

Figure 4.27 FLOODWAYS

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4.10.6.3 FORD (W5-6)



W5-6

The FORD sign shall be used to warn of a ford as described in Clause 4.10.1(b).

Depth Indicators (G9-22) and the sign ROAD SUBJECT TO FLOODING, INDICATORS SHOW DEPTH (G9-21) shall be used with this sign (see Clauses 4.10.6.9 and 4.10.6.10).

**4.10.6.4 FLOODWAY (W5-7-1)
FLOODWAYS (W5-7-2)**



W5-7-1

The FLOODWAY sign shall be used to warn of a floodway as described in Clause 4.10.4.

Depth Indicators (G9-22) and the sign ROAD SUBJECT TO FLOODING, INDICATORS SHOW DEPTH (G9-21) shall be used with this sign (see Clauses 4.10.6.9 and 4.10.6.10).



W5-7-2

The FLOODWAYS (W5-7-2) sign may be used in conjunction with the NEXT x km (W8-17-1) sign (see Clause 4.10.6.12) to warn of a number of floodways on the road at spacings not exceeding 2 km (see Clause 4.10.4(b)).

4.10.6.5 LOW LEVEL BRIDGE (W5-8)



W5-8

The LOW LEVEL BRIDGE sign shall be used to warn of an abrupt descent from the normal approach road level to a bridge at a lower road level. It is used in accordance with the requirements and recommendations of Clause 4.10.5.

4.10.6.6 ON SIDE ROAD (W8-3)



W8-3(L)

The ON SIDE ROAD sign shall be used as a supplement to the FERRY sign (W5-1) (see Clause 4.10.6.1) to warn of a ferry on a side road in proximity to the through road, where the normal distance requirements for placement of the sign on the side road cannot be met.

The ON SIDE ROAD sign shall be erected on the same post as, and below, the warning sign with which it is associated.

4.10.6.7 STOP HERE ON RED SIGNAL (R6-6)



R6-6

The STOP HERE ON RED SIGNAL sign shall be used near the signals located at opening and one-lane bridges, and in any other situation where a vehicle is required to stop at a red signal and the position at which the vehicle must stop is not readily apparent.

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4.10.6.8 STOP banner (R6-8)



R6-8

The STOP banner shall be used to stop traffic approaching a ferry landing, opening bridge or other obstruction where at times, all traffic must stop until the sign is removed from display. Where a road block barrier (see Clause 4.11.1) is installed, the STOP banner shall be affixed to the centre of the boom to face approaching traffic.

4.10.6.9 ROAD SUBJECT TO FLOODING INDICATORS SHOW DEPTH (G9-21)



G9-21-1



G9-21-2

The ROAD SUBJECT TO FLOODING, INDICATORS SHOW DEPTH sign shall be erected on the left side of the road on which Depth Indicators (G9-22) are used, to advise drivers that the road ahead may be covered by floodwaters. A similar sign, ROAD SUBJECT TO SNOW, INDICATORS SHOW DEPTH, may be used at appropriate locations.

4.10.6.10 Depth indicator (G9-22)



G9-22-1A



G9-22-1B



G9-22-2



G9-22-3

Depth Indicators shall be used where floodwaters across the road are likely to rise to an unfordable depth.

The G9-22-1 indicator shall be used at all fords, floodways and low level bridges. It shall be displayed so as to be clearly visible to drivers before reaching the flooded part of the road. Where necessary, separate indicators should be provided on each approach. The zero mark should be set at the lowest pavement level on the section of road liable to flooding.

Where flood depths in excess of 1.5 m or 3.5 m are expected, the G9-22-2 and G9-22-3 indicators shall be erected on progressively higher ground.

4.10.6.11 (Distance) x m (W8-5)



G9-21-1

The (Distance) x m sign shall be used in conjunction with a warning sign to give additional prior warning of the hazard.

4.10.6.12 NEXT x km (W8-17-1)



W8-17-1

The NEXT x km sign shall be used to indicate a number of similar hazards over a specified distance. It is typically used with the FLOODWAYS (W5-7-2) sign.

4.10.6.13 NEXT x km (R9-7-1)



R9-7-1

This sign may be used with the ROAD SUBJECT TO FLOODING ... (G9-21) sign to indicate more than one floodway ahead.

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4.11 PHYSICAL OBSTRUCTIONS AND HAZARDS

4.11.1 Road block barriers

4.11.1.1 Application

Road block barriers may be used wherever temporary closure of the road to vehicular traffic is required due to some physical obstruction or hazard on the roadway ahead, e.g. a ferry or opening bridge, or where there is a legal requirement for all vehicles to stop, e.g. for animal, plant or fruit quarantine checks. They should not be installed if devices such as traffic signals, regulatory signs or hand banners are shown to be effective and adequate.

4.11.1.2 Construction and location

Barriers shall be of light construction so that they are not likely to be a hazard if struck by a vehicle. They shall be located and delineated so that traffic approaching at normal speeds can detect their presence in time to stop. Appropriate advance warning signs shall be used. Where booms are used they should, when lowered, extend horizontally from the left edge of the pavement to at least the centre of a two-way roadway, or at least three-quarters of the width of a one-way roadway.

4.11.1.3 Associated device and marking

The boom shall be finished in alternate stripes of contrasting colour, one or both colours being reflectorised and a STOP banner (R6-8B) (see Clause 4.10.6.8) fixed to it.

In addition, information signs may be erected. Typical examples are shown in Figure 4.28.

