

# **Guidelines for Traffic Controllers**



#### **IMPORTANT**

Before undertaking the tasks of a Traffic Controller on a public road, a person must successfully complete an accredited **Traffic Controller's Training Program**.

A valid **Traffic Controller's** Statement of Attainment indicating accreditation details must be carried at **all times** when operating as a Traffic Controller.

Upon request, the **Traffic Controller's Statement of Attainment** must be presented to any Police officer, WorkSafe officer, VicRoads officer, Municipal Council Authorised Officer or the person in-charge of a worksite or their delegate.

### **Contents**

Preamble	4
Scope	4
Training	4
Traffic Controller's Authority	5
Traffic Controller's Responsibilities	5
Application	6
Dress	7
Stop/Slow Bat	9
Control of Approach Speed	9
The Law and the Traffic Controller	10
Controlling Traffic	11
Signs	15
Locating the Traffic Controller	17
Advance Signing on Curves/Crests	23
Railway Crossings	23
Behaviour and Attitude	26
Safety	26
Reduced Visibility	28
Use of Radio	28
Supervisor's Responsibility	29
Controlling Traffic at Night	30
Response to Crashes at the Worksite	31
Traffic Control in Emergency Situations	31
Conclusion	32
Annexes	32
Road Safety Road Rules 2009	32
Summary of Traffic Controller Instructions	33
Key Points	34
Traffic Controller Restrictions	34
Report by Traffic Controller	35

### **Preamble**

 Roads with worksites are particularly hazardous, in comparison to a road operating under normal conditions. Traffic controllers are used when signs and devices for works are considered insufficient to provide for personal safety, public convenience and efficient control and management of traffic around the worksite.

### Scope

- This handbook details the procedures to be followed and the equipment required by traffic controllers to control the flow of traffic. The use of traffic signals, other control devices, and control at intersections are not covered in this handbook.
- This handbook is based on the Victorian Worksite Safety – Traffic Management Code of Practice and Australian Standard 1742.3 (2009) – Traffic Control Devices for Works on Roads.

### **Training**

4. Traffic controllers are to be appropriately trained in their duties and certified as competent. All accredited traffic controllers at worksites on roads in Victoria should comply with the guidelines contained in this handbook.  All traffic controllers are required to obtain a valid Statement of Attainment in *Traffic Control using Stop/Slow Bat* and should attend an appropriate refresher course every three years.

# **Traffic Controller's Authority**

- 6. Accredited traffic controllers have the authority to:
  - Legally stop/slow traffic using a STOP/SLOW bat:
  - Use hand signals to advise traffic in conjunction with the STOP/SLOW bat; and
  - Report to the supervisor motorists who fail to follow reasonable directions.

# **Traffic Controller's Responsibilities**

- 7. Accredited traffic controllers have the following responsibilities:
  - a. Safety of the traffic controller (self);
  - b. Safety of fellow workers;
  - c. Safety of motorists and other road users;
  - d. Enabling works at the site to be conducted safely by minimising the risk associated with traffic movement:

- e. Controlling traffic in a professional manner to enable drivers to negotiate through, past, or around the worksite safely;
- f. Ensuring that indication given to the traffic is consistent with the display provided by the traffic signals.
- g. Maintaining traffic control in emergencies and other difficult situations; and
- h. Minimising delays to traffic.

# **Application**

- 8. When required by the volume of traffic or the conditions at the worksite, the supervisor may arrange for traffic controllers to control the movement of traffic in the following situations:
  - a. On bituminous surfacing works being carried out under traffic;
  - Where one lane of a two-lane two-way road or bridge is closed (unless traffic signal control is used);
  - Where any of the conditions for the creation of worksite speed limits exists but such speed limits are not being adhered to;
  - Where blasting works are being carried out on or adjacent to trafficked roads;
  - Where construction machinery regularly crosses or enters an existing road;

- f. Where sight distance to the worksite is limited;
- g. In emergencies; and
- h. Where signs and devices direct a motorist to disobey a law in any of the above circumstances.
- When considering the volume of traffic, the following factors must be taken into account:
  - a. Safety of the workers at the site;
  - b. Safety of the public at the site;
  - c. The duration of work;
  - d. Site conditions and layout; and
  - e. Personnel available.

