

Queensland Manual of Uniform Traffic Control Devices

Part 2: Traffic control devices for general use

November 2023



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Feedback

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About this document

This document specifies requirements for regulatory and warning signs, pavement markings and other devices for general use on roads, including expressway type roads and sets out the way they are applied at intersections and interchanges, between intersections and at a number of specific situations, including substandard horizontal and vertical curves, approaches to structures and obstructions, changes in pavement width, climbing and overtaking lanes, steep grades and water crossings.

How to use this document

This document is designed to be read and applied together with AS 1742.2-2022 *Manual of Uniform Traffic Control Devices Part 2* (AS 1742.2-2022). You must have access to the Australian Standard to understand what applies in Queensland.

This document:

- sets out how AS 1742.2-2022 applies in Queensland
- has precedence over AS 1742.2-2022 when applied in Queensland, and
- has the same section and clause numbering and headings as AS 1742.2-2022.

The following table summarises the relationship between AS 1742.2-2022 and this document:

Applicability	Meaning	
Accepted	The Australian Standard 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 Australian Standard.	
Not accepted	The Australian Standard section or clause is not accepted.	

References

The following references apply when reading AS 1742.2-2022.

Reference to	Means
AS 1742.2-2022	AS 1742.2-2022, as amended by this document
	For example, a reference to AS 1742.2-2022 means you must refer to the Australian Standard Part 2, and Part 2 of the Queensland <i>Manual of Uniform Traffic Control Devices</i> (Queensland MUTCD).
	Throughout AS 1742.2-2022, references are made to other parts of the Australian Standards (for example, when reading Part 2 you may be referred to Part 3 for further information.) In this case, you must refer to the equivalent Part within the Queensland MUTCD first. Check the applicability of the equivalent Part in the Queensland MUTCD before referring to the referenced Australian Standard Part.
QGRS	Queensland Guide to Road Safety
QGTM	Queensland Guide to Traffic Management
QGTTM	Queensland Guide to Temporary Traffic Management

Reference to	Means
Queensland (Q) series / Traffic Control (TC) signs	The TC signs are a collection of non-standard traffic control (TC) signs that have been 'officially approved' as required by the <i>Transport Operations (Road Use Management) Act 1995</i> . Included in this register are the MUTCD Q-series signs.
RPDM	Road Planning and Design Manual, 2 nd Edition
TORUM Act	Transport Operations (Road Use Management) Act 1995 (Qld)

Relationship table

Section	Clause	Description	Applicability
1	Scope ar	nd general	
	1.1	Scope	Accepted
	1.2	Application	Accepted
	1.3	Normative references	Accepted, with amendments
	1.4	Terms and definitions	Accepted
	1.4.1	85th percentile speed V ₈₅	Accepted
	1.4.2	annual average daily traffic AADT	Accepted
	1.4.3	expressway type road expressway	Accepted
	1.4.4	major road	Accepted
	1.4.5	may	Accepted
	1.4.6	merge	Accepted
	1.4.7	minor road	Accepted
	1.4.8	relevant authority	Accepted
	1.4.9	shall	Accepted
	1.4.10	should	Accepted
	1.4.11	stopping sight distance SSD	Accepted
	1.4.12	traffic control device	Accepted
	1.4.13	travelled way	Accepted
	1.4.14	zip merge	Accepted
	1.4.15	Registered Professional Engineer of Queensland (RPEQ)	New
	1.4.16	Innovative treatments	New
	1.5	Specification of signs, markings and delineators	Accepted
	1.6	Responsibility and authority for installation	Accepted, with amendments
	1.7	General principles	
	1.7.1	Basic principles for all traffic control devices	Accepted
	1.7.2	Specific principles for signs	
	1.7.2.1	General	Accepted
	1.7.2.2	Reflectorization and illumination	Accepted
	1.7.2.3	Installation and location of signs	Accepted
	1.7.2.4	Non-standard signs and devices	Accepted, with amendments
	1.7.2.5	Excessive use	Accepted

Section	Clause	Description	Applicability
	1.7.2.6	Safety aspects	Accepted
	1.7.2.7	Electronic signs	Accepted
	1.8	Variation to treatments and Registered Professional Engineer of Queensland certification	New
2	Treatmer	nt at intersections	
	2.1	Scope of section	Accepted
	2.2	Devices used	Accepted
	2.3	Movement control, direction control and advance warning	Accepted
	2.4	Application of devices	Accepted
	2.5	GIVE WAY sign and STOP sign control	
	2.5.1	General	Accepted
	2.5.2	Application	Accepted
	2.5.3	Requirements for installation of STOP signs	Accepted
	2.5.4	Signs for give way and stop control	Accepted
	2.5.5	Advance warning signs for give way and stop control	Accepted
	2.6	Roundabout control	
	2.6.1	General	Accepted
	2.6.2	Application	Accepted
	2.6.3	Signs for roundabout control	Accepted
	2.6.4	Advance warning signs and hazard marker signs for roundabouts	Accepted
	2.7	Control by traffic signals	Accepted
	2.8	Direction control at intersections	
	2.8.1	General	Accepted
	2.8.2	Signs for the restriction of travel direction	Accepted
	2.8.3	Application of turn prohibition signs	Accepted
	2.8.4	Signs for the prohibition of turns	Accepted
	2.8.5	Signs for specific turn control	Accepted, with amendments
	2.8.6	Supplementary signs	Accepted, with amendments
	2.8.7	Signs for other direction instruction	Accepted, with amendments
	2.9	Advance warning of intersections	
	2.9.1	General	Accepted
	2.9.2	Application	Accepted
	2.9.3	Signs (on the major road) for warning of a cross road intersection	Accepted
	2.9.4	Signs (on the minor road) for warning of a T-intersection	Accepted

Section	Clause	Description	Applicability
	2.9.5	Signs (on the major road) for warning of a side road intersection	Accepted, with amendments
	2.9.6	Signs (on the major road) for warning of staggered and successive side road intersections	Accepted
	2.9.7	Signs (on the major road) for warning of a modified intersection	Accepted
	2.9.8	Signs for warning of merges and added lanes from intersections	Accepted
	2.9.9	Signs for warning of private driveways	Accepted, with amendments
	2.10	Advance warning of intersection traffic control devices	
	2.10.1	General	Accepted
	2.10.2	Application	Accepted
	2.10.3	Signs for advance warning of intersection traffic control devices	Accepted
	2.11	Pavement markings at intersections	Accepted
	2.12	Hazard marker signs and other devices	
	2.12.1	Hazard marker signs	Accepted
	2.12.2	Sight boards	Accepted
	2.12.3	Kerb markings	Accepted
	2.12.4	Pavement bars and markings	Accepted
	2.13	Typical arrangement diagrams for intersections	Accepted
	2.14	Typical arrangement diagrams	Accepted, with amendments
3	Treatmer terminals	nts at expressway interchanges and	
	3.1	Scope of section	Accepted
	3.2	General	Accepted
	3.3	Intersection control at ramp terminals	Accepted
	3.4	Control of movement and traffic access at ramp terminals	
	3.4.1	General	Accepted
	3.4.2	Signs for wrong way movement control	Accepted
	3.4.3	Signs for the regulatory control of expressway use and access	Accepted, with amendments
	3.5	Direction control and guidance of traffic on expressways at and near interchanges	
	3.5.1	General	Accepted
	3.5.2	Signs for control of traffic entering or leaving the expressway	Accepted, with amendments

