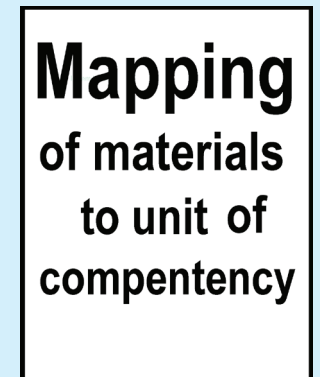
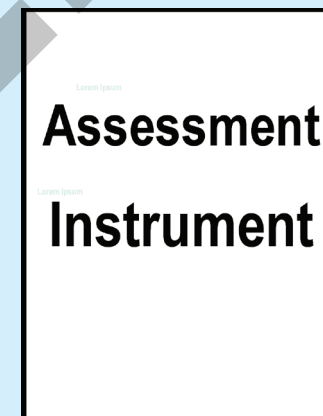
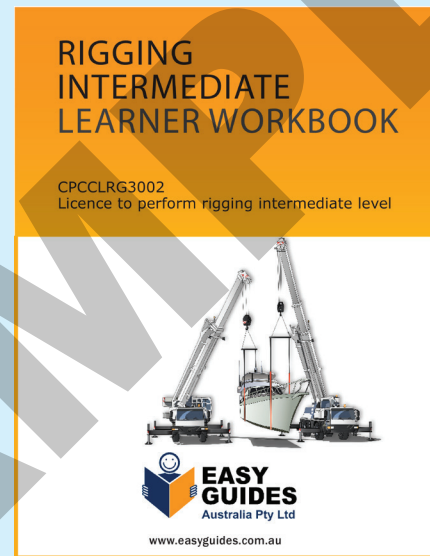


The benefits of using a Trainer Value Pack



Save \$470 when you buy the Trainer Value Pack.

Everything you need to deliver a unit of competency.

Materials can be printed and customised to suit your needs.

TRAFFIC MANAGEMENT LEARNER GUIDE



Training support material for:

RIIWHS302E –
Implement traffic
management plan

Produced by:



CONTENTS

About this guide.....	5
Language – Literacy – Numeracy (LLN).....	6
LLN core skills – customising training.....	7
Acknowledgements.....	8
Introduction	9
Prepare to implement traffic management plan	13
Set out the traffic guidance scheme (TGS)	52
Monitor the traffic guidance scheme (TGS)	85
Close down the traffic guidance scheme (TGS)	93
Glossary	103



PICTURE BASED. PLAIN ENGLISH. LEARNING MADE EASY.

INTRODUCTION



Implement traffic management plan

The unit of competency RIWHS302E Implement traffic management plan develops a person's skills and knowledge in order to implement a traffic management plan in Civil construction. A person implementing a traffic management plan must be able to understand documents associated with the plan. These could include an environmental management plan, a safe work method statement (SWMS) and the traffic guidance scheme.

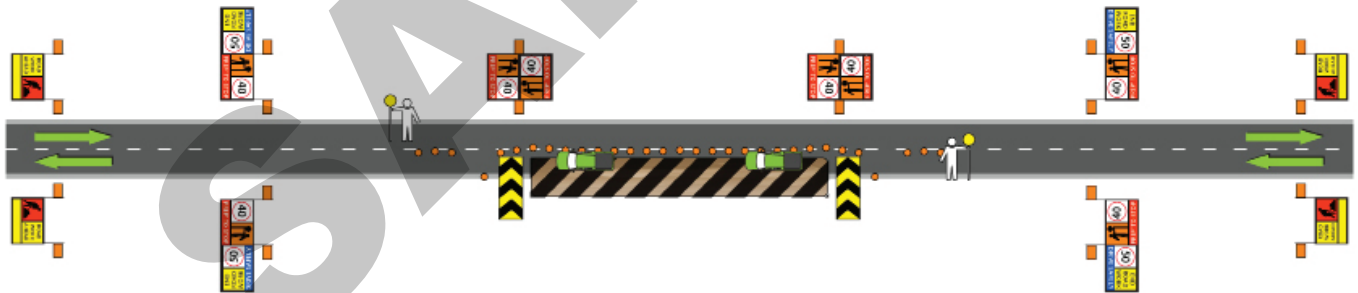
What is a traffic management plan?