### **Dress**

- 10. It is essential for safety that the traffic controller wears appropriate high-visibility clothing at all times while on traffic controller duty. Such high-visibility clothing is designed to make personnel more conspicuous and to warn road users of their presence.
- 11. In daytime applications, a fluorescent red/orange high-visibility garment complying with AS/NZS 4602 is required. The garment should be correctly fastened at the front at all times, and should be clean and in good condition. The garment should display information to identify the organisation to which the controller belongs. A fluorescent red/orange cap or hat may also be worn, though is not required.

- 3
- 12. Fluorescent material alone does not give adequate conspicuity for night use. A garment meeting or exceeding the requirements of AS/NZS 4602 for night use must be worn for night applications.
- 13. High-visibility garments are required to have an information tag which details whether they are suitable for day use, night use, or both day and night use. Traffic controllers are advised to check the tag on their high-visibility garment before use to ensure it is the correct type for the application.
- 14. In wet conditions, the wearing of wet weather clothing should not obscure the high-visibility garment requirements set out above.
- 15. Safety footwear conforming to Australian Standards should be worn at all times by traffic controllers.
- 16. VicTrack guidelines require that workers working in the rail reserve or rail corridor must wear the industry-specific orange colour on their high visibility garments. This colour is not quite the same as red/ orange which is commonly used for the workers on roads.
- 17. When working more than 3 metres from the rail line, traffic controllers may wear garments complying with AS/NZS 4602.

# Stop/Slow Bat

18. The STOP/SLOW bat is a double-sided hand held sign with a STOP banner (R6-8) on one side and a SLOW banner (T7-1) on the other. The banner size must be 450 or 600mm in diameter. The STOP banner comprises a white Class 1 Retroreflective legend and border with a red Class 1 Retroreflective background. The SLOW banner has a black legend and border with a yellow Class 1 Retroreflective background. The banner faces are shown below:







T7-1

19. Traffic control bats should be clean and in good repair. Damaged or defaced banners or bats should be repaired or replaced promptly.

### **Control of Approach Speed**

20. Except in emergency situations, the approach speed of traffic in advance of the traffic controller's position must be no more than 60 km/h.

### The Law and the Traffic Controller

- 21. The traffic controller has no power at law. The legal authority does not rest with the person, but with the STOP sign when it is displayed to drivers.
- 22. While engaged in construction or maintenance work and when operating a STOP/SLOW bat, the traffic controller is empowered to stop vehicles by displaying a STOP sign. The driver is required to stop the vehicle before reaching the sign and as near as practicable to the sign. The driver must not proceed beyond the sign while it is displayed in the drivers' direction. The law in this regard only applies to the STOP sign, which is regulatory in nature, and not to the SLOW sign, which is an advisory sign and only used for guidance.
- 23. Under Victorian law, traffic controllers have no authority to control or direct traffic by hand signals alone or by giving oral instructions to vehicle drivers; the control method is use of the STOP sign. Hand signals by the traffic controller only enhance the use of the STOP/SLOW bat.
- 24. If an offence occurs, such as a vehicle failing to stop after a traffic controller has displayed the STOP sign, the controller should not attempt to stop the vehicle. The traffic controller should immediately attempt to warn the workers ahead and then if possible write down the registration number, body type, colour, and make of the vehicle, the time, date and location of the offence, and pass this on to the

- supervisor. The supervisor is required to pass on the information without delay directly to the Victoria Police for processing.
- 25. A typical reporting form is available in this handbook, and should be carried by traffic controllers during operations.