Section	Clause	Description	Applicability
	3.5.3	Signs for the guidance of traffic entering or leaving the expressway	Accepted
	3.6	Advance warning of expressway terminals	
	3.6.1	General	Accepted
	3.6.2	Signs for the advance warning of expressway terminals	Accepted
	3.7	Pavement markings on expressways and at entrance and exit ramps	Accepted
	3.8	Signs and pavement markings at interchanges and terminals	
	3.8.1	General	Accepted
	3.8.2	Typical arrangement diagrams	Accepted
4	Treatmer	nts between intersections	
	4.1	Scope of section	Accepted
	4.2	Pavement markings and delineation	
	4.2.1	General	Accepted
	4.2.2	General treatment	
	4.2.2.1	Rural road – undivided	Accepted
	4.2.2.2	Rural roads – divided, including rural expressways	Accepted
	4.2.2.3	Urban roads – undivided	Accepted
	4.2.2.4	Urban roads – divided and one-way roadways	Accepted
	4.2.3	No overtaking zones (Barrier lines)	Accepted
	4.2.4	Guide posts	
	4.2.4.1	General	Accepted
	4.2.4.2	Design and construction	Accepted, with amendments
	4.2.4.3	Siting and alignment	Accepted
	4.2.4.4	Longitudinal spacing	Accepted, with amendments
	4.2.5	Delineators	
	4.2.5.1	General	Accepted
	4.2.5.2	Colour	Accepted
	4.2.5.3	Performance requirements	Accepted
	4.2.5.4	Mounting locations	Accepted
	4.2.6	Snow poles	Accepted
	4.2.7	Maintenance marker posts	New
	4.3	Treatment of substandard horizontal curves	
	4.3.1	General	Accepted
	4.3.2	Horizontal curves which are not substandard	Accepted
	4.3.3	Determination of warning signs on curves	Accepted

Section	Clause	Description	Applicability
	4.3.4	Determination of advisory speed and associated signs	
	4.3.4.1	General	Accepted
	4.3.4.2	Determination of advisory speeds on horizontal curves	Accepted
	4.3.4.3	Application of Advisory Speed signs on horizontal curves	Accepted
	4.3.5	Signs for substandard horizontal curves	Accepted, with amendments
	4.3.6	Determination for the use of Curve Alignment Marker signs	
	4.3.6.1	General	Accepted
	4.3.6.2	Curve Alignment Marker signs	Accepted, with amendments
	4.3.6.3	Typical arrangement diagrams	Accepted
	4.4	Treatment of substandard vertical curves	
	4.4.1	General	Accepted
	4.4.2	Substandard stopping sight distance	Accepted
	4.4.3	Crests, dips and humps	Accepted
	4.4.4	Advisory speeds on substandard vertical curves	
	4.4.4.1	General	Accepted
	4.4.4.2	Determination of advisory speeds on vertical curves	Accepted
	4.4.4.3	Application of Advisory speed signs on vertical curves	Accepted
	4.4.5	Signs for substandard vertical curves	Accepted
	4.5	Treatment of approaches to structures and obstructions	
	4.5.1	General	Accepted
	4.5.2	Bridges	
	4.5.2.1	Bridges with more than one lane	Accepted
	4.5.2.2	One-lane bridges on two-way roadways	Accepted
	4.5.2.3	Signalization of one-lane bridges	Accepted
	4.5.2.4	Load and vehicle dimension limitations	Accepted
	4.5.2.5	Speed limits on bridges	Accepted
	4.5.3	Subways and underpasses	
	4.5.3.1	General	Accepted
	4.5.3.2	Height restrictions	Accepted
	4.5.4	Gates, grids and culverts	
	4.5.4.1	Gates	Accepted
	4.5.4.2	Grids	Accepted

Section	Clause	Description	Applicability
	4.5.4.3	Culverts	Accepted
	4.5.4.4	Isolated pavement width restrictions	Accepted
	4.5.5	Obstructions within the roadway	Accepted
	4.5.6	Signs for approaches to structures and obstructions	
	4.5.6.1	Regulatory signs	Accepted, with amendments
	4.5.6.2	Detour signs	Accepted, with amendments
	4.5.6.3	Warning signs	Accepted, with amendments
	4.5.6.4	Speed limit signs on bridges	Accepted
	4.5.7	Hazard marker signs	
	4.5.7.1	General	Accepted
	4.5.7.2	Types of hazard marker signs	Accepted
	4.6	Changes in pavement width	
	4.6.1	General	Accepted
	4.6.2	General treatments at lane reductions (merges)	Accepted
	4.6.3	Narrowing of a roadway	
	4.6.3.1	Narrowing of two-lane road	Accepted
	4.6.3.2	Transition from four-lane road to two-lane road (both undivided)	Accepted
	4.6.4	Transition of divided road to undivided road	
	4.6.4.1	General	Accepted
	4.6.4.2	Typical arrangement diagrams	Accepted
	4.6.5	Signs for lane reductions (merges) and approaches to changes in pavement width	
	4.6.5.1	Signs for zip merges	Accepted
	4.6.5.2	Signs for lane changes	Accepted, with amendments
	4.6.5.3	Signs for approaches to changes in pavement width	Accepted
	4.6.5.4	Signs at the beginning and end of divided roads	Accepted
	4.7	Overtaking lanes, climbing lanes and turnouts	
	4.7.1	General	Accepted
	4.7.2	Signs for overtaking lanes, climbing lanes and turnouts	Accepted
	4.7.3	Typical arrangement diagrams	Accepted
	4.8	Steep grades and safety ramps	
	4.8.1	General	Accepted
	4.8.2	Signs for steep descents	Accepted

Section	Clause	Description	Applicability
	4.8.3	Signs for steep climbs	Accepted
	4.8.4	Signs for safety ramps	Accepted
	4.9	Water crossings	
	4.9.1	General	Accepted
	4.9.2	Ferries and opening bridges	Accepted
	4.9.3	Fords	Accepted
	4.9.4	Floodways	Accepted
	4.9.5	Low level bridges	Accepted
	4.9.6	Signs for water crossings	Accepted, with amendments
	4.10	Road block barriers	
	4.10.1	Application	Accepted
	4.10.2	Construction and location	Accepted
	4.10.3	Associated device and marking	Accepted, with amendments
	4.11	Physical obstructions, road conditions and other hazards	
	4.11.1	General	Accepted
	4.11.2	Signs for warning of physical obstructions	Accepted
	4.11.3	Signs for warning of hazardous road conditions	Accepted, with amendments
	4.11.4	Signs for warning of unexpected vehicles	Accepted, with amendments
	4.11.5	Signs for warning of wandering stock	Accepted, with amendments
	4.11.6	Signs for warning of hazardous wildlife	Accepted, with amendments
	4.11.6.1	Wildlife warning signs	New
	4.11.6.2	Temporary wildlife warning signs	New
	4.11.6.3	High-impact wildlife warning signs	New
	4.11.6.5	Wildlife threshold pavement marking	New
	4.11.6.5	Significant Wildlife Conservation Area (WCA) signing	New
	4.11.6.6	RRPMs	New
	4.11.6.7	Vehicle-activated devices	New
	4.11.7	Signs for warning of temporary or part time hazards	Accepted, with amendments
	4.11.8	Vehicle mounted signs	Accepted, with amendments
	4.11.9	Signs to supplement standard warning signs	Accepted
	4.12	Miscellaneous signs	
	4.12.1	General	Accepted
	4.12.2	Miscellaneous regulatory signs	Accepted, with amendments
	4.12.3	Heavy vehicle control and information signs	Accepted, with amendments
	4.12.4	Emergency access location signs	Accepted, with amendments