Anyone conducting works on or near a road must have a traffic management plan. The plan must be prepared by a qualified person. For example, someone who has done the unit of competency RIICC503A Prepare Work Zone Traffic Management Plans.

The plan will provide a means to move likely road users through, past or around a road works site. The plan is designed to make sure the roads are not unduly affected during the road works. The plan must keep all users of the road safe. This includes people such as pedestrians, school children, people with disabilities, cyclists and emergency vehicles.

The road management plan manages the risks associated with work activities undertaken in a traffic environment. A safe work method statement (SWMS) is one tool used to control the risks.

Traffic management plans must be prepared and approved by the local state or territory road traffic authority before the road works can begin. The traffic management plan includes a traffic guidance scheme (TGS) which gives the specific layout of signs and devices.



What is a traffic guidance scheme (TGS) ?

The traffic management plan includes the traffic guidance scheme (TGS). The TGS is the arrangement of temporary signs and devices to warn traffic and guide it through, past or around a work area or temporary hazard. It is a visual representation of the traffic control devices to be implemented to change existing road/footpath conditions so that an area can be isolated for contractors to carry out their works/event.

A person who has successfully completed the unit of competency RIIWHS302D Implement traffic management plan should be able to correctly set out the TGS. This would include signs and devices such as cones, bollards, signs and variable message sign (VMS) etc.



PREPARE TO IMPLEMENT TRAFFIC MANAGEMENT PLAN



Australian Standards (continued)

Australian Standard 1742.3 Manual of uniform traffic control devices. Part 3: Traffic control for works on roads.

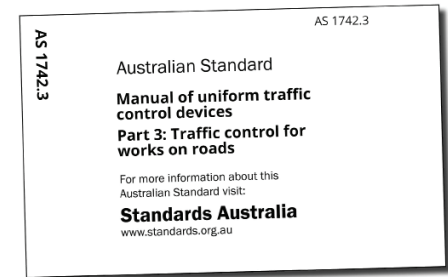
This Standard is the main document that applies to traffic control and management.

"The objective of this Standard is to provide organizations carrying out works on roads with a set of uniform practices for the signing and delineation of construction and maintenance works which will promote the safety of both workers and road users at the work site."

The Standard explains the devices and control measures to warn and guide road users in safely passing around or through a worksite on a road. It includes footpaths, shared paths and bicycle paths adjacent to the roadway.

The Standard is used when works obstructs the normal use of a road by a road user.

The Standard also gives guidance for traffic guidance schemes (TGS) which are used to guide traffic and keep workers safe.



Traffic flow requirements (continued)

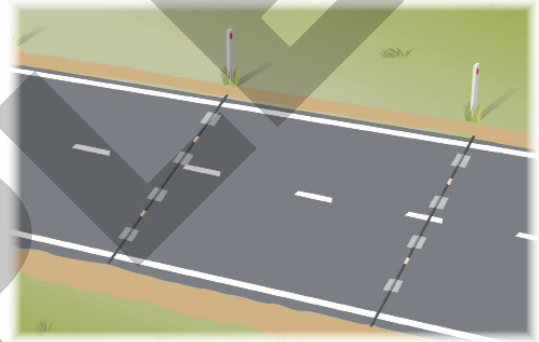
Traffic flow data helps you to know the traffic flow of the affected road area. This data is usually collected by the relevant road traffic authority in each state or territory. Mainroads Western Australia for example, undertakes traffic counting throughout Western Australia. Data is collected for both state road networks and local government roads.

The data is collected by installing counting equipment on the roads. The equipment is usually installed at night when traffic volumes are lower. Pneumatic road tubes are generally used for temporary studies to study a sample of traffic.

Traffic counters can also be used to count and classify vehicles. This will help in making the traffic control plan.

For example:

- What traffic density is expected.
- How long can delays in traffic be expected.
- What percentage of the traffic is made up of heavy vehicles.
- Will the traffic flow be one-way or two-way.
- What speeds will the traffic need to move at.
- Will any detours be needed.
- What traffic warning signs and devices will be needed.
- Will traffic controllers be needed and if so, how many.
- Will a media communication plan be needed to let residents know what is happening.
- A traffic impact engineering report may be needed.



When are traffic controllers used?