# **Controlling Traffic**

- 26. There are four important conditions that must be in place prior to the traffic controller commencing work with the Stop/Slow bat.
- The maximum speed allowable for approaching traffic is 60 km/h;
- The traffic controller must have an escape path;
- The traffic controller should be separated from the worksite by 30 metres or more;
- The traffic controller must have a sight distance to the approaching traffic of more than 1½ times the approach speed of the traffic to enable adequate braking distance for the slowing traffic (eg. if approach speeds are 80 km/h then the traffic controller should be able to see 120 m along the road).
- 27. Prior to stopping traffic, the traffic controller should stand on the kerb or shoulder, clear of the travelled path. It may not always be possible to have in view the worksite due to site conditions but the traffic controller must be in clear view of the oncoming traffic.

- 28. To stop traffic, the traffic controller should watch for a suitable gap in the traffic. The STOP bat should then be extended high over the carriageway at an angle of approximately 450 so that the STOP banner is facing approaching traffic. After ensuring all traffic has stopped, and with the bat extended and STOP banner clearly visible to approaching traffic, the traffic controller may step onto the carriageway and walk confidently to a position in front of the driver with the palm of the free hand indicating the STOP gesture (refer to **Figure 1**).
- 29. The traffic controller should maintain a vigilant watch of the traffic but not take any posture that could be construed as intimidating or distracting.
- 30. If the traffic controller has stopped a large vehicle and visibility to approaching traffic is obscured, the traffic controller should project the Stop/Slow bat out past the stationary vehicle for other drivers to see as they slow to a stop.
- 31. At the conclusion of the stopped period, to allow traffic to proceed, the traffic controller must check that the road ahead is clear, move over to the side of the road, then turn the bat to display the SLOW banner to the traffic, and with the free hand give the TO GO gesture with a deliberate motion across the body (refer to **Figure 2**).



Figure 1: TO STOP



Figure 2: TO GO



Figure 3: TO SLOW

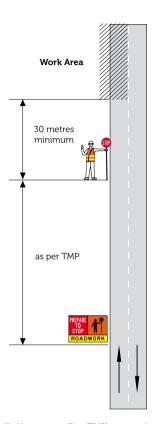
32. To slow traffic, the traffic controller should display the SLOW banner of the bat, face the traffic, extend the free arm and give the TO SLOW gesture (refer to **Figure 3**).

- 33. When in use, the STOP/SLOW bat should be held so that the sign is clearly visible to approaching traffic.
- 34. The key instructions to remember when controlling traffic are:
  - a. Be visible to the road user:
  - Do not stand on the carriageway until approaching traffic has stopped;
  - c. Do not turn your back to traffic;
  - d. Give clear instructions to road users; and
  - e. Always have a clear escape path.
- 35. Traffic controllers should be relieved from duty after not more than two hours, for a period of rest or other duties of at least 15 minutes.

Note: Model instructions for the establishment of manual traffic control and for the training of a traffic controller are detailed in Appendix C of AS 1742.3-2009.

# Signs

- 36. Worksite signing must be placed in accordance with the Traffic Management Plan which should comply with the Victorian Worksite Safety Traffic Management Code of Practice and Australian Standard 1742.3 (2009) Traffic Control Devices for Works on Roads.
- 37. The "traffic controller" symbolic (T1-34) sign and the "Prepare to Stop" (T1-18) sign must be in place facing approaching traffic while traffic control is underway. Figure 4 (on page 16) shows the format for typical advance signing for a traffic controller.
- 38. It is the responsibility of the traffic controller to ensure these signs are in place while controlling traffic and are removed immediately after traffic control has finished.
- The positioning of the signs will vary depending on the traffic approach speed and must comply with the Traffic Management Plan (TMP).
- 40. For heavily trafficked or multi-lane roads, signs must be placed on both sides of the carriageway.
- 41. The symbolic Traffic Controller sign must be a black symbol on a fluorescent orange background. The Prepare to Stop sign must be a white legend on a red background. All signs must be Class 1 retroreflective.