Section	Clause	Description	Applicability
	4.12.5	Signs for warning of cane vehicles	New
	4.13	Variable use lane signs	Accepted
5	Pavemen	nt markings	
	5.1	Scope of section	Accepted
	5.2	General principles	
	5.2.1	Purpose	Accepted
	5.2.2	Removal of markings	Accepted
	5.2.3	Limitations	Accepted
	5.2.4	Types of markings	Accepted
	5.2.5	Pavement marking materials and reflectorization	Accepted
	5.2.6	Colours	Accepted
	5.2.7	Size of markings	Accepted
	5.2.8	Audio tactile line marking	Accepted
	5.3	Longitudinal lines	
	5.3.1	General	Accepted
	5.3.2	Dividing lines	
	5.3.2.1	General	Accepted
	5.3.2.2	Application of dividing lines	Accepted
	5.3.3	Barrier lines	
	5.3.3.1	General	Accepted
	5.3.3.2	Application of barrier lines	Accepted
	5.3.3.3	Location and setting out	Accepted
	5.3.3.4	Modification of barrier line requirements	Accepted
	5.3.3.5	Checking marked barrier lines	Accepted
	5.3.4	Lane lines	Accepted
	5.3.5	Edge lines	Accepted
	5.3.6	Continuity lines	Accepted
	5.3.7	Turn lines	Accepted
	5.3.8	Outline markings	Accepted
	5.3.9	Longitudinal lines at intersections and roundabouts	Accepted
	5.3.10	Audio-tactile line marking	
	5.3.10.1	General	Accepted, with amendments
	5.3.10.2	Noise considerations	Accepted, with amendments
	5.3.10.3	Audio-tactile edge line	Accepted, with amendments
	5.3.10.4	Audio-tactile dividing line	Accepted, with amendments
	5.4	Wide centre line treatment	

Section	Clause	Description	Applicability
	5.4.1	General	Accepted
	5.4.2	Application	
	5.4.2.1	General	Accepted, with amendments
	5.4.2.2	Width	Accepted, with amendments
	5.4.2.3	Start and end transitions	Accepted, with amendments
	5.4.2.4	Between intersections	Accepted
	5.4.2.5	At intersections and driveways	Accepted, with amendments
	5.4.2.6	Transitions at narrow structures and overtaking lanes	Accepted, with amendments
	5.4.2.7	Sign requirements	Accepted, with amendments
	5.5	Transverse lines	
	5.5.1	General	Accepted
	5.5.2	Give way lines	Accepted, with amendments
	5.5.3	Stop lines	Accepted
	5.5.4	Positioning of lines at GIVE WAY and STOP signs	Accepted
	5.5.5	Pedestrian control and protection markings	
	5.5.5.1	Pedestrian guide lines	Accepted
	5.5.5.2	Pedestrian crossing (zebra)	Accepted
	5.5.6	Road hump markings	Accepted
	5.5.7	Kerb markings	Accepted
	5.6	Diagonal and chevron markings	
	5.6.1	General	Accepted
	5.6.2	Markings on splayed approaches	Accepted
	5.6.3	Diagonal markings on shoulders	Accepted
	5.6.4	Painted islands and medians	Accepted
	5.6.5	Bicycle lane safety strip	Accepted
	5.6.6	Yellow box marking	Accepted
	5.7	Pavement arrows	
	5.7.1	General	Accepted
	5.7.2	Intersection arrows	Accepted
	5.7.3	Lane change arrows	Accepted
	5.7.4	Pavement arrows approaching and on expressway exit ramps	Accepted
	5.8	Messages on pavements	
	5.8.1	General	Accepted
	5.8.2	Words and numerals	Accepted
	5.8.3	Word messages	Accepted

Section	Clause	Description	Applicability
	5.8.4	Symbols	Accepted
	5.8.5	KEEP CLEAR marking	Accepted, with amendments
	5.9	Raised pavement markers	
	5.9.1	General	Accepted
	5.9.2	Retroreflective raised pavement markers (RRPMs)	Accepted
	5.9.3	Non retroreflective raised pavement markers (NRPMs)	Accepted
	5.9.4	Internally illuminated pavement markers (IIPMs)	Accepted
	5.9.5	Application of raised pavement markers	
	5.9.5.1	Positioning and spacing of markers	Accepted
	5.9.5.2	Augmenting painted lines	Accepted with amendments
	5.9.5.3	Lane guidance through intersections	Accepted
	5.10	Pavement bars	
	5.10.1	General	Accepted
	5.10.2	Design and installation	Accepted
	5.10.3	Typical uses	Accepted
	5.11	Pavement markings at entrance and exit ramps	
	5.11.1	Entrance and exit ramp layouts	Accepted
	5.11.2	Exit ramp nose marking	Accepted
	5.11.3	Entrance ramp nose marking	Accepted
	5.11.4	Expressway exit lane arrows	Accepted
	5.11.5	Pavement arrows on exit ramps	Accepted
	5.11.6	Step-out marking	Accepted
	5.11.7	Exit ramp marking	New
Appendices			
Α	Guide to t	the determination of 85 th percentile speed	
(informative)	A.1	General	Accepted
	A.2	Data collection	
	A.2.1	Conditions for data collection	Accepted
	A.2.2	Sample size	Accepted
	A.3	Data recording	Accepted
	A.4	Data analysis	
	A.4.1	85th percentile speed	Accepted
	A.4.2	15 km/h pace	Accepted
В	Sign size	selection	
(informative)	B.1	Scope	Accepted

Section	Clause	Description	Applicability
	B.2	Size of signs	Accepted
	B.3	General principles for size selection	Accepted
С	Reflectori	zation and illumination of signs	
(normative)	C.1	Scope	Accepted
	C.2	General	Accepted
	C.3	Means of reflectorization	Accepted
	C.4	Means of illumination	Accepted
D	Installatio	n and location of signs	
(normative)	D.1	Scope	Accepted
	D.2	Sign location	
	D.2.1	General	Accepted
	D.2.2	Longitudinal placement	Accepted
	D.2.3	Lateral placement and height	
	D.2.3.1	General	Accepted
	D.2.3.2	Lateral placement – rural	Accepted
	D.2.3.3	Lateral placement – urban	Accepted
	D.2.3.4	Height – rural	Accepted
	D.2.3.5	Height – urban	Accepted
	D.2.3.6	Overhead mounting	Accepted
	D.2.3.7	Typical arrangement diagrams	Accepted
	D.2.4	Overhead signs	Accepted
	D.3	Sign orientation	Accepted
	D.4	Signpost selection	
	D.4.1	General	Accepted
	D.4.2	Small size posts	Accepted
	D.4.3	Large non-frangible posts	Accepted
	D.4.4	Large frangible posts	Accepted
	D.4.5	Sign post selection guide	Accepted
E (informative)	Use of en	hancement treatments for warning signs	Accepted
F	Determination of advisory speeds on horizontal curves		
(normative)	F.1	Scope	Accepted
	F.2	Principle	Accepted
	F.3	Equipment	
	F.3.1	Ball bank indicator	Accepted
	F.3.2	Other devices	Accepted
	F.4	Procedure	Accepted
	F.5	Advisory speed adjustment	Accepted

Section	Clause	Description	Applicability
	F.6	Report	Accepted
G	Determina	ation of advisory speeds on vertical curves	
(informative)	G.1	Scope	Accepted
	G.2	Principle	Accepted, with amendments
	G.3	Method	Accepted
H (informative)	Signs for wildlife awareness		Accepted, with amendments
I (normative)	Signs and markings where a major road turns or curves left		
	I.1	General and scope	Accepted
	1.2	Purpose	Accepted
	1.3	Principles	Accepted
	1.4	Application	
	1.4.1	General	Accepted
	1.4.2	Crossroads	Accepted
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	1.4.5	Typical arrangement diagrams	Accepted

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1 Scope and general

1.3 Normative references

Addition

The following referenced documents also apply in Queensland:

- The department's Traffic Control (TC) signs database
- Main Roads Technical Specification MRTS45 Road Surface Delineation
- Main Roads Technical Specification <u>MRTS110 Coloured Surface Treatments</u>
- Queensland Guide to Road Safety Part 2
- Road Planning and Design Manual Part 3: Geometric Design
- Signing and Line Marking of Heavy Vehicle Interception Sites Guideline, and
- Transport Operations (Road Use Management) Act 1995.