Traffic controllers are used when signs alone are not enough. Following are examples of when traffic controllers would be used:

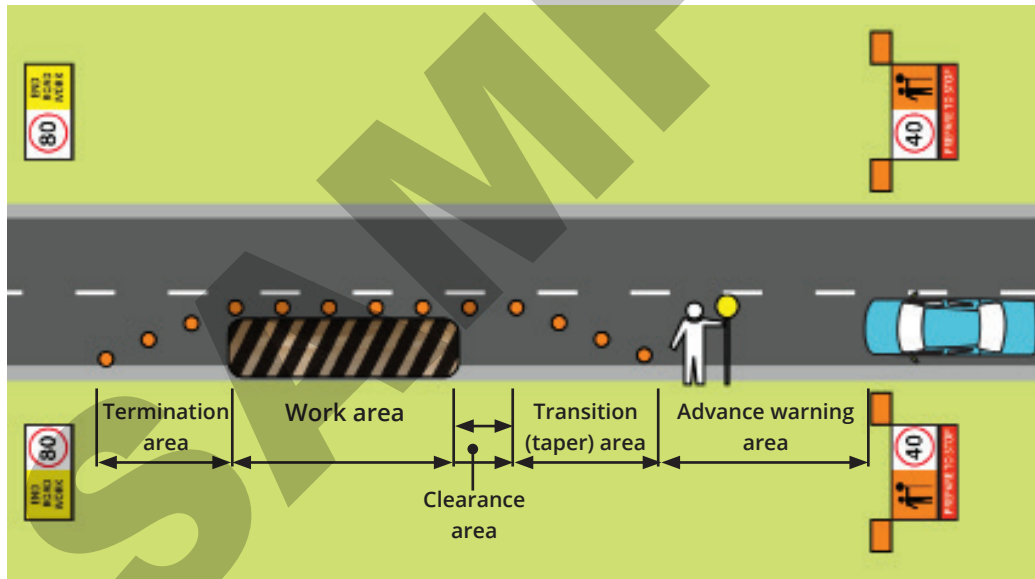
Situation	Reason to control traffic
In an emergency	To slow traffic down. For example, to go past a road accident.
Vehicles crossing the roadway.	This is to allow vehicles to cross the road safely at a designated crossing point.
A temporary total road closure.	A situation like blasting will require total closure of the road. Road users will need to be told the reason and time for the delay.
Low speed operation	This is used when a temporary speed sign has not been put in place and the traffic needs to be slowed.
Using a single lane	Traffic must be restricted to a single direction to alternate the flow of traffic.
Road being surfaced	Traffic will need to be slowed down or directed to take an alternative path as necessary.
Limited sight distance in a work site.	To warn road users of a hazard ahead.

Traffic controllers can only be used in areas where traffic speeds have been reduced to 60 km/h or less.

Traffic controllers cannot direct traffic from a moving vehicle and must work from a static work position.



SET OUT TRAFFIC GUIDANCE SCHEME



Traffic guidance scheme (TGS)

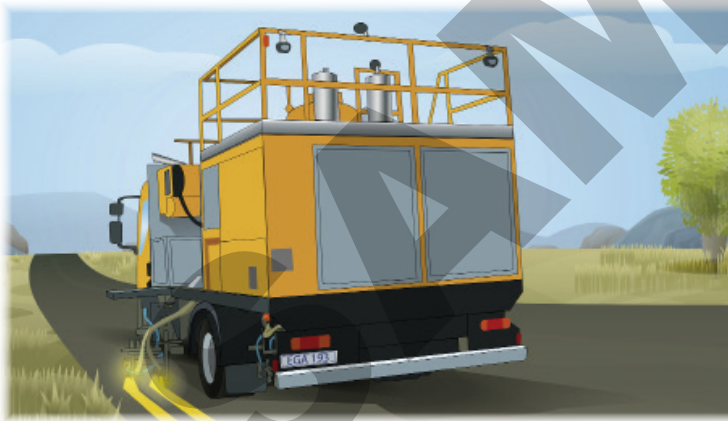
A Traffic guidance scheme is a visual representation of the traffic control devices that will be used to change existing road/footpath conditions so that an area can be isolated for work to be carried out. The TGS must suit the site conditions, traffic volumes and the work that will be done.

Traffic guidance schemes will normally take place at one of three levels:

1. Short-term and mobile works not involving full or part road closure.

The scheme will include all the signs and devices needed to cover the routine tasks the workers will do. Safe work method statements (SWMS) will be used as well as TMPs showing the order and separation distances of items in a mobile works gang.