Note: The Traffic Management Plan (TMP) may require additional signs.

Figure 4: Advance Signing for Traffic Controller

### **Locating the Traffic Controller**

- 42. The traffic controller should be positioned approximately **30 m in advance** of the work area. The distance should be sufficient to separate the controller from the works, but also allow the controller to converse with the workers regarding traffic flow requirements. If a vehicle proceeds beyond the STOP sign, there should be some additional space for it to stop before the work area.
- 43. The traffic controller should stand facing the traffic from a position outside the travelled path so that approaching traffic can see the controller from at least 1½ times the approach speed of the traffic.
- 44. Where sight distance is limited and/or traffic volumes are high it may be necessary to use a second controller in advance of the traffic control position to slow down or stop traffic approaching the end of the queue.
- 45. Where multiple traffic controllers are employed and they do not have line-of-sight to each other, radio contact or an intermediate communicator must be used
- 46. Traffic controllers must always stand in a position so that a clear **escape path** is available. Traffic controllers should never turn their backs to traffic

- 47. When traffic has stopped under a STOP banner instruction, the traffic controller may change position so as to be clearly visible to traffic further along the approach road. The traffic controller should, however, always stay at the head of the traffic queue and not permit other persons to gather at his or her position. The traffic controller must be mindful to ensure a clear escape is available for any new position assumed.
- 48. The traffic controller should not obstruct road users' view of signs, nor should they be obscured by signs when viewed by approaching traffic.
- 49. The visibility of a traffic controller to motorists can be affected by the position of the sun, the background conditions (including lighting), the location of the controller in shade or darkened areas, or by oncoming headlight illumination. These factors should be considered when positioning a traffic controller.
- 50. For sprayed bituminous surfacing works, the location of the traffic controller may be varied to suit the different traffic flows that often develop in this operation. Prior to work commencing, it is essential that the traffic controller and the supervisor decide the appropriate location and procedures for this operation.

51. The following diagrams illustrate the use of One Traffic Controller and Two Traffic Controllers under various traffic conditions.

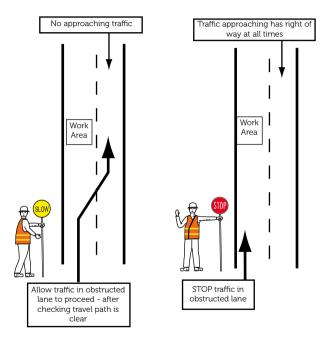


Figure 5a & 5b: Using One Traffic Controller

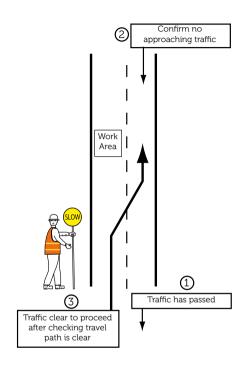


Figure 5c: Using One Traffic Controller

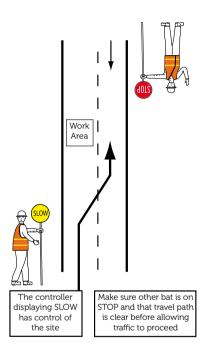


Figure 6a: Using Two Traffic Controllers

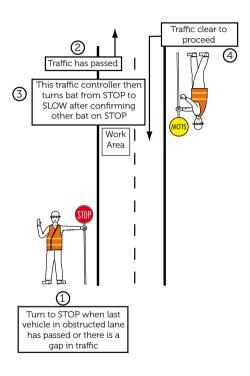


Figure 6b: Using Two Traffic Controllers

### **Advance Signing on Curves/Crests**

- 52. Sight and stopping distance are important near crests or curves where an approaching vehicle does not have adequate advance warning of the approaching works to safely stop at the end of the queue.
- 53. Traffic controllers should stand where they can see both ends of the work area and must be able to see approaching vehicles for a distance of at least one and half times the speed limit in metres (e.g. if the speed limit is 60 km/h, the traffic controller should be able to see at least 90m).
- 54. If the sight distance is inadequate before approaching the worksite, consideration should be given to:
  - a. lowering the speed limit, or
  - b. erecting additional advance warning signs, or
  - c. using an additional traffic controller at the end of the queue.

