km.
7. All work equipment shall be equipped with 360° amber flashing light.
8. Trail Vehicle positioned a distance S (or 2S for $V > 80\text{km/h}$ or $\text{vpd} > 300$) must be used in advance of the Dedicated Traffic Observer.
9. Trail Vehicle shall have a Road Work Sign attached to the rear.
10. An additional Trail Vehicle may be used based upon site specific conditions such as restricted sight distances.

**Modified Cold Mix Patching
Very Short Duration
(less than 30 min)
All Volumes**

V	50	60-70	80-90	100-110
S	50	75	100	150

V – Existing Speed Limit (km/h)

S – Minimum Sign Spacing (m)

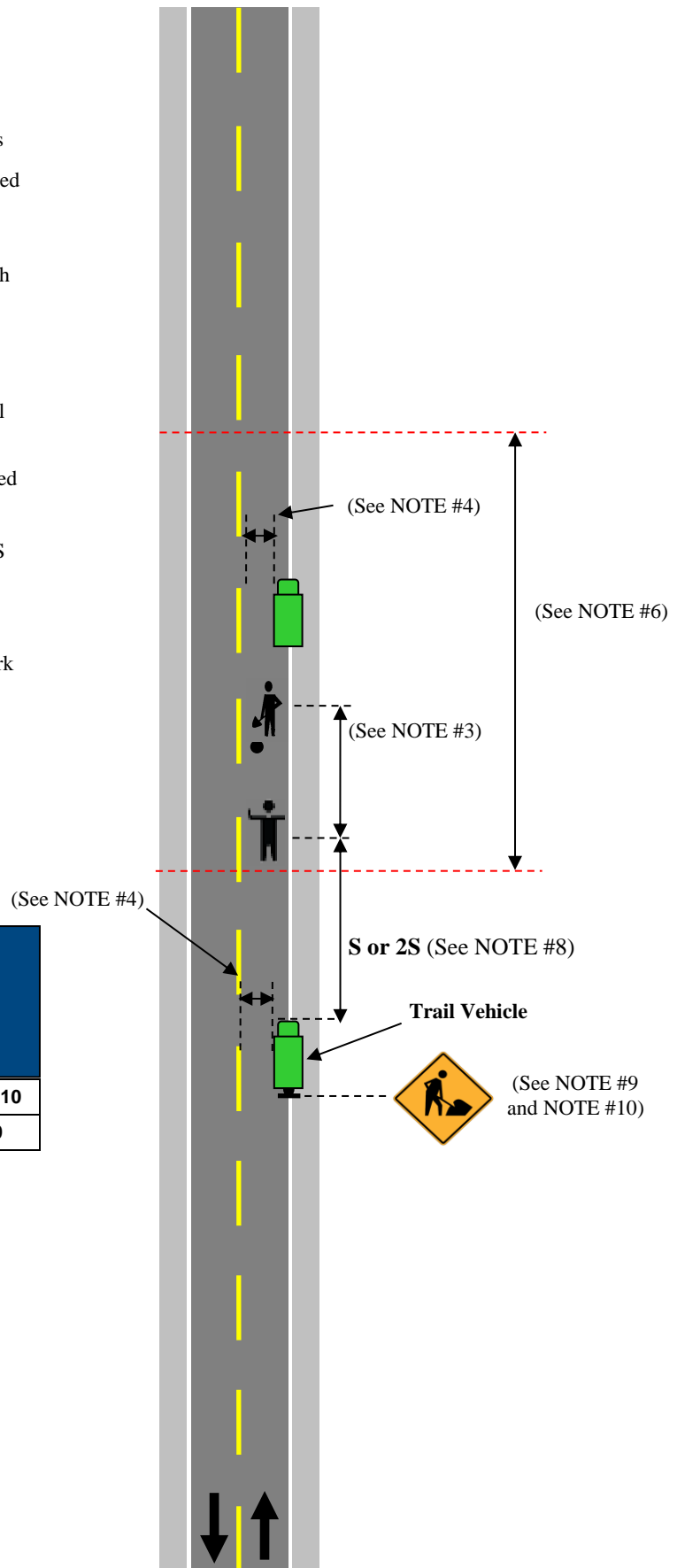


Figure 7-21b

NOTES:

1. Manual labor only. No compaction vehicles allowed.
2. Not for use during peak traffic hours
3. Dedicated Traffic Observer positioned within a safe distance dependent on site conditions.
4. The length of the Activity Area shall not exceed 1km.
5. Work Vehicle shall be equipped with a Flashing Arrow Board set to caution mode or a 360° degree amber light.
6. Trail Vehicle shall have a 90x90 Lane Closed Sign attached to the rear.
7. An additional Trail Vehicle may be used based upon site specific conditions such as restricted sight distances.