Short term works generally cover work from moving vehicles or works that are in place for one work shift or less.






2. Works involving relatively simple part-roadway closures.

The scheme will have a sketch showing the devices needed and their distances apart.



Position temporary traffic signs and barriers

Worksite signing and barriers must be placed in accordance with the traffic management plan (TMP). The TMP should be developed so it is compliant with the appropriate legislation for the state or territory where the work is being done.

<p>Prepare to stop</p> 	<p>Symbolic traffic controller</p> 	<p>Combined prepare to stop and symbolic traffic controller</p> 
<p>These signs are used to give advance warning that traffic may need to stop at the direction of a traffic controller. They must be used together with the symbolic traffic controller sign where traffic may be required to stop. It is the responsibility of the traffic controller to ensure the signs are in place while controlling traffic and are removed immediately after traffic control has finished.</p>		

Implement traffic management plan

RIIWHS302E

Learner Workbook



This resource was developed by:



This document may be edited or reproduced by the purchaser only.

Contents

Training Tasks	4
Prepare to implement the traffic management plan.....	5
Set out the traffic guidance scheme.....	12
Monitor the traffic guidance scheme.....	16
Close down the traffic guidance scheme	19
Clean up.....	21
Practical Tasks	22

d) Name two (2) things to check on this clothing.

.....

.....

.....

Signs and devices (PC 2.1)

e) Signs and devices are an important part of a TGS. What is their main purpose. List three (3).



.....

.....

.....

Tools and equipment (PC 4.2)

Tools and equipment used on the job must be in good working order.

a) What are some of the things you should check for?

.....

.....

.....

Environmental requirements (PC 1.2)

The worksite may have an Environmental Management Plan (EMP) in place.

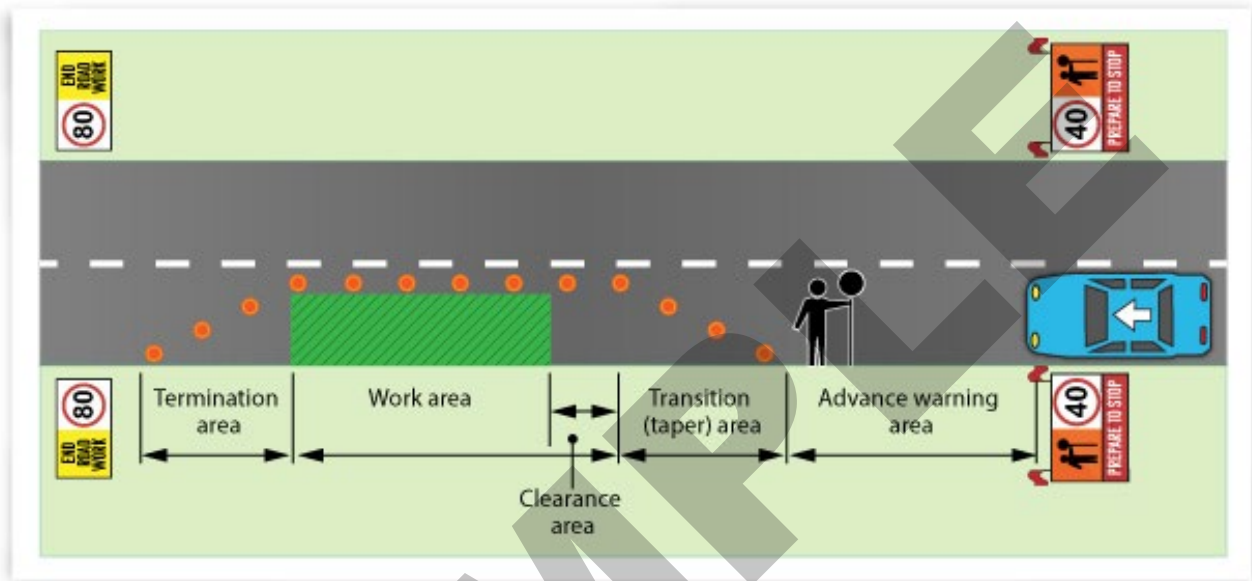
f) What is the purpose of an EMP?

.....

.....

.....