# **Railway Crossings**

55. Railway crossings differ from road intersections as trains always have the right of way, and are unable to stop quickly. Therefore, special care must be taken when directing traffic in locations adjacent to railway crossings.

- 56. Generally drivers will follow directions from traffic controllers when they contradict other signals, signs or control devices on the road. Special care must be taken at railway crossings to ensure that traffic is not directed through flashing railway crossing signals, that traffic queues do not extend across railway crossings and that traffic is not directed through STOP or GIVE WAY signs requiring vehicles to stop or give way to approaching trains.
- 57. No work within 3 m of a railway crossing may be undertaken without prior approval from the relevant Rail Authority, except in an emergency in which case notification should be provided to the Rail Authority as early as reasonably practical. All works at rail crossings must be undertaken with a Railsafe Supervisor present to monitor and manage the rail crossing and rail movements.
- 58. Where a railway crossing exists within a section of road being controlled by a traffic controller, a flag person accredited by the relevant Rail Authority must be stationed at the traffic stop line of the railway crossing, or at least 3 m from the nearest rail. The flag person must be equipped with a two way radio to watch for trains and advise the other traffic controllers to stop traffic in time for train movements through the crossing. The flag person must also be an accredited traffic controller.

59. If the section of road under traffic control is near but not traversing the railway crossing, within the distances in the following table, a flag person must be stationed at the railway crossing. The flag person must be located on the same side of the crossing as the works and related traffic control, at the traffic stop line or at least 3 m from the nearest rail.

Speed Limit (km/h)	Distance from Railway (m)
<70	150
70 – 90	200
>90	300

- 60. Traffic controllers stationed at railway crossings are required to be equipped with a hand-held STOP/ SLOW bat which has the rear SLOW banner covered. This is to prevent vehicles approaching the railway crossing from the opposite direction following the SLOW instruction and ignoring other signs or flashing signals.
- 61. Traffic controllers must ensure that stopped vehicles do not queue back over a railway crossing. If there is a chance of this happening, vehicles must be stopped on the approach to the railway crossing.
- 62. Traffic controllers and all other personnel working within 10 m of any railway crossing must wear a high visibility garment that complies with AS/NZS 1906.4 and AS/NZS 4602.

### **Behaviour and Attitude**

- 63. Only personnel who can reasonably deal with the travelling public should be selected as traffic controllers. They should have a sound temperament and not allow themselves to be provoked by members of the public. By exercising restraint they will gain more respect.
- 64. Correct appearance, behaviour and attitude are essential so that motorists will recognise traffic controllers as a form of authority and will react accordingly.
- 65. A disinterested controller with a slovenly appearance and manner will create a bad impression to the travelling public. Traffic controllers must not attempt to control traffic while seated and should hold the traffic bat erect and not hold it upside down while giving hand signals. Traffic controllers must ensure that the signing on the approach to the job gives a timely and accurate warning of the situation facing drivers. If this is not the case, drivers may ignore the controller putting themselves and workers at greater risk.