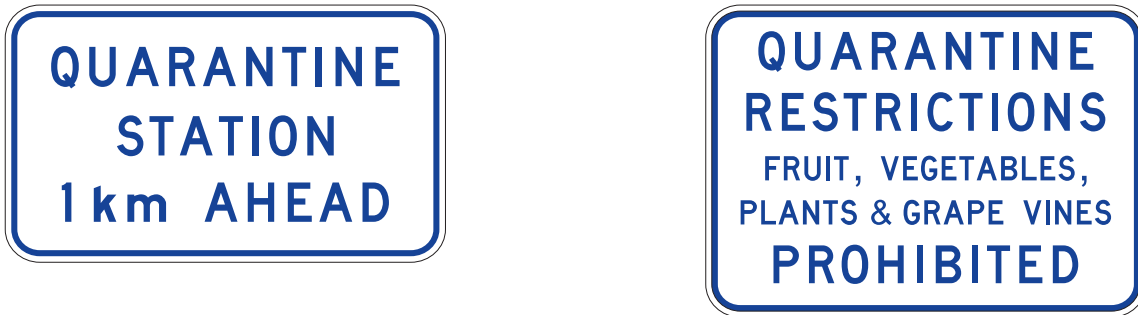


Figure 4.28 EXAMPLES OF QUARANTINE STATION SIGNS

4.11.2 Hazard warning signs

4.11.2.1 General

The signs in this series warn road users of hazardous road conditions which are not covered by specific treatments elsewhere in the Manual. The signs are listed in Table 4.10.

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Table 4.10 SIGNS FOR HAZARDOUS ROAD CONDITIONS – SIZE TABLE

Sign type	Sign Number	Size (mm)
ROAD ENDS	W5-18	A 600 x 600 B 750 x 750 C 900 x 900
GRAVEL ROAD	W5-19	
Slippery	W5-20	
Trucks Crossing or Entering	W5-22	
Kangaroos	W5-29	
Aircraft	W5-30	
FIRE STATION	W5-36	
AMBULANCE STATION	W5-37	
Stock	W5-38	
Tram	W5-41	
Fallen rocks	W5-42(L,R)	
UNEVEN SURFACE	W5-43	
Camel	W5-44	
Emu	W5-45	
Wild horse	W5-46	
Koala	W5-47	
Wombat	W5-48	
WILD ANIMALS	W5-49	
FARM MACHINERY	W5-50	
WHEN WET	W8-7	
WHEN FROSTY	W8-8	
UNDER SNOW	W8-9	
BOGGY WHEN WET	W8-21	
ON BRIDGE WHEN FROSTY	W8-29A	600 x 750
	W8-29B	750 x 937
	W8-29C	900 x 1125
(Distance) x m	W8-5A	600 x 200
	W8-5B	750 x 250
	W8-5C	900 x 300
NEXT x km	W8-17-1A	600 x 400
	W8-17-1B	750 x 500
	W8-17-1C	900 x 600
REDUCE SPEED	G9-9A	1500 x 750
	G9-9B	1800 x 900
NO THROUGH ROAD	G9-18A	600 x 400
	G9-18B	900 x 600
ROAD CLOSED	G9-20	900 x 550
Stock AHEAD	T1-19A	900 x 600
	T1-19B	1200 x 900
TRAFFIC HAZARD	T1-10	1200 x 600
NEW ROUNDABOUT	T1-21	1800 x 600
CHANGED SIGNALS	T1-22	1200 x 600
CHANGED TRAFFIC CONDITIONS	T1-23	1800 x 900
CHANGED INTERSECTION	T1-33	1800 x 600
ROAD CLOSED	T2-4	1800 x 300

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Table 3.10 SIGNS FOR HAZARDOUS ROAD CONDITIONS – SIZE TABLE (cont.)

Sign type	Sign Number	Size (mm)
WATER OVER ROAD	T2-13A	900 x 600
	T2-13B	1200 x 900
Trucks crossing or entering	T2-25	900 x 600
SMOKE HAZARD	T4-6A	900 x 600
	T4-6B	1200 x 900
SCHOOL BUS	T6-4	Variable
Give way to buses	R6-31	450 x 450

4.11.2.2 ROAD ENDS (W5-18)



W5-18

The ROAD ENDS sign shall be used to warn of the end of a road where, because of visibility or grades, drivers need prior warning so that they may stop in time.

4.11.2.3 GRAVEL ROAD (W5-19)



W5-19

The GRAVEL ROAD sign shall be used to warn road users at the approach to a section of unsealed road.

This sign should be used in conjunction with a NEXT x km supplementary plate (W8-17-1) (see Clause 4.10.6.12) where the gravel road extends for only a short distance, typically 5 km or less. It may also be used in conjunction with a BOGGY WHEN WET supplementary plate (W8-21) (see Clause 4.11.2.11).

The sign shall not be used on a sealed road in advance of a turnoff to an unsealed road.

4.11.2.4 Slippery (W5-20)



W5-20

The Slippery sign shall be used to warn of a section of pavement on which the skid resistance has been reduced to an unexpectedly low level. Its use shall be restricted as follows:

- (a) Except as specified below, it shall be limited to use as a temporary measure only pending appropriate restoration of the pavement surface. The exceptions are -
 - (i) signs in advance of a bridge deck or similar which may be affected by frost and which is not amenable to skid resistance restoration; and
 - (ii) pavements on which black ice is likely to form.

(b) The sign shall not be used on slippery surfaces where drivers would expect them to be slippery in the normal course, e.g. unsealed roads, pavements under snow.

(c) The sign shall be removed as soon as the skid resistance of the pavement under all likely weather conditions, has been restored to an acceptable level.

The relevant supplementary plates in Clause 4.11.2.10 shall be used with the sign.

On a long length of slippery road the sign should be repeated at intervals of not more than 3 km.

NOTE: An acceptable minimum skid resistance value should be established and wherever practicable measurements taken at doubtful sites to determine whether slippery signs should be used.