Set out the traffic guidance scheme (TGS)



The TGS is the arrangement of temporary signs and devices to warn traffic and guide it through, past or around a work area or temporary hazard. A TGS scheme is a visual representation of the traffic control devices that will be used to change existing road/footpath conditions so that an area can be isolated for work to be carried out.

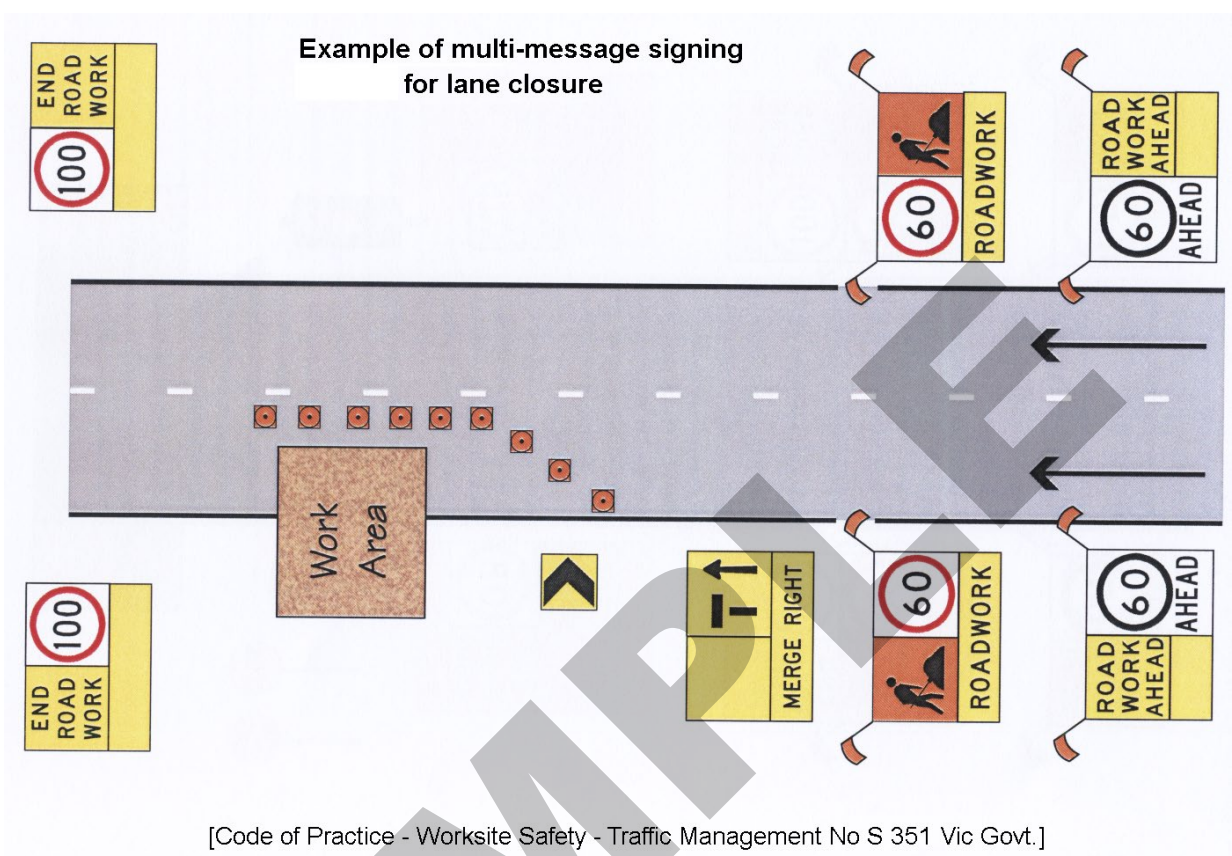
Read the document provided by your trainer, 'Guiding principles for temporary traffic management plans'.



Knowledge Training Task 6

PC 1.6, 2.1, 2.2, 2.3

Traffic guidance scheme (TGS)



In this training task you are going to prepare to implement a TGS by answering the following questions.

Traffic guidance scheme (TGS) (PC 1.6)

Your traffic guidance scheme needs to be right for the site conditions, amount of traffic and the work activities.

a) What are the three types of TGSs?

.....

.....

.....

Traffic guidance scheme (PC 2.1, 2.2, 2.3)

b) Your TGS needs to take a number of important factors into account. Name three (3).

.....

.....