**Modified Single Lane Closure
For Cold Mix Patching
Very Short Duration
(less than 30 min)
All Volumes**

V	50	60-70	80-90	100-110
S	50	75	100	150
T	30	64	110	180
B	35	50	70	75

V – Existing Speed Limit (km/h)
 S – Minimum Sign Spacing (m)
 T – Taper Length (m)
 B – Buffer Area Length (m)

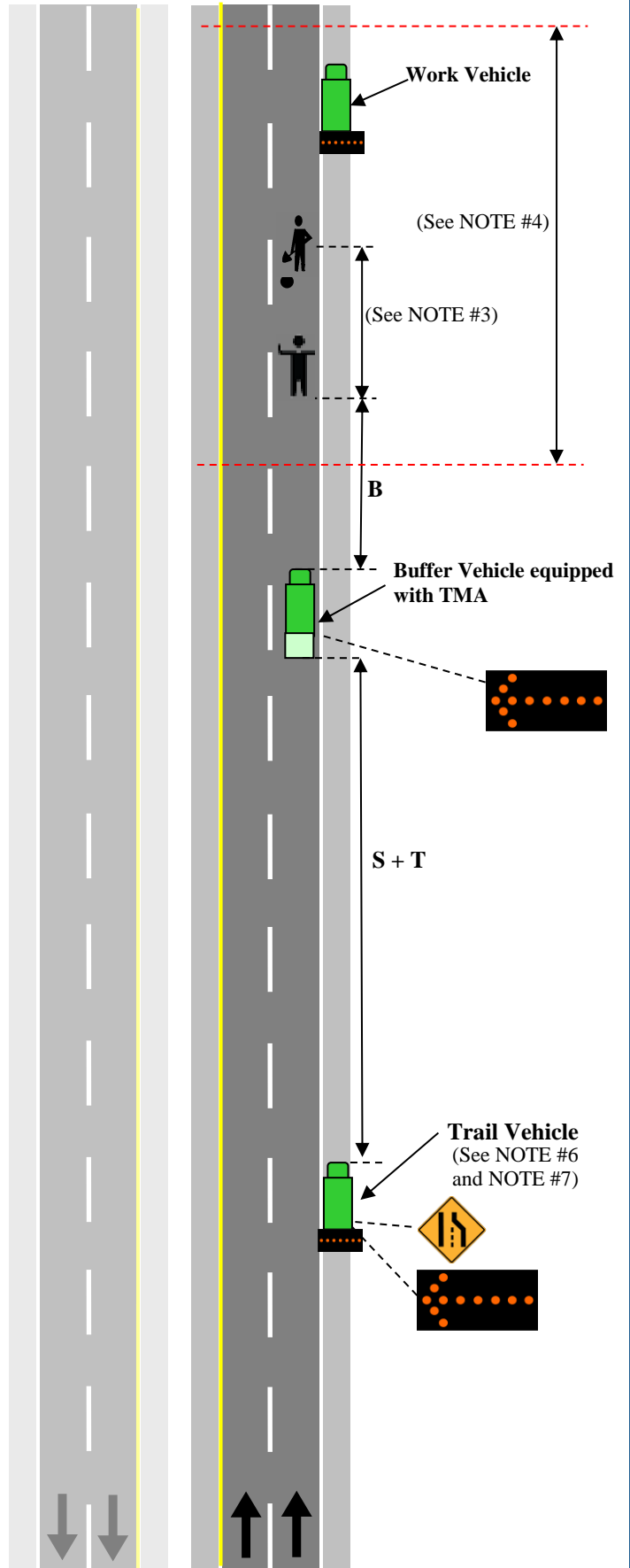


Figure 8-7V Sa