1.4 Terms and definitions

1.4.15 Registered Professional Engineer of Queensland (RPEQ)

New

A person who is registered as a Registered Professional Engineer of Queensland (RPEQ) under the *Professional Engineers Act 2002* (Qld) with the <u>Board of Professional Engineers of Queensland</u>.

1.4.16 Innovative treatments

New

Innovative treatments that provide improved safety, efficiency and/or value-for-money outcomes are encouraged. Such treatments may include:

- a) innovative use of current devices
- b) alternative device layouts using existing and/or improve devices, and/or
- c) new devices or practices.

New or improved devices, treatments, or practices require approval by the Department of Transport and Main Roads (see Clause 1.8 for guidance about variations to optimal treatments) prior to their use or adoption.

For trials of new or innovative traffic control devices, treatments or practices, a submission in accordance with the requirements of Clause 1.13 of the Queensland *Manual of Uniform Traffic Control Devices* (Queensland MUTCD) Part 1 shall be submitted to TrafficEngineering.Support@tmr.qld.gov.au.

1.6 Responsibility and authority for installation

Addition

Append to the last sentence of the third paragraph:

In accordance with Clause 1.8.

1.7 General principles

1.7.2 Specific principles for signs

1.7.2.4 Non-standard signs and devices

Addition

For guidance on the use of non-standard traffic signs and devices in Queensland, refer to Clause 1.8 of the Queensland MUTCD Part 1.

1.8 Variation to treatments and Registered Professional Engineer of Queensland certification

New

This Part of the *Manual* contains mandatory requirements (*shall*), recommendations (*should*) and options (*may*). The application of these mandatory requirements and recommendations is intended to provide the optimal level of safety and traffic efficiency. It is acknowledged that, in some instances, variations to these requirements and recommendations may be necessary and as such, variations to these requirements and recommendations may be undertaken as follows:

- a) Where recommendations (*should*) are not adopted, a risk assessment shall be undertaken and certified by a Registered Professional Engineer of Queensland (RPEQ).
- b) Where mandatory requirements (*shall*) are not adopted, a risk assessment shall be undertaken and certified by an RPEQ.
 - Notifications of variations to mandatory requirements (including all relevant information) shall be emailed to TrafficEngineering.Support@tmr.qld.gov.au for information purposes and for the benefit of identifying potential future practice changes not for approval or endorsement. These variations may include learnings that may be attributed to the variation of a *shall* requirement, such as operational, cost or safety impacts.
- c) Where innovative treatments (see Clause 1.4.16) that are outside the scope of the Queensland MUTCD are proposed to be adopted, a risk assessment shall be undertaken and certified by an RPEQ.
- d) All proposed innovative treatments require approval by Transport and Main Roads prior to their use or adoption. Requests for approval of innovative treatments (including all relevant information) shall be emailed to TrafficEngineering.Support@tmr.qld.gov.au. As part of an approval to use or trial an innovative treatment, Transport and Main Roads may require that the application provides a detailed evaluation report on the performance and effectiveness of the treatment. Transport and Main Roads may use the results of the evaluation to identify potential future practice changes to this Part of the Manual.
- e) The use of options (*may*) is not a variation to the optimal treatment and does not require certification by an RPEQ.

- 2 Treatments at intersections
- 2.8 Direction control at intersections
- 2.8.5 Supplementary signs

Addition

(d) RIGHT LANE MUST U TURN (R2-9-Q01)



R2-9-Q01

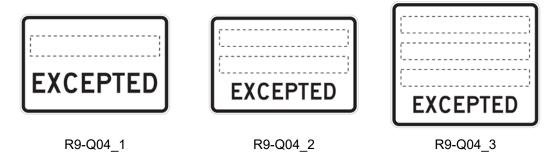
The RIGHT LANE MUST U TURN (R2-9-Q01) sign should be provided where an exclusive U-turn lane is provided at signalised intersections, and may be provided for exclusive U-turn lanes on higher order unsignalised intersections. Where provided, the sign should be located in the median near the beginning of the merge taper. Where advance information is required (such as in a trap lane scenario) R7-2, R7-12 or R9-8 supplementary plates may be provided along with further installations of R2-9-Q01).

Where a dedicated U-turn facility has been installed, the following signs from the department's Traffic Control Signs Database may be appropriate: TC9632, TC9634, TC9635, and TC9636.

2.8.6 Supplementary signs

Addition

(b) Exception signs



Additional exception classes may be used to supplement regulatory signs via the R9-Q04 template.

Exceptions for the following vehicle classes are permitted for use in Queensland:

TAXIS	TRAMS	TRUCKS
CONSTRUCTION	[COUNCIL]	CANE
VEHICLES	BUSES	VEHICLES
LOCAL	LOCAL	POLICE
DELIVERIES	TRAFFIC	VEHICLES
SERVICE	STOCK	T2/T3
VEHICLES	VEHICLES	VEHICLES
[COUNCIL]	[COUNCIL]	BUSES
AUTHORISED	AUTHORISED	m AND
VEHICLES	BUSES	UNDER
PERSONAL MOBILITY DEVICES	T3 AND TRUCK LANE VEHICLES	TRUCKS m AND UNDER
VEHICLES LONGER THAN m	VEHICLES SHORTER THAN m	
	CONSTRUCTION VEHICLES LOCAL DELIVERIES SERVICE VEHICLES [COUNCIL] AUTHORISED VEHICLES PERSONAL MOBILITY DEVICES VEHICLES LONGER	CONSTRUCTION VEHICLES BUSES LOCAL DELIVERIES TRAFFIC SERVICE SERVICE VEHICLES [COUNCIL] AUTHORISED VEHICLES PERSONAL MOBILITY DEVICES VEHICLES SHORTER

(d) Distance and location signs

ON SIDE ROAD (R9-Q05)



R9-Q05 (L)

The ON SIDE ROAD (R9-Q05) supplementary plate may be used below black on white signs to indicate that a message or requirement applies on a side road.

2.8.7 Signs for other direction instructions

Addition

(c) THROUGH TRAFFIC KEEP LEFT / RIGHT (R2-Q02)





R2-Q02 (L)

R2-Q02 (R)

The THROUGH TRAFFIC KEEP LEFT / RIGHT (R2-Q02) signs may be used to direct traffic to the desired side of a diverging road.

2.9 Advance warning of intersections

2.9.5 Signs (on the major road) for warning of a side road intersection

Addition

(d) Successive Side Road Intersections on a Curve – Outside (W2-Q01) (L and R)



W2-Q01(L)



W2-Q01(R)

The Successive Side Road Intersections on a Curve – Outside (W2-Q01) sign applies to situations where two successive side roads intersections occur on a curve, and the existence of the curve contributes to the magnitude of the hazard. The number of side roads shown on any one symbol shall be limited to two.