### **Safety**

66. The traffic controller is required to be alert while acting in an official capacity. In addition to looking after their own safety and that of the road workers in

- a hazardous environment, traffic controllers have the responsibility of ensuring the safety of the travelling public, including pedestrians through or around the works area.
- 67. For these reasons, only competent persons should be appointed as traffic controllers.
- 68. A potential hazard confronting the traffic controller is a vehicle that fails to stop, or fails to slow down. Interpretation of the SLOW sign means many things to different motorists and traffic controllers should not assume that motorists will reduce their speed to a speed consistent with the level of safety desired at the worksite.
- 69. Caution should also be exercised when standing close to the path travelled by vehicles, as protruding loads can present a hazard, especially if part of the load on the vehicle has moved without the driver's knowledge.
- 70. The traffic controller should remain standing at all times while carrying out their duties. This ensures the traffic controller is not unduly restricted if there is a need for evasive action.
- 71. Traffic controllers should be mindful to never turn their backs to traffic and to always maintain an escape path.

# **Reduced Visibility**

- 72. Traffic controllers and supervisors should be aware of the dangers faced by road workers as a result of reduced visibility. Reduced visibility on roads can be caused by dust, heavy rain, fog or smoke. At 60km/h, the stopping distance for an average car is 90m assuming level road and reasonable pavement. In situations where visibility is reduced to less than these distances, additional care must be taken by traffic controllers to ensure the safety of themselves and road users.
- 73. Where supervisors have a degree of control over the cause of reduced visibility, such as site-generated dust or burn off, appropriate steps should be taken to avoid the creation of a hazard, or to control the hazard to ensure the safety of road workers. Where there are factors outside the control of the supervisor, such as fog, heavy rain, or bushfires, the supervisor should review the need for the work to be started or continued until visibility conditions have improved.

### **Use of Radio**

74. Situations can arise at worksites where traffic controllers may need to use radios to ensure adequate communication over long work lengths, or due to limited sight distances.

- 75. If the work is to occur over a long period of time, the capacity of the battery in the radio should be carefully monitored. When using hand-held radios, traffic controllers should ensure that the standard of hand signals in support of the STOP/SLOW bat is not adversely affected.
- 76. A neck or shoulder strap, attached to the radio, should be used to maintain a free hand for signalling.
- 77. It is not recommended to use two-way radios operating on CB (citizen band) frequencies, as interruptions or interference may be caused by other operators using the same frequency.

# Supervisor's Responsibility

- 78. Supervisory personnel on works requiring a traffic guidance scheme should ensure that signs and devices do not direct the travelling public to disobey a law unless a traffic controller is present to direct traffic.
- 79. Supervisors should ensure that traffic controllers are courteous to the travelling public. They should also ensure that the personnel assigned to place, maintain and remove signs and devices are aware of their responsibilities and that traffic controllers are informed of their duties.
- 80. Where lengthy delays are caused by works or plant breakdown, the supervisor should inform the traffic controller of the delay and give an estimated time to be relayed to the public.

### **Controlling Traffic at Night**

- 81. Under dry conditions, traffic controllers are to wear a day/night high visibility garment conforming to the specifications of AS/NZ 4602. Where additional conspicuity is required, white combination overalls fitted with silver retroreflective material should be worn. In wet conditions, wet weather clothing should not obscure the high-visibility garment required above to ensure conspicuity of the traffic controller.
- 82. Methods for the use of a luminous wand for night-time traffic control are shown in **Figure 7**.

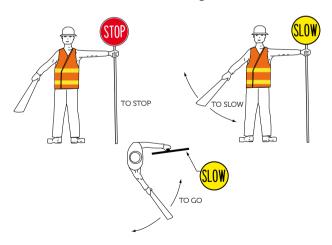


Figure 7: Use of Luminous Wand for Night-time Traffic Control

### Response to Crashes at the Worksite

- 83. In the event of a crash occurring at the worksite, the traffic controller's primary responsibility is to maintain control of the traffic for the protection of the workers and the public.
- 84. Assistance to those involved should be provided while steps are taken to notify appropriate emergency authorities such as police, ambulance and fire brigade. Names and addresses of witnesses should be obtained when it is safe to do so.

