

**Manual**

**Queensland Guide to Temporary Traffic Management  
Part 4: Mobile Works**

**March 2025**



## Copyright

© The State of Queensland (Department of Transport and Main Roads) 2025.

## Licence



This work is licensed by the State of Queensland (Department of Transport and Main Roads) under a Creative Commons Attribution (CC BY) 4.0 International licence.

## CC BY licence summary statement

In essence, you are free to copy, communicate and adapt this work, as long as you attribute the work to the State of Queensland (Department of Transport and Main Roads). To view a copy of this licence, visit: <https://creativecommons.org/licenses/by/4.0/>

## Translating and interpreting assistance



The Queensland Government is committed to providing accessible services to Queenslanders from all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68.

## Disclaimer

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

## Feedback

Please send your feedback regarding this document to: [tmr.techdocs@tmr.qld.gov.au](mailto:tmr.techdocs@tmr.qld.gov.au)

**About this document**

This document supplements the Austroads *Guide to Temporary Traffic Management Part 4 Mobile Works*, which has been prepared to assist with mobile worksites, in accordance with Austroads best practice. It provides general information about the context and components of designing temporary traffic guidance schemes at mobile worksites.

**How to use this document**

This document is designed to be read and applied together with Austroads *Guide to Temporary Traffic Management Part 4: Mobile Works* (AGTTM04-21 Edition 1.1). You must have access to the Guide to understand what applies in Queensland.

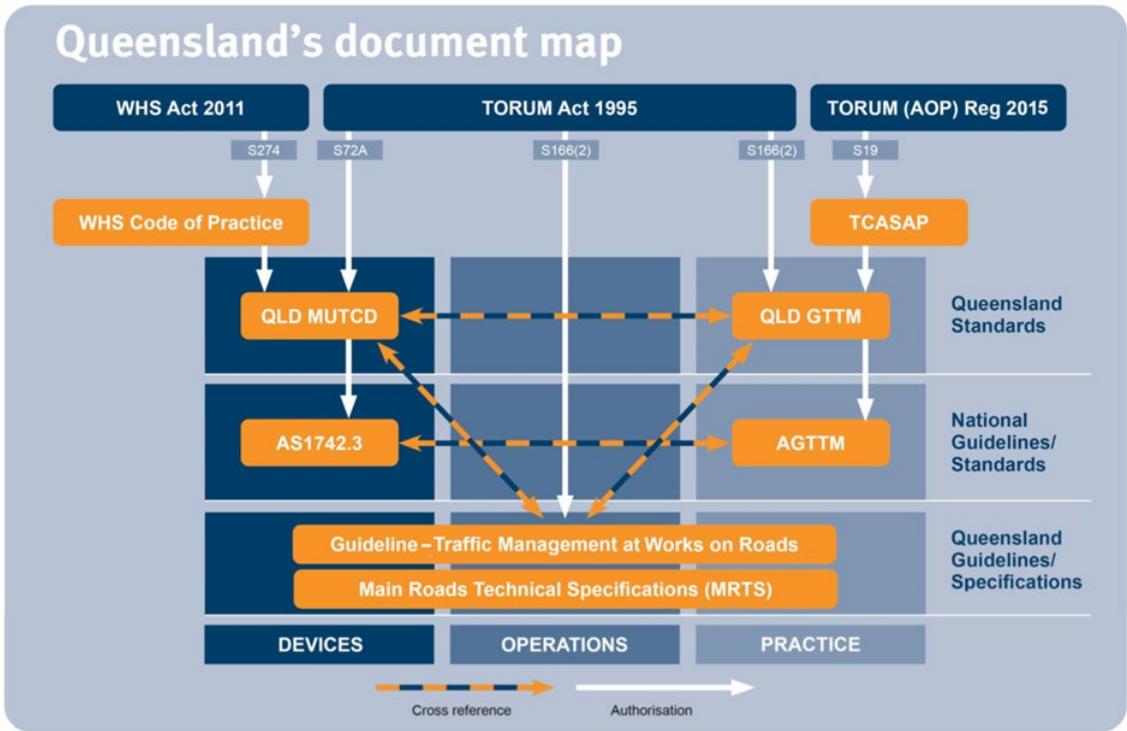
This document:

- sets out how AGTTM04-21 applies in Queensland
- has precedence over AGTTM04-21 when applied in Queensland
- has the same section and clause numbering and headings as AGTTM04-21.