2.9.9 Signs for warning of private driveways

<u>Addition</u>

(b) SLOW TURNING TRAFFIC (W5-Q17)



7) sign may be used to

The SLOW TURNING TRAFFIC (W5-Q17) sign may be used to warn of the possibility of vehicles being inhibited from entering a driveway or property at a normal turning speed due to some form of constraint such as the opening of automatic gateways or pedestrian traffic.

2.14 Typical arrangement diagrams

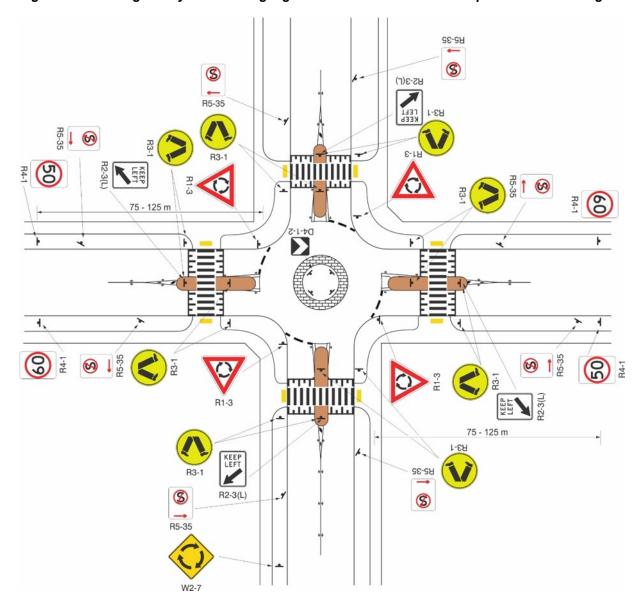
Addition

(i)

Figure 2.14.1	
NOTE 1	Pedestrian Crossing (R3-1) sign shall be installed on both sides of the lane and facing each approach, at or in the immediate vicinity of the pedestrian crossing, refer to Queensland MUTCD Part 10.
NOTE 2	The Roundabout (R1-3) sign shall be installed as near as possible to the give way line on all approaches, see Clause 2.6.3.
NOTE 3	For use of the Roundabout Ahead (W2-7) sign, see Clause 2.10.3(c).
NOTE 4	The Pedestrian Crossing Ahead (W6-2) sign shall be used in advance of pedestrian crossings (zebra) where visibility of the Pedestrian Crossing sign (R3-1) is obstructed due to road curvature or other local conditions, refer to Queensland MUTCD Part 10.
NOTE 5	Speed Restriction (R4-1) signs should be installed 30–50 m from intersections in urban areas, refer to Queensland MUTCD Part 4.
NOTE 6	The Road Hump (W5-10) sign shall not be used at raised pedestrian crossings (zebra), refer to Queensland MUTCD Part 13.
NOTE 7	For the required setback of the raised pedestrian crossing (zebra), refer to RPDM Volume 3 Part 4B.
NOTE 8	For markings on a raised pedestrian crossing (zebra), see Figure 5.15.
NOTE 9	The KEEP LEFT (R2-3(L)) sign may not be necessary where traffic is clearly required to pass to the left of the island or where a Roundabout (R1-3) sign is located in the island, see Clause 2.8.2(b).
NOTE 10	The No Stopping (R5-35) sign may be provided 20 m prior and 10 m past all raised pedestrian crossings (wombat) where yellow no stopping lines have proven to be ineffective.

- NOTE 11 The Unidirectional Hazard Marker (D4-1-2) sign should be used at local street roundabouts for each approach, but will necessarily be omitted where the central island is required to be mounted by larger turning vehicles. In these cases, other means of retroreflective delineation (e.g., RRPMs) together with an appropriate level of street lighting should be provided.
- NOTE 12 Where provided, landscaping in the central island should be low enough to not restrict visibility across the island.

Figure 2.14.1 – Regulatory and warning signs at roundabout with raised pedestrian crossings



- 3 Treatments at expressway interchanges and terminals
- 3.4 Control of movement and traffic access at ramp terminals
- 3.4.3 Signs for the regulatory control of expressway use and access

Addition

Classes of road users that may be displayed on the R6-13 and GE6-2 signs in Queensland include:

- Pedestrians
- Bicycles
- Animals
- Mopeds
- Agricultural Machinery
- Personal Mobility Devices
- 3.5 Direction control and guidance of traffic on expressways at and near interchanges
- 3.5.2 Signs for control of traffic entering or leaving the expressway

Difference

Replace note to item (d) with the following:

NOTE The S2 symbol shall be used on the sign where help phones are provided.

Addition

(e) EMERGENCY STOPPING BAY x m AHEAD (G9-90-1), EMERGENCY STOPPING BAY x km AHEAD (G9-90-2)



G9-90-Q01

The EMERGENCY STOPPING BAY & HELP PHONE x (m / km) AHEAD (G9-90-Q01) sign shall be used in lieu of the G9-90 series signs where a help phone is available.

- 4 Treatments between intersections
- 4.2 Pavement markings and delineation
- 4.2.4 Guide posts
- 4.2.4.2 Design and construction

Addition

The Department of Transport and Main Roads has issued a standard drawing for road edge guide posts. Refer to SD1356 *Road Edge Guide Posts – Post and Installation Details*.

4.2.4.4 Longitudinal spacing

Addition

(f): Bridges and culverts

Hazard marker posts may be installed to warn road users and maintenance personnel of a hazard in the vicinity of the hazard marker post. The Department of Transport and Main Roads has issued a standard drawing for hazard marker posts that indicate the location of hazard marker posts in relation to road edge guide posts at bridges at culvert sites that may be used. Refer to SD1851 *Hazard Marker – Post and Installation Details*.

4.2.7 Maintenance marker posts

<u>New</u>

Maintenance marker posts should be installed in accordance with Department of Transport and Main Roads SD1358 *Maintenance Marker Posts – Post and Installation Details* to indicate any item that requires regular maintenance, or which may otherwise be damaged by operation of maintenance machinery.

4.3 Treatment of substandard horizontal curves

4.3.5 Signs for substandard horizontal curves

Addition

(k): Tilting Truck (W1-8 Series)



W1-8-Q01

The Tilting Truck (W1-8-Q01) shall only be used when W1-8 series signs cannot be installed due to physical constraints.

Note: Right hand version is available, and the arrow may be adjusted to any of the arrows within the W1-8 series.

(I): WATCH FOR TRUCKS (W8-Q12)



W8-Q12

The WATCH FOR TRUCKS (W8-Q12) supplementary plate should only be used to supplement curve warning signs on narrow winding roads where there have been problems with large vehicles sweeping across the centre line.

4.3.6 Determination for the use of Curve Alignment Marker signs

4.3.6.2 Curve Alignment Marker signs

Addition

(b) Curve Alignment Marker x km/h (D4-7) (L and R)



D4-7-Q01

The Curve Alignment Marker x km/h (D4-7-Q01) sign may replace the first Curve Alignment Marker sign in a series of CAMs around a curve in accordance with the guidance for use of D4-7 where additional delineation is considered required.

- 4.5 Treatment of approaches to structures and obstructions
- 4.5.6 Signs for approaches to structures and obstructions
- 4.5.6.1 Regulatory signs

Addition

(d): RAMP LOAD LIMIT x t GROSS (R6-3-Q01)



R6-3-Q01

The RAMP LOAD LIMIT x t GROSS (R6-3-Q01) sign may be used in Queensland to indicate the maximum permissible gross load in tonnes of an on/off ramp.