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4.11.2.5 Trucks (crossing or entering) (W5-22)



W5-22

The Trucks (Crossing or Entering) sign shall be used where it is necessary to warn of the frequent movement of trucks to or from an adjoining property.

If the truck movements are occasional or seasonal the sign T2-25, displayed as a temporary sign, shall be used instead.



T2-25

4.11.2.6 Stock (W5-38)



W5-38

The Stock sign shall be used if there is a need to warn of the unexpected presence of wandering stock in the road reserve. The NEXT x km (W8-17-1) supplementary plate should be used in conjunction with this sign (see Clause 4.11.2.15) when used for this purpose.

It may also be used as part of an active signal system at a stock crossing.

Except as indicated above, this sign shall not be used for situations where stock is crossing or driving along a road under control. The Stock Ahead (T1-19) sign (see Clause 4.11.3.4) shall be used for this purpose.

Where there is likely to be wandering stock on an unfenced road, e.g. on outback pastoral leases, a W5-Q10 sign shown in Figure 4.29 may be used in lieu of the Stock sign. The sign, if used, shall be placed at the beginning of the section of road concerned and repeated as necessary. The first and any other sign located close to a grid shall be located 100 to 150 m beyond the grid.



FIGURE 4.29 UNFENCED ROAD WATCH FOR WANDERING ANIMALS (W5-Q10) SIGN

4.11.2.7 Hazardous wildlife

Kangaroo	(W5-29)
Camel	(W5-44)
Emu	(W5-45)
Wild horse	(W5-46)
Koala	(W5-47)
Wombat	(W5-48)
WILD ANIMALS	(W5-49)

Hazardous wildlife signs shall be used to warn road users of the unexpected presence of wild animals on the road which may be a hazard to road users.

Signs shall be used only where hazardous wild animal activity is most likely to occur. Distance plates shall not be used with these signs except for short distances over which animal activity is known to be continuous.

Where there are several types of animal that may be a hazard at a particular location, the sign WILD ANIMALS may be used. If there are only two animals of significant hazard, instead of using the WILD ANIMALS sign, they may both be depicted on the one sign. The alternative of signing only the animal of greatest threat may be sufficient within a localised area even though other kinds may be a potential hazard. See also Clause 4.11.2.6 regarding wandering stock within the road reserve and on unfenced roads.

NOTE: This Standard does not specify symbolic warning signs for small animals. The efficacy of warning signs to protect small animals that may wander onto the road is at least doubtful. Appendix G illustrates a series of informative signs that may be used to alert road users to the presence of wildlife in the vicinity.



W5-29



W5-44



W5-45



W5-46



W5-47



W5-48



W5-49

4.11.2.8 Aircraft (W5-30)



W5-30

The Aircraft sign may be used in the vicinity of an airfield to warn that aircraft may fly over the road at a low altitude.

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4.11.2.9 FIRE STATION (W5-36), AMBULANCE STATION (W5-37)



W5-36



W5-37

These signs shall be used in advance of the entrance to a fire station or ambulance station to warn traffic in time to avoid an emergency vehicle that may exit suddenly from the station.

4.11.2.10 WHEN WET (W8-7), WHEN FROSTY (W8-8), UNDER SNOW (W8-9), ON BRIDGE WHEN FROSTY (W8-29)



W8-7



W8-8



W8-9



W8-29

The WHEN WET, WHEN FROSTY and UNDER SNOW signs shall be placed below the Slippery sign (W5-20) where it is desired to indicate specific conditions (see Clause 4.11.2.4). The sign ON BRIDGE WHEN FROSTY shall be used to indicate that the bridge deck may be slippery but not the approach road.

Other legends may be used as required.

4.11.2.11 BOGGY WHEN WET (W8-21)



W8-21

The BOGGY WHEN WET sign shall be used as appropriate in conjunction with the GRAVEL ROAD sign (W5-19) (See Clause 4.11.2.3), and the NEXT x km supplementary plate (W8-17-1) (see Clause 4.11.2.13).

4.11.2.12 (Distance) x m (W8-5)



W8-5

The (Distance) x m sign shall be used in conjunction with a warning sign where an indication of distances of less than 1 km to the hazard is desirable. Distances should be indicated as follows:

0 to 500 m - to the nearest 50 m

501 to 900 m - to the nearest 100 m

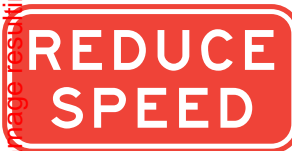
4.11.2.13 NEXT x km (W8-17-1)



W8-17-1

The NEXT x km sign shall be used in conjunction with the Stock sign (W5-38) (see Clause 4.11.2.6), where the hazard exists for a distance of 1 km or more. The distance shall be shown to the nearest 1 km.

4.11.2.14 REDUCE SPEED (G9-9)



G9-9

The REDUCE SPEED sign may be erected at sites where the approach speed of traffic is high and the majority of drivers must slow down and may be required to stop. Where used, it shall be erected in conjunction with the appropriate standard warning sign so that the reason for the reduction in speed is apparent to a driver.

REDUCE SPEED signs shall not be erected instead of other standard warning devices and signs, and generally should not be erected unless the other devices have proved to be, or are likely to be ineffective. They should not be regarded as a cure for every high-speed traffic situation; indiscriminate and frequent use will destroy the impact which the sign, properly used, has on approaching drivers.

REDUCE SPEED signs should be erected 60 to 120 m in advance of the appropriate warning sign so that both signs are visible at the same time to an approaching driver.

4.11.2.15 ROAD CLOSED (G9-20)



G9-20

The ROAD CLOSED sign shall be erected in the centre of a road that is closed to vehicular traffic. It should be erected in conjunction with a permanent barrier across the roadway.