.....

c) What is the maximum time you can stop traffic on a TGS?

.....

Signs and devices (PC 2.1)

You need to make sure that the signs and devices are correctly positioned and displayed on each approach to the work area. Make sure the signs are displayed laterally (both sides of the road).

Dimension D is a distance expressed in metres which is used for the positioning of advance signs and related purposes. The signs are placed sufficient distances apart so that road users have sufficient time to read them.

Table 4.2 Value of Dimension D	
Speed of traffic km/h	Dimension D m
45 or less	0 to 5
46 to 55	15
56 to 65	45
Greater than 65	Equal to speed of traffic, in km/h

[Table 3.7, Section 4.1.5, AS 1742.3]

d) According to the above table, what is Dimension D in metres if the speed limit is 80 km/h?

.....

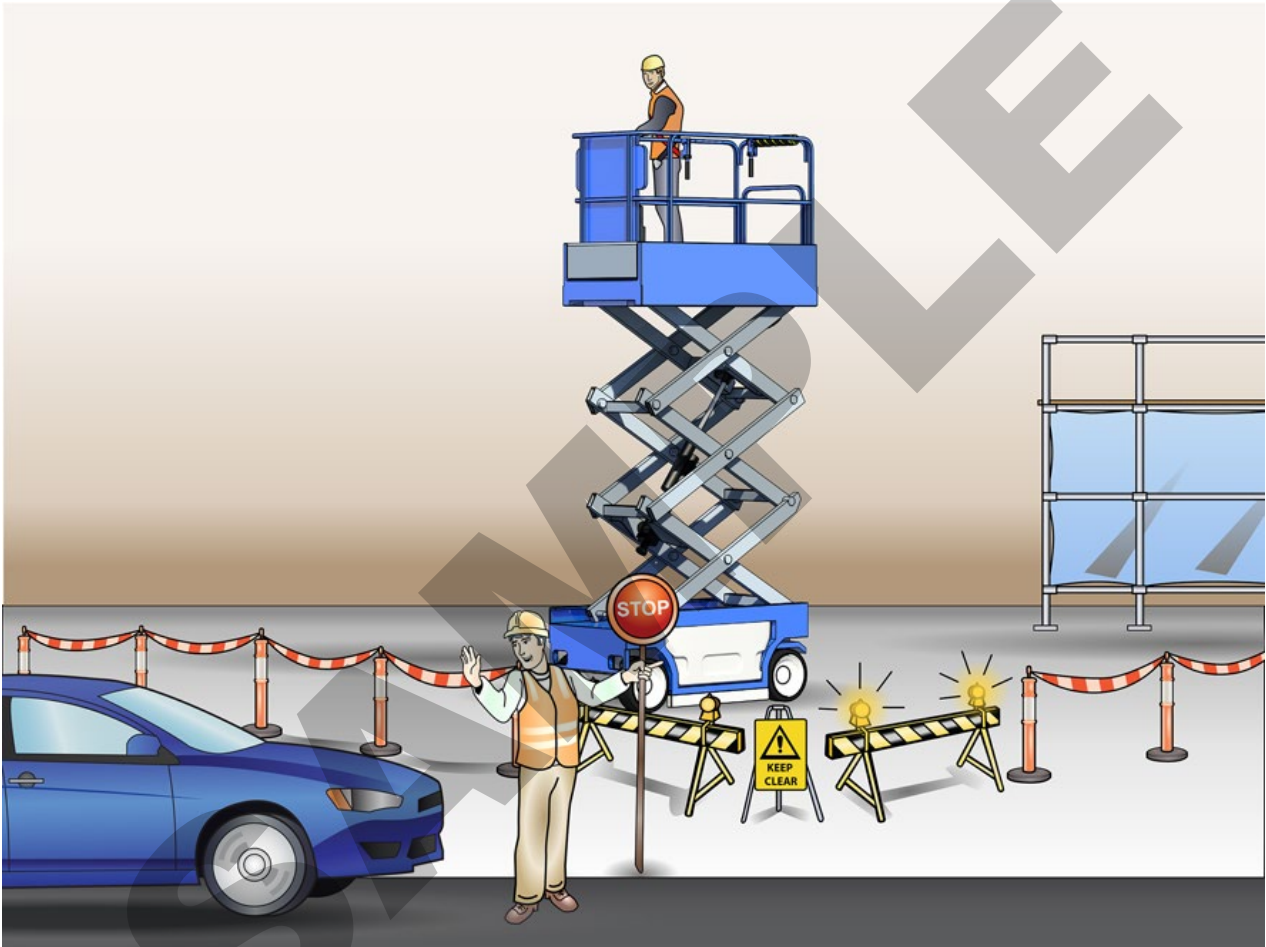
e) What is a lateral shift taper?