The following table summarises the relationship between AGTTM04-21 and this document:

Applicability	Meaning
Accepted	The Guide section or clause is accepted.
Accepted, with amendments	Part or all of the section or clause has been accepted with additions, deletions or differences.
New	There is no equivalent section or clause in the Guide.
Not accepted	The Guide section or clause is not accepted.

A summary of the documents relevant to TTM practice in Queensland, and their links, is provided following:



## References

The following references apply when reading AGTTM04-21.

Reference to...	Means
AGTTM04-21	<p><i>Austrroads Guide to Temporary Traffic Management Part 4 Mobile Works</i>, as amended by this document: for example, a reference to AGTTM04-21 means you must refer to the <i>Queensland Guide to Temporary Traffic Management (QGTTM) Part 4</i>.</p> <p>Throughout AGTTM04-21, references are made to other parts of the Guide (for example, when reading Part 4 you may be referred to Part 3 for further information.) In this case, you must refer to the equivalent Part within the QGTTM. Check the applicability of the equivalent Part in the QGTTM <b>before</b> referring to the referenced Austrroads Guide Part.</p>
AGTTM	<i>Austrroads Guide to Temporary Traffic Management</i>
AS 1742	Australian Standard AS 1742 <i>Manual of Uniform Traffic Control Devices</i>
Queensland (Q) series / Traffic Control (TC) signs	<a href="#">MUTCD (Q) series and TC signs</a> .
Queensland MUTCD	<a href="#">Queensland Manual of Uniform Traffic Control Devices</a> which supplements AS 1742.

**Relationship table (harmonised to AGTTM04-21 Edition 1.1)**

Section		Description	Applicability
1	<b>Introduction</b>		
	1.1	Purpose	Accepted
	1.2	Structure of AGTTM	Accepted
	1.3	Scope of Part 4	Accepted
	1.4	Application of Part 4 to New Zealand	Accepted
	1.5	Definitions	Accepted
2	<b>Design Process</b>		
	2.1	General	Accepted
	2.2	Risk Assessment	Accepted, with amendments
	2.2.1	<i>Risk considerations</i>	Accepted
	2.3	Design Steps	Accepted
	2.4	Design Balance	Accepted
	2.5	Essential Design Principles	Accepted
	2.5.1	<i>Worksite layout</i>	Accepted
	2.5.2	<i>Sight distance</i>	Accepted
	2.5.3	<i>Signs</i>	Accepted, with amendments
	2.5.4	<i>Road categories</i>	Accepted
	2.5.5	<i>Traffic volume</i>	Accepted
	2.5.6	<i>Speed</i>	Accepted
2.5.7	<i>Variations to design</i>	Accepted, with amendments	
3	<b>TGS Design for Mobile Works</b>		
	3.1	General	Accepted
	3.2	Activities	Accepted
	3.2.1	<i>Class 1</i>	Accepted
	3.2.2	<i>Class 2</i>	Accepted
	3.2.3	<i>Class 3</i>	Accepted
	3.3	Step 1 – Confirm the Works can be Defined as Mobile Works	Accepted
3.4	Step 2 – Identify the Works Location	Accepted	