Partial or complete road closures in accordance with Part 3 of the Manual may be required if a road is temporarily closed to approaching through traffic.

4.11.2.16 NO THROUGH ROAD (G9-18)



G9-18

The NO THROUGH ROAD sign shall be used to advise traffic not to enter a dead-end local road in error and should face drivers likely to turn into the road.

NOTE: A NO THROUGH ROAD sign (G5-10) designed to be used in conjunction with street name signs, is specified in Part 5 of the Manual.

4.11.2.17 Tram (W5-41)



W5-41

This sign shall be used to warn of the possible unexpected appearance or presence of a tram, e.g. when entering a street from its own right of way or parked at a terminus.

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4.11.2.18 Fallen rocks (W5-42)

W5-42(L)



W5-42(R)

This sign shall be used to warn of locations where there may be a hazard from rocks that have fallen onto the roadway. The right hand version of this sign would not be required where the potential rock fall would not affect drivers passing to the left of it.

4.11.2.19 UNEVEN SURFACE (W5-43)

W5-43

This sign shall be used to warn of the unexpected onset of road conditions on sealed roads with significantly reduced riding qualities. It shall not be used on unsealed roads.

4.11.2.20 Farm machinery (W5-50)

W5-50

The Farm Machinery sign shall be used on roads where the presence of slow moving or overwidth farm machinery would be an unexpected hazard.

4.11.3 Warning signs for temporary or part time hazards**4.11.3.1 Water over road (T2-13)**

T2-13

The WATER OVER ROAD sign shall be used to indicate that the road is trafficable with care although there is water over the road.

3.11.3.2 Smoke hazard (T4-6)

T4-6

The SMOKE HAZARD sign shall be used to warn traffic of the possible loss of visibility due to smoke from roadside burning off, sugar cane fires or any other cause.

4.11.3.3 Vehicle mounted signs

(a) Give Way to Buses (R6-31)



R6-31

This sign shall be displayed on the rear of public buses to indicate that following traffic is required to give way to the bus as it drives from a bus stop into the following stream of traffic.

(b) SCHOOL BUS (T6-4)



T6-4

The SCHOOL BUS sign shall be attached to passenger carrying vehicles when they are primarily engaged in the transport of school children to or from school, and shall be displayed only when the vehicle is in use for such purpose.

(c) Other vehicle mounted signs

Signs shall be used as necessary to indicate the special loads being carried or the specialised nature of work being undertaken by service vehicles that could create a hazard to traffic whilst so engaged. The design of these signs shall conform with that of other signs in the T series, i.e. black legend on a yellow background. Sign design principles to ensure adequate legibility and reading time should be observed.

Vehicle mounted signs associated with works on roads are specified in Part 3 of this Manual. Where excess dimension loads are being carried, or where the nature of the vehicle could create a hazard to traffic, specific vehicle mounted signs shown below are displayed on appropriate vehicles. These vehicles may require a permit under the Transport Operations (Road Use Management) Act.

NOTE: In addition to the signs prescribed below, certain other requirements for special vehicles are prescribed in the Transport Operations (Road Use Management) Act. Details of other vehicle marker plates are included in AS4001 – Motor Vehicles – Rear Marker Plates.

ROAD TRAIN (T6-Q01)



T6-Q01

The ROAD TRAIN sign (T6-Q01) shall be affixed to the front of the hauling unit and to the rear of the rearmost trailer of all road trains.

The sign shall consist of a yellow reflectorised background not less than 1200 mm long and 250 mm wide with the legend ROAD TRAIN in black letters not less than 180 mm high.

The warning sign at the front of the vehicle shall be mounted so that it is not below the bumper bar of the hauling unit. The rearmost warning sign is to be mounted a maximum of three metres above the ground.

(i) OVERSIZE LOAD AHEAD (T6-Q04)



T6-Q04

Excess dimension vehicles or vehicles carrying excess dimension loads may be required to be escorted by a pilot vehicle/s. Signing is required for pilot vehicles. Sign T6-Q04 (double-sided) is required to be mounted on the roof of the pilot vehicle/s.

Both faces of the sign shall consist of a yellow reflectorised background 1200 mm long and 600 mm wide with the legend OVERSIZE and LOAD AHEAD in black letters not less than 200 mm high and 100 mm high, respectively.

(ii) OVERSIZE (T6-Q03)



T6-Q03

The excess dimension vehicle shall display the OVERSIZE (T6-Q03) sign affixed to the front of the hauling unit and at the rear of the vehicle (or load).

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The sign shall consist of a yellow reflectorised background not less than 1200 mm long and 450 mm wide with the legend in black letters not less than 200 mm high.

The warning sign shall be mounted so that it is not below the bumper bar or, if there is no bumper bar, at least 500 mm above ground level.

4.11.3.4 Stock AHEAD (T1-19)



T1-19

The Stock AHEAD sign shall be used as a temporary sign where stock is being driven across or along a road under the control of a person other than where an active signalling device has been installed. It may be displayed on either a moveable stand or as a fixed folding type sign. In either case it shall only be displayed when stock under control is either on or about to enter the roadway.

4.11.3.5 Changed traffic conditions signs

The following signs should be used to warn regular users of a route that changes to traffic conditions have been made. They shall be displayed for a limited period only, after the change has been made:

- (a) NEW ROUNDABOUT (T1-21)
- (b) CHANGED SIGNALS (T1-22)
- (c) CHANGED TRAFFIC CONDITIONS (T1-23)
- (d) CHANGED INTERSECTION (T1-33)

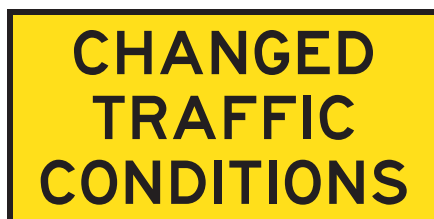
The CHANGED TRAFFIC CONDITIONS sign shall be used only when none of the other three signs apply.