.....

.....

.....

Monitor the traffic guidance scheme





Knowledge Training Task 7

PC 3.1, 3.2, 3.3, 3.4

Monitor the traffic guidance scheme (TGS)

Once your TGS has been set out you need to monitor the scheme to make sure everything is working well.

Check traffic flow (PC 3.1)

a) How can you find out about traffic flow (traffic volume)?

.....

.....

.....

Check work being done (PC 3.2)

You may need to adjust your traffic guidance scheme depending on the work being done.

b) How might you adjust your TGS if traffic flow is causing a hazard?

.....

.....

.....

Check traffic controllers (PC 3.3)

You need to check that traffic controllers are doing their work properly. You need to have a process for dealing with them if they are not doing their work properly.

c) What are some things a traffic controller should not do?

.....

.....

.....



Plan and Prepare – Practical Task 1 (PC 1.1, 1.2, 1.3, 1.4, 1.5, 1.6)

Please note: Practical tasks do not have to be broken up into elements and performed separately. It may be more efficient and realistic to perform all elements as a holistic exercise. The trainer/assessor is responsible for determining the most appropriate method to implement the tasks.

✓ or ✗	Your trainer/assessor will give you a traffic control job to do. Use the checklist below to make sure you plan and prepare for the job properly.
	<p>1-A Access, interpret and apply the site traffic management plan and traffic guidance scheme. This means you must be able to find the traffic management plan and/or traffic guidance scheme, understand what it is telling you to do and put the instructions into practice.</p> <ul style="list-style-type: none"> • You must follow the instructions set out in the TMP and TGS to ensure your work is compliant • A SWMS including an appropriate TGS or standard diagram may be appropriate if the works are on a site with a low worksite hazard rating (eg: Short term, low impact or mobile works).
	<p>1-B Obtain, confirm, clarify and apply work instructions. This means you must be able to find work instructions that relate to the job, you understand the instructions or ask questions to help you understand and you put the instructions into practice.</p> <p>Work instructions could be:</p> <ul style="list-style-type: none"> • Compliance information • Company policies and procedures • Manufacturer’s guidelines and specifications • Verbal, written and graphical instructions • Signage, work schedules and plans • Work bulletins, memos and maps • Safety data sheets (SDS) • Quality requirements • Instructions issued by authorised organisations or external personnel.
	<p>1-C Identify, address and report potential risks and hazards. This means you must be able to find out any hazards on the job and how to control them.</p> <p>Hazard controls include things like:</p> <ul style="list-style-type: none"> • Using the hierarchy of hazard control. • Selecting, inspecting and correctly fitting the required PPE (including Hi-Vis clothing) • Performing a worksite hazard assessment (there may be a form to do this) • Reviewing a SWMS or JSEA and following recommendations • Putting hazard control measures in place • Identifying safety requirements outlined in work instructions.
	<p>1-D Wear appropriate personal protective equipment (PPE)</p> <ul style="list-style-type: none"> • Identifies PPE that must be worn specific to the job. • Identifies that PPE must meet Australian Standards.
	<p>1-E Identify, obtain and implement signage and devices. This means you must be able to work out what signs and traffic control devices are required, find them and put them in place as required.</p> <ul style="list-style-type: none"> • The traffic controller is responsible for making sure the prepare to stop and symbolic

Mapping Tool

RIIWHS302E Implement traffic management plan

Note: This completed document shows that the enclosed learning materials have been mapped against the Unit of Competency.

Legend

PC	Performance Criteria
PE	Performance Evidence
KE	Knowledge Evidence

Application

This unit develops a participant's skills and knowledge required to implement a traffic management plan in Civil construction.

This unit is appropriate for those working in supervisory roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

Note: The terms Occupational Health and Safety (OHS) and Work Health and Safety (WHS) are equivalent and generally either can be used in the workplace. In jurisdictions where the National Model WHS Legislation has not been implemented RTOs are advised to contextualise the unit of competency by referring to the existing State/Territory OHS legislative requirements.