Section	Description	Applicability
3.5	Step 3 – Determine the Needs of the Works Convoy	Accepted
3.5.1	<i>Lead vehicle</i>	Accepted
3.5.2	<i>Work vehicle</i>	Accepted
3.5.3	<i>Shadow vehicle</i>	Accepted with amendments
3.5.4	<i>Advance warning vehicle</i>	Accepted
3.5.5	<i>Vehicle positioning</i>	Accepted
3.6	Step 4 – Determine the Works Convoy Spacing	Accepted
3.7	Step 5 – Determine the Signs and Devices to use	Accepted
3.7.1	<i>Advance warning</i>	Accepted with amendments
3.7.2	<i>Signs mounted on vehicles</i>	Accepted with amendments
3.7.3	<i>Works within a shoulder</i>	Accepted
3.7.4	<i>Works within a lane</i>	Accepted
3.7.5	<i>Works involving a side street, signalised intersection, freeway on-ramp or off-ramp</i>	Accepted
3.8	Step 6 – Identify the Operational Procedures to be Followed	Accepted
3.8.1	<i>Reduced sight distance</i>	Accepted
3.8.2	<i>Signs</i>	Accepted
3.8.3	<i>Advance warning</i>	Accepted
3.8.4	<i>Mobile temporary speed zone</i>	Accepted with amendments
3.8.5	<i>Workers on foot</i>	Accepted
3.8.6	<i>Work convoy arrangements</i>	Accepted
3.8.7	<i>Maintaining traffic flow</i>	Accepted
3.8.8	<i>Communication</i>	Accepted
3.8.9	<i>Pedestrians and cyclists</i>	Accepted
3.8.10	<i>Road marking &amp; line marking</i>	Accepted
3.8.11	<i>Kerbside collection and street sweeping</i>	Accepted
3.8.12	<i>Rolling blocks</i>	Accepted
3.8.13	<i>Unsealed roads</i>	Accepted
3.9	Step 7 – Design the Traffic Guidance Scheme and Document the Notes for Field Staff	Accepted

# Contents

- About this document.....i
- How to use this document.....i
- References .....ii
- Relationship table (harmonised to AGTTM04-21 Edition 1.1).....iii
- 2 Design Process .....1**
- 2.2 Risk Assessment ..... 1
- 2.5 Essential Design Principles ..... 1
  - 2.5.3 Signs.....1
  - 2.5.7 Variations to Design .....1
- 3 TGS Design for Mobile Works .....2**
- 3.5 Step 3 – Determine the Needs of the Works Convoy..... 2
  - 3.5.3 Shadow vehicle .....2
  - 3.7 Step 5 – Determine the Signs and Devices to Use .....2
    - 3.7.1 Advance warning .....2
    - 3.7.2 Signs mounted on vehicles .....2
- 3.8 Step 6 – Identify the Operational Procedures to be Followed ..... 3
  - 3.8.4 Mobile temporary speed zone .....3

## **2 Design Process**

### **2.2 Risk Assessment**

#### Difference

Replace:

It is important to note that a Design Exceptions Report shall be approved by the relevant Road Infrastructure Manager (RIM) and road authority if design exceptions are made or published standards or the AGTTM are not adhered to.

with:

Where variations to the treatments in the Queensland MUTCD Part 3 or QGTTM are proposed, a risk assessment certified in accordance with the requirements of Clause 1.9 of Queensland MUTCD Part 3 shall be undertaken.

### **2.5 Essential Design Principles**

#### **2.5.3 Signs**

##### Difference

Replace the following dot point:

- signs that are not relevant during works must be removed or covered as it is essential that all signs at the worksite or varied travel route accurately represent the prevailing conditions at all times.

with:

- vehicle-mounted signs that are not relevant (during works or after works) must be removed or covered as it is essential that all vehicle-mounted signs accurately represent the prevailing conditions at all times.

##### Addition

It is important to consider the impact of existing static signs on the mobile works operations and while it may not always be practicable or possible as part of mobile works operations to remove or cover existing static signs, any existing static signs which may cause conflict or a safety issue for the mobile works operations should be treated, especially if the mobile works operation is stationary for a period. Subject to a risk assessment, existing static signs along a route may remain in place during mobile works operations.

#### **2.5.7 Variations to Design**

##### Addition

Refer to Clause 1.9 of the Queensland MUTCD Part 3.