(e): OVERALL WIDTH LIMIT x m (R6-33-Q01)



R6-33-Q01

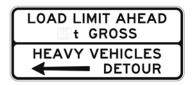
The OVERALL WIDTH LIMIT x m (R6-33-Q01) sign may be used in Queensland to indicate the maximum permissible overall width in metres of a vehicle on a section of road and if used shall be erected on the immediate approaches to the restricted section.

Detour signs shall be erected before and at an appropriate intersection in advance of the section to divert over-width vehicles (see Clauses 4.5.2.4 and 4.5.6.2).

4.5.6.2 Detour signs

Addition

(a): LOAD LIMIT AHEAD x t GROSS, HEAVY VEHICLES DETOUR (G9-4-Q01) (L/R)



G9-4-Q01

The LOAD LIMIT AHEAD x t GROSS, HEAVY VEHICLES DETOUR (G9-4-Q01) sign may be used in at Queensland in advance of an intersection with a detour.

4.5.6.3 Warning signs

Addition

(h): OVERHEAD WIRES (W5-Q16)



W5-Q16

The OVERHEAD WIRES (W5-Q16) sign may be installed in advance of overhead wires above a roadway, waterway, or thoroughfare.

At locations where boat masts are at risk of touching overhead wires W8-Q16 supplementary plate should be installed beneath W5-Q16. Where a clearance height is required to be shown the W8-Q16 supplementary plate should be installed.

(i): BOATS LOWER MASTS (W8-Q16)



W8-Q16

The BOATS LOWER MASTS (W8-Q16) sign should only be installed below W5-Q16.

(j): CLEARANCE x m (W8-Q17)



W8-Q17

The CLEARANCE x m (W8-Q17) sign should only be installed below W5-Q16.

- 4.6 Changes in pavement width
- 4.6.5 Signs for lane reductions (merges) and approaches to changes in pavement width
- 4.6.5.2 Signs for lane changes

Addition

Where a lane change requires the right lane to merge left, signs and pavement arrows in this clause shall be modified accordingly.

- 4.9 Water crossings
- 4.9.6 Signs for water crossings

<u>Addition</u>

(n): ON SIDE ROAD (G9-21-1-Q01)



G9-21-1-Q01

The ON SIDE ROAD (G9-21-1-Q01) supplementary plate shall be used with ROAD SUBJECT TO FLOODING INDICATORS SHOW DEPTH (G9-21-1 and G9-21-2) and ROAD SUBJECT TO FLOODING DO NOT ENTER WHEN FLOODED (G9-21-3) signs where a floodway on a side road is too close to the main road for G9-21-1, G9-21-2 or G9-21-3 to be installed on the side road.

- 4.10 Road block barriers
- 4.10.3 Associated device and marking

<u>Addition</u>

Boom Barrier (W5-Q11)



W5-Q11

Where a boom barrier is used across the roadway other than for active railway crossings (refer to Queensland MUTCD Part 7), the Boom Barrier (W5-Q11) warning sign shall be used in advance of the barrier at a distance in accordance with Appendix D.

4.11 Physical obstructions, road conditions and other hazards

4.11.3 Signs for warning of hazardous road conditions

Addition

(h): High Wind Area (W5-Q12), HIGH WIND AREA (W8-Q14)





W8-Q14

The High Wind Area (W5-Q12) and HIGH WIND AREA (W8-Q14) signs may be used in exposed areas where there are potential vehicle stability issues arising from strong cross winds.

(i): DRIFT SAND (W5-Q04)



W5-Q04

The DRIFT SAND (W5-Q04) sign may be used where the occurrence of drift sand represents a hazard to drivers.

(i): SOFT EDGES (W5-Q05)



W5-Q05

The SOFT EDGES (W5-Q05) sign may be used where the presence of soft, unsealed road shoulders represents a hazard to drivers.

4.11.4 Signs for warning of unexpected vehicles

Addition

(c): EMERGENCY VEHICLES (W5-36-Q01)



W5-36-Q01

The EMERGENCY VEHICLES (W5-36-Q01) sign shall be used where two or more emergency services are co-located. The sign shall be provided in lieu of other signs such as FIRE STATION (W5-36) and AMBULANCE STATION (W5-37), as applicable.

(g): Queued Traffic (W5-Q13)



W5-Q13

The Queued Traffic (W5-Q13) sign may be used to give advance warning to drivers of queued traffic ahead where stopping sight distance to the end of queue may not be achieved.

Where the Queued Traffic sign is installed, active devices that operate during times when queues are anticipated should be considered.

(h): Buses (W5-Q14)



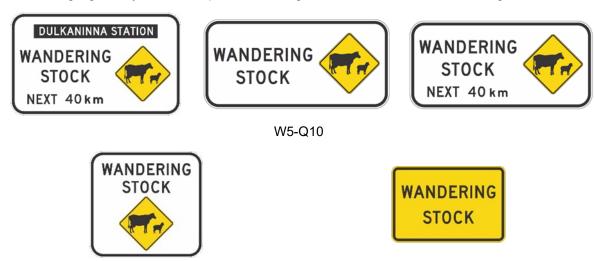
W5-Q14

The Buses (W5-Q14) sign may be used in advance of locations where entering buses may constitute an unexpected hazard, such as an intersection or driveway in proximity to a bus depot.

4.11.5 Signs for warning of wandering stock

Addition

The following signs may be used to provide warning of unfenced roads and wandering stock:



The WANDERING STOCK (W5-Q10) signs may be used for the warning of wandering stock due to adjacent unfenced property. If used, a sign shall be placed at the beginning of the section of road concerned and repeated as necessary. A station/property name should be used where applicable.

W8-Q13

The examples included above show both sheep and cattle. Where a single type of stock or horses are prevalent an alternate warning sign may be used.

The WANDERING STOCK (W8-Q13) supplementary plate shall only be used below the Stock (W5-38) warning sign.

4.11.6 Signs for warning of hazardous wildlife

W5-Q10

4.11.6.1 Warning signs

New

Wildlife warning signs shall be installed when:

- wildlife frequently encroaches onto the road or roadside in localised areas when there is a significant traffic volume, or
- where drivers are unlikely to expect wildlife.

Wildlife warning signs may be repeated (if warranted) at intervals of not less than five kilometres in rural areas, or as appropriate in urban areas. It may also be appropriate to sign short, individual lengths of road in specific locations where the risk of an animal / vehicle collision is greatest.

Wildlife warning and information signs are not specifically intended to perform an animal preservation role and research indicates that they are not particularly effective for this purpose. If the preservation of animals is critical other traffic management and animal management treatments will be required; signs alone are not adequate.

Wildlife warning signs should:

- · not be provided for migratory animals,
- be continually assessed for their need and relevance, and
- · be removed if no longer relevant.

4.11.6.2 Temporary warning signs

New

Temporary wildlife warning signs (W5-Q18 series) may be used where there have been recent sightings of wildlife, especially koalas and cassowaries, in a localised area.









Examples of temporary wildlife warning signs (W5-Q18)

4.11.6.3 High-impact warning signs

New

High impact wildlife warning signs consist of a white target board with a green border and incorporate an animal warning sign. Supplementary plates may be installed below where required.

High impact wildlife warnings signs should be used selectively at hotspot locations or in areas with significant conservation value. These signs may be used in conjunction with Wildlife Conservation Area (WCA) signs (see Clause 4.11.6.4) to highlight hotspots within the conservation area.

Figure 4.11.6.3 – Examples of wildlife warning signs with target boards









4.11.6.4 Wildlife Conservation Area (WCA) signing

New

Wildlife Conservation Area (WCA) signs (W5-Q19) should include the animal symbolic warning sign of the most prevalent animal in the area. WCA signs shall only be installed where the warrants for the included warning sign in accordance with Section 4.11.6 are met.



