

RIIWH5206

Control Traffic with Portable Traffic Control Devices and Temporary

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.



LEARNER GUIDE

RIIWHS206 Control Traffic with Portable Traffic Control Devices and Temporary Traffic Signs

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- Course Information.
- Review Questions.
- Practical Assessment overview and Instructions.

Table of Contents

1.1 Introduction	5
1.1.1 Traffic Management	5
1.1.2 Traffic Control	5
1.1.3 Common Terms and Definitions	6
Review Questions	7
1.2 Working Safely	8
1.2.1 Personal Protective Equipment (PPE)	8
1.2.2 Work Health and Safety	9
1.2.3 Australian Standard and Codes of Practice	10
1.2.4 Environmental Protection	11
1.2.5 Emergency Procedures	12
Review Questions	13
1.3 Risk Management	14
1.3.1 Hazard Identification	15
1.3.2 Risk Assessment	16
1.3.2.1 Risk Evaluation	16
1.3.3 Hazard Control	17
1.3.4 Site Isolation and Traffic Control	18
Review Questions	18
1.4 Temporary Traffic Management	20
1.4.1 Traffic Management Plan (TMP)	20
1.4.1.1 Traffic Guidance Scheme (TGS)	21
1.4.2 Operations Documentation	22
1.4.2.1 Work Instructions	22
Review Questions	23
2.1 Tools and Equipment Required for TTM	25
2.1.1 Stop/Slow Bat	26
2.1.2 Luminous Night Wand	26
2.1.3 Cones and Bollards	26
2.1.4 Barriers and Barricades	27
2.1.5 Display Vehicles and Trailers	27
2.1.6 Temporary Traffic Signals	27
2.1.7 Traffic Stop Boom Gate	28
2.1.8 Vehicular and Trailer Attenuator	28
2.1.9 Communications Devices	29
2.1.10 Equipment Pre-start and Serviceability Inspections	29
Review Questions	30
2.2 Setting up a Traffic Management Zone	32
2.2.1 Temporary Traffic Control Signs	32
2.2.2 Tapers and Lateral Shifts	34
Review Questions	37
3.1 Traffic Controller Position	38
3.1.1 Traffic Controller Visibility	38
3.1.2 Traffic Controller Safety	39
Review Questions	40
3.2 Monitoring Traffic Flow and Traffic Control Devices	42
3.2.1 Drive-through and Walk-through Inspection of Devices	43
3.2.1.1 TMP Inspections	44
3.2.2 Maintaining Traffic Flow	44
3.2.2.1 Emergency Service Vehicles	45
3.2.3 Traffic Sequencing and Impact	45
3.2.4 Sign Change of Status	45
Review Questions	46

3.3 Reporting Traffic Offences	47
3.3.1 Recording Vehicle Details	48
Review Questions	48
4.1 Completion of Work	49
4.1.1 Pack-up Procedure	49
Review Questions	50
4.2 Clean Up and Inspection of Work Area.....	51
4.2.1 Cleaning, Inspecting and Maintaining Equipment.....	51
Review Questions	51
Practical Assessment Instructions	52
Conditions of Assessment.....	52
Protective Personal Equipment (PPE) Requirements.....	52
Grounds for stopping the assessment.....	52
Achieving a Satisfactory Outcome	52
Practical Assessments	53

1.1 Introduction

This course is based on the national unit of competency **RIIWH206 Control Traffic with Portable Traffic Control Devices and Temporary Traffic Signs**.

You will learn about:

- ◆ Selecting appropriate equipment to prepare the site.
- ◆ Positioning devices and signs according to plans.
- ◆ Controlling traffic with signs and temporary devices.
- ◆ Packing up and checking equipment once the work is complete.



1.1.1 Traffic Management

Traffic management is the organisation, arrangement, guidance, and control of both stationary and moving traffic, including pedestrians, cyclists and all types of vehicles.



It aims to:

- ◆ Provide for the safe, orderly and efficient movement of persons and goods.
- ◆ Protect the local environment.
- ◆ Enhance the local environment on and adjacent to roads.

1.1.2 Traffic Control

Traffic control is a skill required to maintain the **safety** of motorists and road users during activities such as road works, traffic accidents, events, heavy machinery and plant operations.

Traffic controllers are used:

- ◆ When signs and devices for roadworks are considered insufficient.
- ◆ To provide traffic control for personal safety.
- ◆ For public convenience.
- ◆ Efficient job control and management.



As a traffic controller, you have an extremely important job on a worksite. In addition, you are a front-line representative of your organisation and have an important public relations role.