T1-21



T1-22



T1-23



T1-33

4.11.3.6 ROAD CLOSED (T2-4)



T2-4

The ROAD CLOSED sign should be used at any temporary closure of the road due to the presence of blockages such as non-trafficable flood waters, fallen trees or accidents.

A NO ENTRY sign may be used with the ROAD CLOSED sign.

3.11.3.7 TRAFFIC HAZARD (T1-10)



T1-19

The sign TRAFFIC HAZARD is for emergency use only, and may be used whenever any unexpected event causes a traffic hazard. Should the hazard remain for any appreciable time, this sign shall be replaced as soon as possible, generally within 24 h, by signs more appropriate to conditions imposed on traffic. In addition, other signs and devices may be needed to define the hazard limits and to guide traffic, particularly where hazard is not readily evident.

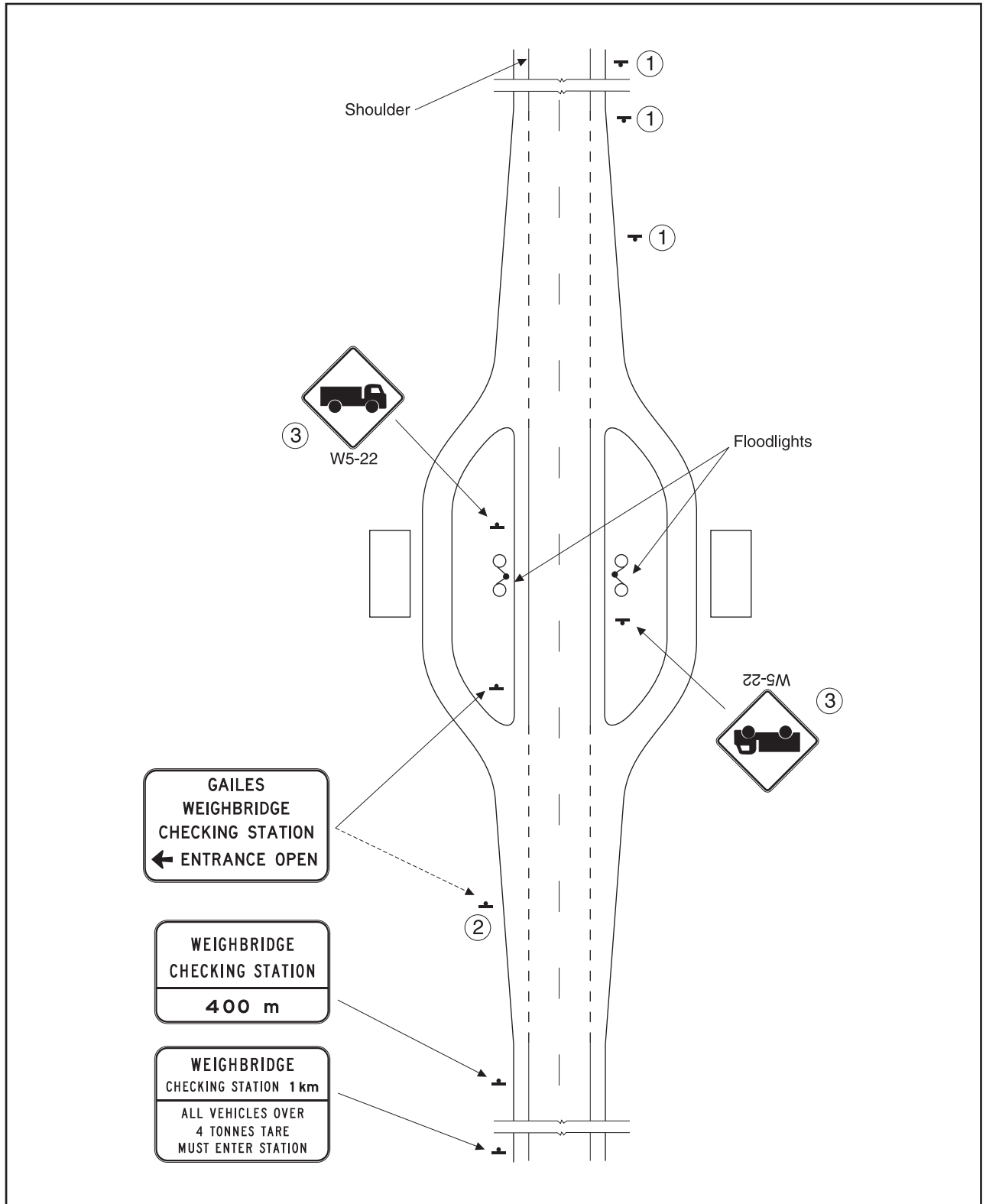
4.11.4 Miscellaneous installations

4.11.4.1 Truck checking stations and weighbridges

Truck checking stations and weighbridges are set up on roads to assist in the enforcement of vehicle mass and dimension regulations. A typical treatment is shown in Figure 4.30.

4.11.4.2 Traffic survey interview stations

The main points to be considered in establishing a traffic survey interview station are the provision of adequate sight distance to the interview station, the installation of suitable signs and lighting at night, and adequate provision for bypassed traffic.



NOTES:

- 1 Similar signs as for other approach.
- 2 Alternative position for gore sign. In this case, the arrow would be altered to 45° angle.
- 3 Use of this sign may be considered where visibility of the exit from the checking station is restricted.