W5-Q19

WCA signs shall only be installed within the following locations where a 'conservation' status is related to wildlife and not for other reasons (such as scenic value or flora):

- protected areas under the Nature Conservation Act 1992 where vehicle / animal collisions are deemed likely:
 - national parks
 - conservation parks
 - resources reserves
 - nature refuges
 - coordinated conservation areas
 - wilderness areas
 - World Heritage management areas
 - international agreement areas.
- land within state forests, timber reserves or dedicated as a reserve (or protected area) for environmental purposes under the *Land Act 1994*
- a World Heritage Area under the World Heritage Convention
- an area supporting a critically endangered or endangered ecological community in the list established under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- a declared RAMSAR wetland under the EPBC Act
- an area of high nature conservation value under the Vegetation Management Act 1999, or
- an area, other than state-controlled land, identified in a local government's planning scheme as an area that has special environmental significance for native wildlife.

WCA signs should be erected as close as possible to the boundary of the conservation area but shall be placed so as not to compete with other traffic control devices or pose a safety hazard to road users.

WCAs may be marked with the wildlife threshold pavement marking in accordance with Clause 4.11.6.5. Green RRPMs should be used in conjunction with WCA signs (see Clause 4.11.6.6).

4.11.6.5 Wildlife threshold pavement marking

New

The wildlife threshold pavement marking is detailed in TC2321 and may be used to identify the start of signed WCAs. The wildlife threshold pavement marking should not be used at locations that do not meet the requirements of a WCA (see Clause 4.11.6.4). Wildlife threshold pavement marking should not be used on multi lane arterial roads.

The purpose of the wildlife threshold pavement marking is to complement the entry signs into a WCA and shall bear the words 'WILD LIFE', which shall be marked in accordance with Section 5.8.

Wildlife threshold pavement markings shall meet the skid resistance requirements of Transport and Main Roads' Technical Specification MRTS110 *Coloured Surface Treatments* and shall consist of a green background with a yellow border.

Green RRPMs shall be installed at all wildlife threshold pavement marking installations (see Clause 4.11.6.6).

4.11.6.6 RRPMs

New

Green RRPMs may be used at locations with WCA signs (see Clause 4.11.6.4) to highlight areas of greater wildlife significance, or where vehicle / animal collisions are significantly overrepresented. Green RRPMs shall not be installed with wildlife information signs.

Where green RRPMs are used for signing WCAs, they shall:

- a) be installed over the length the WCA
- b) be removed where no longer required
- c) be bi-directional and installed adjacent to the road edge line on both sides of the road
- d) be installed in addition to standard RRPM requirements as specified in Section 5.9
- e) not be installed on motorways
- f) not be installed on roads or in locations where they may pose a hazard to other road users, and
- g) have a minimum spacing of 48 m and not exceed a spacing of 96 m; spacing (m) shall be uniform over the length of the area defined by the WCA.

4.11.6.7 Vehicle activated devices

New

Vehicle activated devices incorporate a radar device that activates when a vehicle is travelling above a pre-set speed threshold and may be used as an alternative to passive signs. Either flashing lights (wig wags) or the whole sign may be vehicle activated.

These devices may be used where:

- there is an increased risk of animal / vehicle collisions, or
- due to elevated impacts with animals.

Vehicle activated flashing lights

Vehicle activated flashing lights shall be installed with a radar device capable of detecting vehicle speeds that activate the flashing of the lights in a wig wag arrangement. The devices shall be used with high impact wildlife warning signs (see Clause 4.11.6.3) to enhance sign conspicuity. The flashing lights shall operate alternately when activated by an approaching vehicle which is exceeding a nominated speed within the prescribed times of operation, or during set times when animals are likely to be encountered. The flashing lights shall continue to flash until the vehicle speed reduces to below the nominated speed or the vehicle continues past the sign.

Vehicle activated flashing light signs should be used selectively at critical locations where high impact wildlife warning signs need enhancement to improve driver speed compliance.

Vehicle activated signs

Vehicle activated signs may be used where the presence of animals along the road is expected and there is a poor compliance with the posted speed. These devices are installed with a radar device capable of detecting vehicle speeds and shall be pre-set with the posted speed limit. A relevant animal symbol that is easily understood by drivers shall be displayed on the sign. When a vehicle is detected, the sign shall activate as follows:

- Vehicle at or below the posted speed limit: device shall activate and cycle between a green symbolic of the animal and the message 'THANK YOU'. Cycle shall be between 1–2 seconds.
- Vehicle above the posted speed limit: device shall activate and cycle between a red symbolic
 of the animal and the message 'SLOW DOWN'. Cycle shall be between 1–2 seconds.

4.11.7 Signs for warning of temporary or part time hazards

Addition

(f): CHANGED TRAFFIC CONDITIONS (T1-23-Q01)



T1-23-Q01

The CHANGED TRAFFIC CONDITIONS (T1-23-Q01) sign may only be used on roads with both a maximum posted speed limit of 60 km/h and where the available verge width is less than 2 metres.

4.11.8 Vehicle mounted signs

Addition

(c): Other vehicle mounted signs

NOTE In addition to the signs prescribed below, certain other requirements for special vehicles are prescribed in the *Transport Operations (Road Use Management) Act 1995.*

4.12 Miscellaneous signs

4.12.2 Miscellaneous regulatory signs

Addition

(h) WEAVING TRAFFIC (W5-Q15)



W5-Q15

The WEAVING TRAFFIC (W5-Q15) sign may be used where traffic has a short distance to cross between adjacent lanes to enter or exit a road.

4.12.3 Heavy vehicle control and information signs

Difference

Replace Item (c) with:

The BUSES MUST ENTER (R6-18) and TRUCKS MUST ENTER (R6-27) signs shall not be used at the entrance to heavy vehicle checking stations (heavy vehicle interception sites).

For guidance on the signing and line marking for heavy vehicle interception sites, refer to the <u>Signing and Line Marking for Heavy Vehicle Interception Sites Guideline</u>.

Addition

(e): TRUCKS AND BUSES USE LEFT LANE (R6-28-Q01)



R6-28-Q01

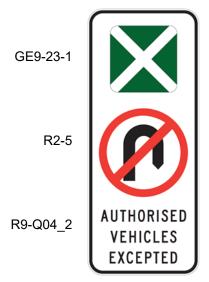
The TRUCKS AND BUSES USE LEFT LANE (R6-28-Q01) shall be used to indicate a mandatory requirement for trucks and buses to use the left lane.

4.12.4 Emergency access location signs

Addition

(a): Emergency Median Crossing (GE9-23-1), Emergency Median Crossing x m (GE9-23-2)

At emergency access locations located in the median, a combination of Emergency Median Crossing (GE9-23-1), No U Turn (R2-5), and AUTHORISED VEHICLES EXCEPTED (R9-Q04_2) signs may be used where there is a history or high likelihood of unauthorised vehicles performing U-turns.



(b): Emergency Access (GE9-24-1), Emergency Access Direction (GE9-24-2) (L and R)

Where an advance sign may be required for an Emergency Access (GE9-24-1) or Emergency Access Direction (GE9-24-2) (L and R) sign, a Supplementary Distance Plate x m (G9-66) may be added below the GE9-24 series signs.

4.12.5 Signs for warning of cane vehicles

New

The following signs may be used to warn of cane vehicles:

(a) Cane Vehicle Crossing (W5-50-Q01), CANE VEHICLE CROSSING (W5-50-Q02)



The Cane Vehicle Crossing (W5-50-Q01), CANE VEHICLE CROSSING (W8-Q15) signs may be used at locations where cane vehicles cross the roadway. Where cane vehicles are likely to cross multiple locations along a road, or travel along a road, see item (b).