1.1.3 Common Terms and Definitions

The following is a list of terms and acronyms that may be useful as you work through this unit:

Acronym or Term	Definition or Meaning
AADT	Average Annual Daily Traffic count – Total traffic passing an observation point over a period of a year, divided by number of days per year.
Advanced Signs	Signs and pictograms required before the work area to indicate traffic-controlled zone.
AGTTM	Austrroads Guide to Temporary Traffic Management.
AS1742.3	Australian Standard – Manual of Uniform Traffic Control Devices Part 3: Traffic Control for Works on Roads.
ATAP	Australian Transport Assessment And Planning.
Austrroads	Formerly National Association of Australian State Road Authorities (NAASRA).
Dimension 'D'	A distance expressed in metres, determined by the approach speed of traffic. Is used to position advanced signs.
Long Term	The description of work applied to a traffic management scheme required to operate both day and night and maybe left unattended.
PCBU	Person Conducting a Business or Undertaking (Formerly Employer).
PFT	Provision for Traffic.
PTW	Permit to Work.
Road Infrastructure	Permanent installations associated with roads, tunnels, bridges, interchanges and traffic signals.
Short Term	The description applies when a traffic management scheme is required only well work personnel are in attendance and generally limited to of a single shift or lesser period.
SSRM	Standard Specifications for Road Maintenance.
SSRW	Standard Specifications for Road Works.
TC	Traffic Controller.
TGS	Traffic Guidance Scheme. A visual representation of the traffic control devices to be implemented. An arrangement of temporary traffic control devices to warn traffic and guide it through or around/past a work site or temporary hazard.
TMD	Traffic Management Designer.
TMI	Traffic Management Implementor.
TMP	Traffic Management Plan. A document detailing all essential traffic management associated with roadworks or works on roads. Includes risk assessment, traffic demand, traffic routing.
Traffic Calming	The means by which local streets are kept relatively free of through traffic by the implementation of traffic management devices.
Travelled Path	The part of the roadway which is made available to vehicles. It may consist of one or more lanes.
TTM	Temporary Traffic Management.
TTMW	Temporary Traffic Management Worker.
Type 1	Used for short-term projects only.
Work Area	Specific area where work is being done.
Work Site	An area which includes the work area and any additional length of road required for advanced signs, taper, side roads or other area needed for the associated purpose.

Review Questions

1.

What is traffic control?



2.

What do the following acronyms mean?

- a) TMP
- b) TGS
- c) PCBU
- d) TTM



a)

b)

c)

d)

1.2 Working Safely



You must follow all safety rules and instructions when performing any work.

If you are not sure about what you should do, ask your manager or supervisor.

They will tell you what you need to do and how to do it in a safe way.

1.2.1 Personal Protective Equipment (PPE)

As a traffic controller, you need to be visible to everyone and safe from the elements. As such, hi-vis clothing is a mandatory requirement.

If the elements are harsh with bright hot sun or cold blowing rain, the PPE needs to be appropriate to the conditions since traffic controllers can be exposed to the elements for many hours at a time.

Some items of PPE required by traffic control personnel may include:

- ◆ Hi-vis clothing.
- ◆ Long pants and long sleeve shirt.
- ◆ Hard hat.
- ◆ Wide-brim sun hat and sun protection.
- ◆ Safety shoes or boots.
- ◆ Night baton.
- ◆ Torch.
- ◆ Gloves.
- ◆ Wet weather clothing.



It is the user's responsibility to make sure their PPE is in good condition, fits well and is right for the work and weather.

Do not use any PPE that is not in good condition.

Tag it as out of service, remove it from use and report it to your supervisor for replacement.



When working during darkness or at dawn and dusk, additional precautions are required to ensure traffic controllers are clearly seen.

Where traffic controllers are required to work at night, care should be taken to ensure all signs, devices and clothing are appropriately reflective in accordance with standards.

Traffic controllers must be well illuminated by portable floodlights, street lighting, car headlights etc.

The light source must be angled or shielded to minimise glare to approaching traffic.

Additionally, traffic controllers shall use a luminous wand when controlling traffic at night.

During night operations, the personnel involved in temporary traffic management (TTM) control and operation should use the following items of PPE:

- ◆ Day/night reflective hi-vis clothing.
- ◆ Luminous wand.
- ◆ Torch.
- ◆ Steel-capped boots.



1.2.2 Work Health and Safety

Every workplace must follow laws and rules to keep everyone safe. There are 4 main types:

Law	Explanation
Acts	These are laws that you have to follow.
Regulations	These explain what the law means.
Codes of Practice	These are instructions on how to follow the law, based on industry standards.
Australian Standards	These tell you what the minimum requirement is for a job, product or hazard.

Work Health and Safety (WHS), called Occupational Health and Safety (OH&S) in some states, outlines a series of requirements to keep everyone in the workplace safe.

If you have any questions about safety rules, you should talk to your manager or supervisor.



WHS law says that all companies and workers need to keep themselves and other people safe while they work. This is called a **duty of care**.

To keep everybody safe workers need to:

- ◆ Follow instructions.
- ◆ Follow workplace rules.
- ◆ Make sure equipment is safe to use.
- ◆ Carry out their work safely.
- ◆ Report problems.