Figure 3.30 TYPICAL TREATMENT AT A TRUCK CHECKING STATION

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4.11.4.3 Signs

The temporary warning signs used for traffic survey interview stations and similar road blocks are listed in Table 4.11.

Table 4.11 SIGNS FOR TRAFFIC SURVEYS – SIZE TABLE

Sign type	Sign Number	Size (mm)
TRAFFIC SURVEY x m	T1-14	1200 x 900
TRAFFIC SURVEY	T2-22	1200 x 600
PREPARE TO STOP	T1-18	1200 x 900

The above signs are used as follows:

a) *TRAFFIC SURVEY x m (T1-14)*



T1-14

The TRAFFIC SURVEY x m sign shall be used to give advance warning of a traffic survey interview station at which traffic may be required to stop. Other signs which should be used in conjunction with this sign are TRAFFIC SURVEY (T2-22) and PREPARE TO STOP (T1-18).

The sign should be placed 200 to 400 m in advance of the traffic survey interview station.

b) *TRAFFIC SURVEY (T2-22)*



T2-22

The TRAFFIC SURVEY sign shall be used to indicate the location of a traffic survey interview station. Advance signs which should be placed prior to this sign are TRAFFIC SURVEY x m (T1-14) and PREPARE TO STOP (T1-18).

c) *PREPARE TO STOP (T1-18)*



T1-18

The PREPARE TO STOP sign shall be used in conjunction with other signs in advance of toll stations, traffic survey interview stations and may be used in advance of other vehicle road blocks, such as animal plant and fruit inspection stations, particularly where sight distance is restricted.

It should be placed on the left side of the road 100 m to 200 m in advance of the station.

4.11.5 Other special purpose signs

4.11.5.1 Tabulation of signs

The signs listed in Table 4.12 are used to warn road users of special conditions along a road which may not be apparent or would be unexpected.

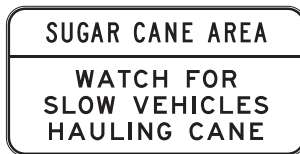
Table 4.12 SIGNS FOR SPECIAL PURPOSES – SIZE TABLE

Sign type	Sign Number	Size (mm)
DRIFT SAND	W5-Q04	} A 600 x 600 } B 750 x 750 } C 900 x 900
SOFT EDGES	W5-Q05	
WATCH FOR ENTERING TRAFFIC	W5-26C W5-26D	
CANE HAULING AHEAD	W5-Q07	1100 x 900
SUGAR CANE AREA	G9-Q03	2400 x 1200

4.11.5.2 CANE HAULING AHEAD (W5-Q07)



W5-Q07



G9-Q03

The CANE HAULING AHEAD flag shall be used to warn drivers of sections of road along which cane hauling takes place. When used on roads under the control of the Department of Transport and Main Roads, an undertaking to display the flags at the appropriate time is required. The flag shall only be displayed when cane hauling is actually in progress.

This flag should be erected in areas where the SUGAR CANE AREA sign (G9-Q03) has been installed to give advance notice of a sugar growing area.

4.11.5.3 DRIFT SAND (W5-Q04)



W5-Q04

The DRIFT SAND sign is used to warn of the hazard caused by sand which may have drifted on to the pavement.

4.11.5.4 SOFT EDGES (W5-Q05)



W5-Q05

The SOFT EDGES sign is used to warn of the hazard caused by soft edges adjacent to the pavement.

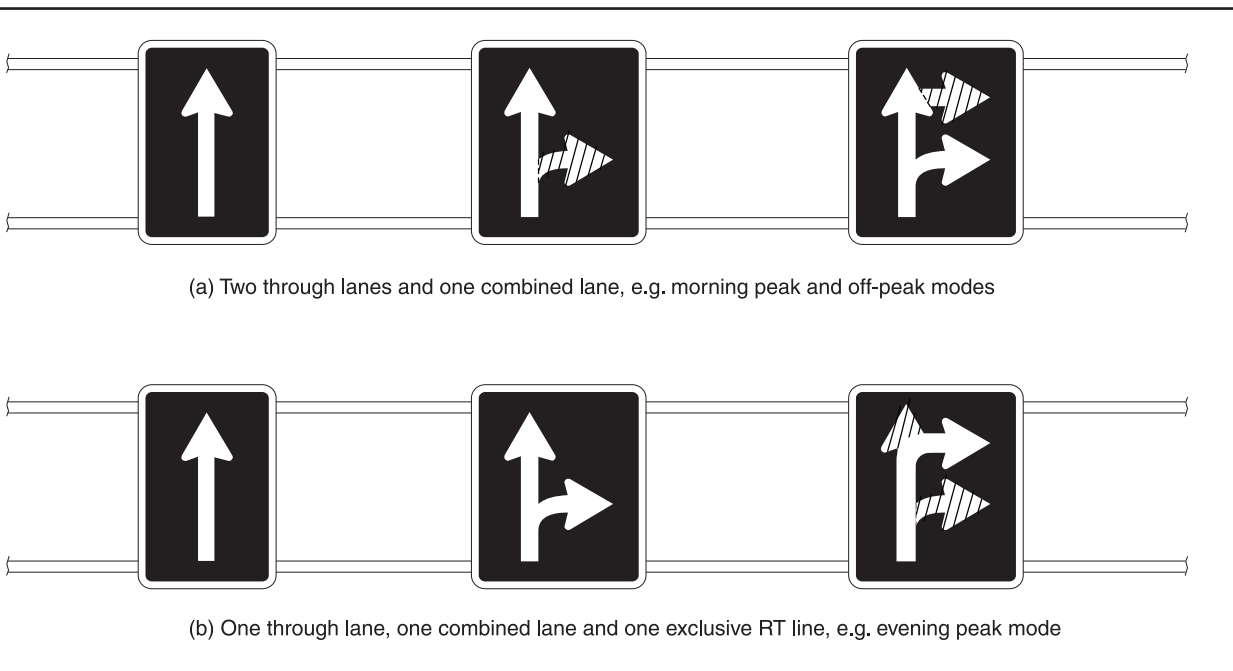
4.12 VARIABLE USE LANE SIGNS

Signs whose purpose is to vary the movements which may be legally made from a lane on an intersection approach at different times during the day shall comprise white upward pointing straight or curved arrows or combination arrows on a black rectangular background. The change from one pattern to another over each lane may be achieved by fibre-optics or other electronic means within the same display unit, as shown in Figure 4.31, or alternatively, may comprise two internally illuminated overhead message signs side by side over each lane.