Section 1 – Performance Criteria

Performance Criteria (PC)	Learner Guide & PowerPoint Presentation	Learner Workbook (formative assessment)		Assessment (summative assessment)		RTO to fill out (Customised and additional materials, eg. web sites, DVDs, handouts...)
		Knowledge Questions	Practical Tasks	KNOWLEDGE	PRACTICAL	
Element 1 Prepare to implement traffic management plan						
1.1 Determine worksite requirements and scope of traffic management plan and traffic guidance scheme	<p>Introduction</p> <ul style="list-style-type: none"> • Implement traffic management plan • What is a traffic guidance scheme? <p>Prepare to implement traffic management plan</p> <ul style="list-style-type: none"> • Duty of Care obligations • Worker's Duty of Care • Compliance • Australian Standards • Australian Standard 1742.3 • Traffic flow requirements • When are traffic controllers used? • Check your work instructions • Traffic management plan • The traffic guidance scheme • Sample information on a traffic guidance scheme • Memorandum of authorisation 	Training Task 1 Training Task 2	Practical Task 1,	Question 1, 3	Practical Task 1	
1.2 Identify, address and report potential risks, hazards and environmental issues and determine control measures	<p>Prepare to implement traffic management plan</p> <ul style="list-style-type: none"> • Australian Standards • When are traffic controllers used? • Worksite hazard management process 	Training Task 1 Training Task 3	Practical Task 1	Question 5, 6, 16	Practical Task 1	

Performance Criteria (PC)	Learner Guide & PowerPoin Presentation	Learner Workbook (formative assessment)		Assessment		RTO to fill out (Customised and additional materials, eg. web sites, DVDs, handouts...)
		Knowledge Questions	Practical Training Task	KNOWLEDGE	PRACTICAL	
Element 1 Plan and Prepare to implement traffic management plan						
1.4 Resource personnel to implement traffic management plan and traffic guidance scheme according to workplace policies and procedures	Prepare to implement traffic management plan • Training and qualification	Training Task 2 Training Task 3 Training Task 4	Task 1	Question 1, 18, 19	Practical Task 1	
1.5 Confirm required liaison and communication activities are carried out according to instructions	Prepare to implement traffic management plan • Communicate traffic management plan	Training Task 1 Training Task 2	Task 1	Question 2	Practical Task 1, 2	
1.6 Provide traffic guidance scheme implementation instructions to traffic control personnel and clarify and confirm recipient understanding as required	Prepare to implement traffic management plan • Work instructions • Fix or report faults	Training Task 1 Training Task 6	Task 1	Question 7, 8, 9	Practical Task 1, 2	

Performance Criterion (PC)	Learner Guide & PowerPoin Presentation	Learner Workbook (formative assessment)		Assessment		RTO to fill out (Customised and additional materials, eg. web sites, DVDs, handouts...)
		Knowledge Questions	Practical Training Task	KNOWLEDGE	PRACTICAL	
Element 2 Set out traffic guidance scheme						
2.1 Check required signs and devices are positioned and installed according to traffic guidance scheme	Set out traffic guidance scheme <ul style="list-style-type: none"> Traffic guidance scheme Regulatory signs Position temporary signs and barriers Signs and devices Recommended maximum cone space and bollards 	Training Task 3 Training Task 5 Training Task 6	Task 2	Question 10, 11, 12, 14, 15, 21, 22, 23, 24, 25, 26, 27, 29, 30	Scenario A, B, C Practical Task 2	
2.2 Inspect traffic guidance scheme and authorise roadwork crew to proceed with work activities	Set out traffic guidance scheme <ul style="list-style-type: none"> Preparation and planning Set out traffic management plan 	Training Task 6	Task 2	Question 12, 23, 24, 28	Scenario A, B, C Practical Task 2	
2.3 Confirm roadwork crew are protected from work site hazards	Set out traffic guidance scheme <ul style="list-style-type: none"> Select tools and equipment Check tools and equipment for serviceability Dimension D Approach tapers Examples of traffic guidance schemes Protect work crew Protecting workers without the use of safety barriers Work distances without safety barriers Use truck mounted attenuators to protect workers 	Training Task 6	Task 2	Question 24, 29, 31, 32	Scenario A, B, C Practical Task 2	