1.2.3 Australian Standard and Codes of Practice

You can find out what regulations and codes of practice apply in your state from the relevant road and traffic authority:

State/Territory	Department	Website
ACT	Dept. of Territory and Municipal Services	www.tams.act.gov.au
NT	Dept. of Transport	www.transport.nt.gov.au
NSW	Roads & Maritime	www.rms.nsw.gov.au
QLD	Dept. of Transport & Main Roads	www.tmr.qld.gov.au
SA	Dept. of Planning, Transport and Infrastructure	www.dpti.sa.gov.au
TAS	Dept. of State Growth	www.transport.tas.gov.au
VIC	Dept. of Transport	www.transport.vic.gov.au
WA	Dept. of Transport	www.transport.wa.gov.au



Important compliance documents that relate to traffic management plans are:

- ◆ State and territory traffic management legislation, regulations and codes of practice.
- ◆ Australian Standard AS1742.3:2019 – Manual of Uniform Traffic Control Devices (MUTCD) Traffic Control for Works on Roads.

The AS1742.3:2019 provides technical specifications and guidance for the setting out of temporary traffic control signs and devices used at road works.

Legislative, organisational and site requirements and procedures may relate to:

Work Zones	E.g. identification, signage, hours of operation, warning lights.
Engineering Practices	E.g. design specifications, construction methods.
Traffic Laws	E.g. speed limits, speed zones, traffic control methods.
Employment Legislation	Including workplace relations and Equal Employment Opportunity.

Each state and territory has established a Code of Practice for traffic management based on and incorporating AS1742.3:2019.

Generally, the Code of Practice aims to:



- ◆ Establish and maintain a standard approach to road works (whether on the roadway or roadside) that protects the safety of road users and workers.
- ◆ Establish a hazard-based assessment of worksite conditions to allow hazards to be identified and managed to create a safe worksite.
- ◆ Support the planning for, and management of traffic to pass safely through, past or around a worksite, including the development and implementation of a traffic management plan.
- ◆ Support appropriately trained and qualified persons to control and direct traffic.

1.2.4 Environmental Protection

Environmental protection requirements are part of every worksite. Make sure you check with your supervisor about what environmental issues need to be managed during your work.

All environmental details should be listed in an 'environmental management plan' for the site. It can include details for:

- ◆ Waste management.
- ◆ Water quality protection.
- ◆ Noise control.
- ◆ Vibration control.
- ◆ Dust management.



The plan will outline the steps and processes needed to prevent or minimise damage to the environment.

Where aspects of traffic management may have an environmental impact, procedures should be applied in accordance with the project environmental management plan to minimise any impact.

1.2.5 Emergency Procedures



Emergency procedures will vary depending upon the worksite.

These procedures could include:

- ◆ Evacuation.
- ◆ First aid.

A site such as a **temporary traffic management work area** will not necessarily establish a designated muster area.

However, consideration should be given during daily prestart to include the following:

- ◆ Escape routes.
- ◆ Prevailing conditions (wind direction).
- ◆ Staging area.
- ◆ Communication.

Things to remember during an emergency are:

1. Keep calm.
2. Warn and direct people away from the area.
3. Follow instructions from your supervisor.
4. Call emergency services in accordance with workplace procedures.



First aid is the initial care given to injured and or ill persons. Every workplace shall have a designated First Aid Officer.

If someone needs urgent First Aid, you must tell your supervisor or contact the First Aid officer.

Do not apply First Aid if you are not trained.

Review Questions

3.

What are three (3) items of PPE you should wear for day work?

1.

2.

3.

4.

What is duty of care?

5.

What is the Australian Standard for traffic control?

6.

What does an environmental plan outline?

7.

What should you do if someone on your worksite needs first aid?



1.3 Risk Management

A **hazard** is a thing or situation that has the potential to cause injury, harm or damage.

A **risk** is the chance of a hazard hurting someone or causing some damage.

If you can remove or at least control a **hazard**, you can reduce the **risk** involved.

The identification and control of hazards and risks is a fundamental part of keeping any workplace or situation 'safe'.

Risk Management is the process of eliminating or controlling hazards to reduce the risks that people and equipment are exposed to at work.

The risk management process is made up of 3 main stages:



If you think something is dangerous, tell your boss or supervisor as soon as possible.



1.3.1 Hazard Identification



Part of your job is to look around to see if you can find any hazards before you start any work.

A good way to do this is to check:

- ◆ **Up high** above your head.
- ◆ All around you **at eye level**.
- ◆ **Down low** on the ground (and also think about what is under the ground).

Some hazards that you may find in your work area can include:

- ◆ Uneven or unstable terrain.
- ◆ Pits, dirt mounds, excavations, embankments, cuttings, recently filled trenches.
- ◆ Overhead and underground services.
- ◆ Bridges, structures and surrounding buildings.
- ◆ Facilities.
- ◆ Trees, poles, obstructions.
- ◆ Trip hazards.
- ◆ Traffic and traffic control.
- ◆ Fires.
- ◆ Hazardous materials.
- ◆ Other machines.
- ◆ Workers, worksite visitors and the public.
- ◆ Restricted access barriers.
- ◆ Working in proximity to others.
- ◆ Site access and egress.
- ◆ Speed of traffic and cyclists.
- ◆ Geometry of the road approaching and past the work site (site distance, curve, etc.).