# **Traffic Control in Emergency Situations**

- 85. In situations where the works are due to an emergency (i.e. the works are required due to risks to public health and safety), the worksite initial set up should be in accordance with a generic Traffic Management Plan (TMP) or Safe Operating Procedure (SOP) as best meets the requirements of the situation.
- 86. During initial set up, some signs including advance signs or speed reduction signs may not be possible to deploy due to the emergency situation. If the emergency situation continues and traffic control operates more than 2 hours, then all advance signs and devices must be in place.
- 87. The supervisor responsible for traffic management at the emergency or incident location must notify the relevant road authority as soon as possible.

#### Conclusion

- 88. Adherence to the procedures outlined in this handbook should ensure safe and efficient control of traffic by traffic controllers using the STOP/ SLOW bat. The aim and responsibility of the traffic controller is to ensure the safety of all workers and road users while allowing works to proceed, and at the same time minimising the delays to traffic.
- 89. The instructions in this handbook are a guide to the responsibilities, appropriate dress and behaviour of traffic controllers. However, following the instructions in this handbook alone are not sufficient to allow a person to safely control traffic. Any person who undertakes traffic control must first complete a Traffic Controller's Course and carry a valid Traffic Controller's Statement of Attainment.

#### **Annexes**

#### **Road Safety Road Rules 2009**

- 101. Hand-held stop signs
- (1) A driver approaching a hand-held stop sign must stop before reaching the sign.

Penalty: In the case of a bicycle, 5 penalty units;

In the case of any other vehicles, 10 penalty units.

- (2) The driver must not proceed until the holder of the sign:
  - (a) No longer displays the sign towards the driver; or
  - (b) Otherwise indicates that the driver may proceed.

Penalty: In the case of a bicycle, 5 penalty units;

In the case of any other vehicle, 10 penalty units.

(3) This rule does not apply to a driver approaching or at a hand-held stop sign at a children's crossing.

Note Rule 80 defines children's crossing, and deals with hand-held stop signs at children's crossings.

### **Summary of Traffic Controller Instructions**

- Stand on the kerb or road shoulder with a clear view of the approaching traffic and if possible a view of the worksite.
- Wait for a suitable break in traffic before attempting to stop vehicles.
- When a suitable break is found, extend the bat across the carriageway at an angle of 45°, with the STOP banner facing the approaching traffic as well as using the STOP hand signal.
- When approaching traffic has stopped, and if required, move from the kerb or road shoulder to the centre of the carriageway with the bat still extended 45°.
- When it is clear to move the traffic on, the traffic controller should walk off the carriageway the same way as they walked on.

When safely back on the kerb or road shoulder, turn the bat so that the SLOW banner is facing the vehicle queue, and indicate to the first driver to proceed using TO GO motion hand signal.

### **Key Points**

At all times, the traffic controller should:

- a. Be more than 30 m from the worksite;
- b. Be visible to the road user:
- Not move onto the carriageway until approaching traffic has stopped;
- d. Not turn their back to traffic;
- e. Give clear instructions to road users; and
- f. Always have a clear escape path.

#### **Traffic Controller Restrictions**

The traffic controller must not:

- Work where approach speeds of traffic are more than 60 km/h;
- b. Give hand signals without the STOP/SLOW bat
- c. Give oral instructions to motorists:
- d. Demand motorist's names and addresses:
- e. Direct motorists through red traffic lights;

Where there is a need to control tram traffic, the tram operator must be advised.

At railway level crossings, workers must not work within 3m of the nearest rail unless under the direction of a person from the Railsafe Supervisor.

### **Report by Traffic Controller**

Registration Number	Body Type
Body Colour	Model of Vehicle
Offence	
Time	Date
am/pm	/ /
Location	
Direction of Travel	
Weather Conditions	
Remarks	
Controller (Print Name)	Controller (Signature)
Date of Report	Region/Project
/ /	
Patrol Gang	

This report may be submitted to Victoria Police.

For further information please phone **13 11 71** or visit **vicroads.vic.gov.au** 