### 3 TGS Design for Mobile Works

#### 3.5 Step 3 – Determine the Needs of the Works Convoy

##### 3.5.3 Shadow vehicle

###### Addition

In subsection **Truck mounted attenuators**, add the following sentence after the 3<sup>rd</sup> paragraph:

Only TMAs included on the current list of accepted products in the Transport and Main Roads [Accepted Road Safety Barrier Systems and Devices](#) document shall be used at roadwork sites in Queensland.

#### 3.7 Step 5 – Determine the Signs and Devices to Use

##### 3.7.1 Advance warning

###### Addition

Add the following notes to Figure 3.9:

The 40 m roll ahead distance shall be kept free of workers on foot and items of plant.

The distance between the advance warning vehicle and shadow vehicle is 90 metres for this example.

##### 3.7.2 Signs mounted on vehicles

###### Difference

Replace:

Vehicle mounted warning devices fitted with illuminated arrow signs must be fitted to all convoy vehicles and plant items. This excludes small plant items protected by a work vehicle and shadow vehicle. The sign mounted to the vehicle and illuminated flashing arrow sign must be the minimum size of:

with:

Vehicle mounted warning devices fitted with illuminated arrow signs must be fitted to all TTM vehicles in the convoy.

All work vehicles and items of plant in the mobile works convoy, other than minor items of plant protected by a works vehicle or a shadow vehicle, must display a vehicle-mounted warning device which when suitable may be fitted with an illuminated flashing arrow sign.

The sign mounted to the vehicle and illuminated flashing arrow sign must be the minimum size of:

###### Deletion

In subsection **Vehicle mounted warning device**, delete the first paragraph:

All vehicles and items of plant in the mobile works convoy, other than minor items of plant protected by a works vehicle and shadow vehicle must carry a vehicle-mounted warning device fitted with an illuminated flashing arrow sign.

### Addition

In subsection **Vehicle mounted warning device**, add the following:

On two-way roads, vehicle mounted warning devices fitted with illuminated arrow signs must be visible to road users from both approaches where warning for both approaches is required (see Figure 3.9).

## **3.8 Step 6 – Identify the Operational Procedures to be Followed**

### **3.8.4 Mobile temporary speed zone**

#### Difference

Replace the entire Section 3.8.4 with the following:

To improve the safety of road workers and road users, a temporary speed limit may be applied to mobile works. When mobile works involve workers on foot or using small ride-on plant within the lane or within 1.2 m of traffic, a temporary speed limit of 40 km/h must be applied.

The mobile work zone must be established using Speed Restriction signs or Speed Limit AHEAD signs located on vehicles in the mobile works convoy. Temporary speed limits must also be terminated on the vehicles in the mobile convoy. Depending on the works convoy arrangements and speed limit requirements, the work vehicle (or plant item) and the shadow vehicle may be used to display speed limit signs.

On undivided roads where traffic travels past the mobile convoy in both directions, temporary speed limits for the safety of road workers or road users must be applied for both directions of travel. In this case, at a minimum, the speed zone must be implemented between the work and shadow vehicles.

For works where a lead vehicle is not required, at a minimum, the speed zone must be implemented between the work vehicle (or plant item) and the shadow vehicle.

All temporary speed limits require a risk assessment to determine the appropriate speed limit. If a risk assessment indicates an unusually high risk to workers at a particular site, a speed limit lower than 40 km/h may be required.

When the need for the temporary speed limit is no longer applicable, the speed limit should be removed or altered to an applicable value; for example, when a 40 km/h speed zone is implemented for workers on foot or using small ride-on plant within the lane or within 1.2 m of traffic and workers are no longer in this area, the temporary speed limit implemented for them must be removed and, if applicable, an alternative speed limit for the safety of road workers and road users may be implemented.

Ensure that the temporary speed zone is terminated by a Speed Restriction or END Speed Limit sign. The END Speed Limit sign will trigger the default built up or open road speed limit.