(b) SUGAR CANE AREA WATCH FOR SLOW VEHICLES HAULING CANE (G9-Q03_1), SUGAR CANE AREA SLOW VEHICLES (G9-Q03_2)





G9-Q03_1

G9-Q03_2

SUGAR CANE AREA

The SUGAR CANE AREA WATCH FOR SLOW VEHICLES HAULING CANE (G9-Q03_1), SUGAR CANE AREA SLOW VEHICLES (G9-Q03_2) signs may be used where cane vehicles are likely to cross multiple locations along a road, or travel along a road.

- 5 Pavement markings
- 5.3 Longitudinal lines
- 5.3.10 Audio tactile line marking
- 5.3.10.1 General

Deletion

Delete Table 5.4.

Difference

Replace:

The dimensions of audio-tactile ribs are given in Table 5.4.

with:

Dimensions and tolerances for audio-tactile ribs are given in Transport and Main Roads Technical Specification MRTS45 *Road Surface Delineation* Table 7.9.2.

<u>Addition</u>

For additional guidance on the use of audio-tactile line marking refer to the *Queensland Guide to Road Safety* Part 2: Safe Roads Section 11.2.4.4.

5.3.10.2 Noise considerations

Addition

Noise considerations are given in the *Queensland Guide to Road Safety* Part 2: Safe Roads Section 11.2.4.4.4.

5.3.10.3 Audio-tactile edge line

Addition

Provision of gaps in audio-tactile edge lines for cyclists is given in the Queensland Guide to Road Safety Part 2: Safe Roads Section 11.2.4.4.6.

5.3.10.4 Audio-tactile dividing line

Addition

White audio-tactile ribs may be used on top of dividing lines where required by project constraints.

5.4 Wide centre line treatment

5.4.2 Application

5.4.2.1 General

<u>Difference</u>

Replace entire clause with:

The design of wide centre line treatments (WCLT) is predominantly influenced by road conditions and can impact the road cross-section and pavement design. At the initial stage of designing wide centre line treatments, the Department of Transport and Main Road's *Road Planning and Design Manual – Edition 2*: Volume 3, Supplement to Austroads *Guide to Road Design* Part 3: Geometric Design (RPDM Part 3) is the primary reference.

The RPDM Part 3 also covers WCLT requirements under Normal Design Domain and Extended Design Domain conditions, along with transition details for various scenarios.

The requirements for line types and how to transition the line marking into the connecting network, as defined in this document, is required once the design has progressed into final detailed design.

5.4.2.2 Width

Difference

Replace:

Where the seal width is not sufficient to provide a separation width of 1 m, the width may be reduced to a minimum of 0.6 m. Widths narrower than 0.6 m may be permitted by jurisdictional guidance.

with:

Refer to RPDM Part 3 for guidance on wide centre line treatment widths under both normal design domain and extended design domain.

5.4.2.3 Start and end transitions

Difference

Replace Note 2 of Figure 5.10:

L is the transition distance calculated from traffic speeds and rate of lateral movement in accordance with road design practice, where W is the lateral movement distance (i.e. shift from normal dividing line to one side of the wide centre line treatment line).

with:

Refer to RPDM Part 3 for WCLT transition distance requirements.

5.4.2.5 At intersections and driveways

Addition

For the design requirements regarding permitting turning at minor intersections and driveways where double two-way barrier lines are installed, refer to the RPDM Part 3.

5.4.2.6 Transitions at narrow structures and overtaking lanes

Difference

Replace Note 2 of Figure 5.13:

A transition back to normal dividing line is shown. However the WLCT may be continued through the structure if the residual width available, after maintaining the lane widths, is greater than 0.6 m, see Clause 5.4.2.2.

with:

The width of the WCLT over the narrow bridge structure is the residual width available while maintaining the lane and shoulder widths. These widths may vary at successive structures dependent on the residual width available.

5.4.2.7 Sign requirements

Addition

The following signs may be used in Queensland to inform motorists where overtaking is not permitted and where overtaking is permitted when safe to do so.









5.5 Transverse Lines

5.5.2 Give way lines

Difference

Replace Item (c) with:

At a roundabout, to indicate the safe position for a vehicle to be held before entering. The line shall be placed across the entering road. The line may be along the edge of the circulating roadway (see Figures 2.8 and 2.9) or set back up to five metres from the edge of circulating roadway. The line may be staggered on multiple lane approaches.

5.8 Messages on pavements

5.8.5 KEEP CLEAR marking

<u>Addition</u>

Where an installation of KEEP CLEAR pavement marking applied in accordance with this clause has proven to be ineffective, the KEEP INTERSECTION CLEAR G9-67-Q01 sign may be installed to further discourage queuing across the intersection.



G9-67-Q01

5.9 Raised pavement markers

5.9.5 Application of raised pavement markers

5.9.5.2 **General**

Addition

Where RRPMs are used to augment lane lines, edge lines, and outline markings adjacent to bicycle lanes (or sealed shoulders forming part of an identified cycle network) which are less than 1.5 m wide, they shall not be placed within the bicycle lane (or sealed shoulder), but on the opposite side of the line which they are augmenting.

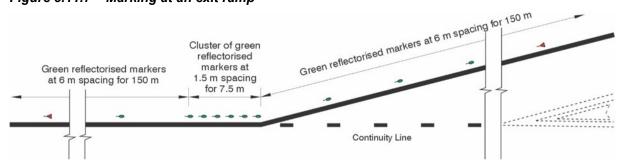
5.11 Pavement markings at entrance and exit ramps

5.11.7 Exit ramp marking

New

The making shown in Figure 5.11.7 is the normal exit ramp marking. To delineate the approach to and entrance of an off ramp, green uni-directional RRPMs are used in association with the edge line.

Figure 5.11.7 – Marking at an exit ramp



Appendices

Appendix H: Signs for wildlife awareness (normative)

Addition

Wildlife awareness signs shall indicate only one animal species that is likely to be present. If there are different types of animals encroaching on the roadside within an area and wildlife awareness signs are required for multiple animal species, only the animal most at risk from traffic strikes shall be installed.

The sizes of wildlife awareness signs shall be:

- Size A: 750 x 600 mm, where the speed limit is posted ≤ 80 km/h.
- Size B: 900 x 720 mm, where the speed limit is posted > 80 km/h.

The following conditions apply to wildlife awareness signs:

- Signs should not be provided for migratory animals.
- Signs should only be provided where the presence of animals on the road is expected.
- Signs shall be continually assessed for their need and relevance.
- Signs that are no longer applicable shall be removed.

Wildlife awareness signs should not be erected on the same post as wildlife warning signs (with the exception of W8-Q18). Wildlife warning signs take precedence over wildlife awareness signs. Signs should be located where the animals are likely to be encountered and not too far in advance.

The 1300 ANIMAL sign (W8-Q18) may be used to supplement wildlife awareness signs to provide motorists with a single point of contact to report injured animals. No other phone numbers shall be included on the sign. The RSPCA shall first be contacted prior to installation of a sign bearing the 1300 ANIMAL number to ensure adequate services operate in the area the sign is to be installed.

The following wildlife awareness signs may be used in Queensland.









Examples of W5-Q20



W8-Q18



CARE FOR OUR
ISLAND'S
WILDLIFE
REPORT INJURED
ANIMALS PHONE
1300 ANIMAL



W8-Q19

W5-Q21

W5-Q22