Variable use lane signs shall be suspended above the lane to which they refer. It will almost always be necessary to place a sign over every lane on the approach even though not all will be variable. Pavement arrows shall not be used with these signs.

A safe procedure for changing from one display to the next shall be developed.

Overhead lane control signals for controlling reversible flow lanes are specified in Part 14 of the Manual.



(a) Two through lanes and one combined lane, e.g. morning peak and off-peak modes

(b) One through lane, one combined lane and one exclusive RT line, e.g. evening peak mode

Figure 4.31 EXAMPLES OF VARIABLE LANE USE SIGNS

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4.13 MISCELLANEOUS SIGNS

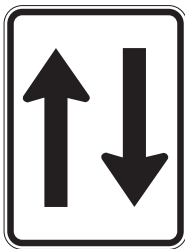
4.13.1 General

Signs in this miscellaneous series are listed in Table 4.13.

Table 4.13 MISCELLANEOUS SIGNS

Sign type	Sign Number	Size (mm)
Two-way	R2-11A	450 x 600
	R2-11B	600 x 800
One-way (repeater)	R2-17A	450 x 800
	R2-17B	600 x 1067
	R2-17C	900 x 1600
Median Turning Lane	R6-30A	600 x 1200
	R6-30B	900 x 1800
BUSES MUST ENTER	R6-18A	600 x 700
	R6-18B	900 x 1050
	R6-18C	1200 x 1400
TRUCKS MUST ENTER	R6-27A	600 x 700
	R6-27B	900 x 1050
	R6-27C	1200 x 1400
KEEP LEFT UNLESS OVERTAKING	R6-29A	1200 x 600
	R6-29B	1800 x 900
	R6-29C	2400 x 1200
END KEEP LEFT UNLESS OVERTAKING	R6-32A	1200 x 800
TRUCKS USE LEFT LANE	R6-28A	900 x 900
	R6-28B	1200 x 1200
	R6-28C	1800 x 1800
END	R7-4C	600 x 200
	R7-4D	900 x 300
	R7-4E	1200 x 400
Emergency Median Crossing marker	GE9-23A	450 x 450

4.13.2 Two-way (R2-11)



R2-11

The Two-way sign shall be used as follows:

- On carriageways such as service roads where traffic laws and regulations would normally prescribe that such carriageways are one-way, but two-way operation is desirable or necessary.
- As a temporary measure where a carriageway designed or normally used for one-way traffic is being used for two-way traffic.

This sign shall only be used where traffic laws and regulations require its use. In all other situations sign W4-11 (see Clause 4.7.5.4(d)) should be used.

4.13.3 ONE WAY (Repeater) (R2-17)



R2-17

The ONE WAY (Repeater) sign may be used on long one-way streets or roadways to remind drivers that they are on a one-way roadway. This sign shall not be used less than 50 m in advance of an intersection on an arterial road or 20 m on a local road.

4.13.4 MEDIAN TURNING LANE (R6-30)



R6-30

THE MEDIAN TURNING LANE sign shall be used where a turning lane, bay or series of bays, is to be designated by means of a sign. It may be used in conjunction with or as an alternative to pairs of opposing right turn pavement arrows. When used, the signs shall be placed in a prominent position on the approach to the turning bay in each direction of travel.

NOTE: It is recommended that pavement arrows always be used to designate a median turning bay regardless of whether or not the signs are used.

4.13.5 KEEP LEFT UNLESS OVERTAKING (R6-29) END KEEP LEFT UNLESS OVERTAKING (R6-32)



R6-29



R6-32

These signs shall be used on a multi-lane roadway to enforce or advise of a legal requirement to use the right hand lane for overtaking only, as follows:

(a) *Speed limit 80 km/h or less*

Where the R6-29 sign is displayed there is a legal requirement for traffic to use the right lane for overtaking only (with exceptions associated with turning traffic). If the requirement is to terminate before the end of the multi-lane road is reached, the END ... (R6-32) sign shall be used.

NOTE: In the absence of the above signs the keep left unless overtaking rule does not apply if the speed limit is 80 km/h or less.

(b) *Speed limit greater than 80 km/h*

The requirement to use the right lane only for overtaking applies regardless of the existence of signs. The R6-29 sign should not therefore be used for this purpose.

NOTE: This does not apply to use of the R6-29 sign at the beginning of an overtaking lane (see Clause 4.8.2(f)). It is always used in this case regardless of the speed limit.

4.13.6 TRUCKS USE LEFT LANE (R6-28), END (R7-4)

The TRUCKS USE LEFT LANE sign shall be used to indicate a mandatory requirement for trucks to use a slow vehicle lane. If it is necessary to terminate this requirement prior to the end of the lane, the END (R7-4) sign shall be used in conjunction with this sign to mark the termination.



R6-28



R7-4

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4.13.7 Emergency Median Crossing (GE9-23)



GE9-23

This sign shall be used where it is required to indicate an emergency median crossing, usually on an expressway type road. It may need to be accompanied by a sign restricting use of the crossing to specified users.

4.13.8 Checking station entry signs

BUSES MUST ENTER (R6-18)

TRUCKS MUST ENTER (R6-27)



R6-18



R6-27

These signs shall be used at the entrance to heavy vehicle checking stations to direct trucks or buses, or both, to enter the checking station. Advance signs indicating the distance to the checking station and intersection direction signs indicating the entry point shall also be used in conjunction with these signs.

4.14 USE OF FLASHING LIGHTS WITH WARNING SIGNS

Warning signs that need to attract special attention because of the extreme severity of the hazard to which they refer or lack of adequate sight distance to the hazard, or a combination of the two, need to attract special attention, may be augmented with flashing lights. Recommended sign assemblies are described in Appendix A.

SECTION 5. PAVEMENT MARKINGS AND DEVICES

5.1 SCOPE

This Section specifies the lines, patterns, symbols, letters and numerals and markers used in or on road pavements and kerbs or adjacent to the road, for the purpose of guiding traffic.

NOTE: Raised islands or medians are not defined as pavement markings, although their surfaces may be marked.

Requirements for longitudinal pavement markings on sealed pavements of various crosssections are included also in Clause 4.2.2.

5.2 GENERAL PRINCIPLES

5.2.1 Purpose

A system of clear and effective pavement markings is essential for the proper guidance and control of vehicles and pedestrians.

Pavement markings may simply guide traffic or give advance warning, or they may impose restrictions which are supported by traffic regulations. They may act as a supplement to other road devices, but they are often the only effective means of conveying certain regulations and warnings to drivers.

It is essential to check their use against the traffic laws and regulations before they are installed or removed, to avoid possible conflict or confusion.

5.2.2 Removal of markings

Markings required on account of particular road conditions or to impose restrictions shall be removed or obliterated if those conditions cease to exist or the restrictions are withdrawn. Steps should be taken to ensure that marking removal does not leave a change in surface texture that could be mistaken for a marking or that covering material does not produce a slippery surface. Substantial changes to pavement markings may require pavement resurfacing.

5.2.3 Limitations

Pavement markings have the following limitations:

- (a) They may not be clearly visible if the road is wet or dusty, e.g. near an edge or a median.
- (b) They are subject to traffic wear and usually require frequent maintenance.
- (c) They can be obscured by traffic.
- (d) Their effect on skid resistance requires careful choice of materials and precludes the use of large marked surface areas. Markings within a traffic lane may be a hazard to motorcycles and should, where practicable, be avoided on curves.

In spite of these limitations they have the advantage under favourable conditions of conveying information to drivers without diverting their attention from the road.

5.2.4 Types of markings

The following types of markings are described in this section:

- (a) *Longitudinal lines*
 - Dividing linesClause 5.3.2
 - Barrier linesClause 5.3.3
 - Lane linesClause 5.3.4
 - Edge lines.....Clause 5.3.5
 - Continuity linesClause 5.3.6
 - Turn linesClause 5.3.7
 - Outline markingsClause 5.3.9
 - Longitudinal lines at intersectionsClause 5.3.9
- (b) *Transverse lines*
 - Stop linesClause 5.4.2
 - Give-way linesClause 5.4.3
 - Markings at STOP and GIVE WAY signsClause 5.4.4

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Pedestrian crosswalk lines	Clause 5.4.5
(c) <i>Other markings</i>	
Diagonal and chevron markings	Clause 5.5.1
Messages on pavements including words, numerals and arrows.....	Clause 5.5.2
Marking of parking and loading areas.....	See Part 11
Kerb markings	Clause 5.5.3
(d) <i>Raised pavement markers</i>	Clause 5.6

5.2.5 Pavement marking materials and reflectorization

Pavement marking materials of various kinds are specified in AS 4049 (Series).

All longitudinal lines, chevrons and diagonal markings having application at night shall be reflectorized. Reflectorization should also be considered for other markings where an adequate level of skid resistance can be maintained. Glass beads for use in the reflectorization of pavement markings are specified in AS/NZS 2009.

5.2.6 Colours

Except as specified below the colour of pavement markings shall be white.

Yellow markings shall be restricted to the following uses:

- (a) Parking spaces whose use is restricted to certain user classes, see Part 11.
- (b) Edge lining to indicate no stopping.
- (c) Tram lane lines.
- (d) Longitudinal lines in snow areas except for the edge line where stopping is to be permitted.

Black may be used in the gaps of a broken pavement line to heighten contrast where a light coloured pavement does not allow adequate line definition to be obtained. This does not establish black as a standard colour.

Where yellow is used, the colour shall be Golden Yellow, Colour No. Y14 in AS 2700. The colour coding for RRPMS differs from that for pavement markings (see Clause 5.6.2).

5.2.7 Size of markings

The size, spacing and pattern of longitudinal lines are shown in Figure 5.1.

5.2.8 Profile line marking

Longitudinal lines may be installed as profile markings in the form of regularly spaced ribs added to a uniform thickness line. Profile markings provide an audible warning when vehicles run over the lines and aid wet night visibility.

5.3 LONGITUDINAL LINES

5.3.1 General

A longitudinal line shall consist of a continuous or a broken line, or a combination of both, marked generally parallel to the direction of travel. Where warranted, longitudinal lines shall be used as described below.

The pattern and dimensions of longitudinal lines are shown in Figure 5.1.

5.3.2 Dividing lines

5.3.2.1 General

A dividing line is used to separate opposing traffic movements on undivided (two-way) roads. It need not be in the geometric centre of the roadway. Where crossing of the line must be prohibited in one or both directions, a barrier line shall be used (see Clause 5.3.3).

5.3.2.2 Two-lane, two-way roads

A dividing line shall take one of the following forms:

- (a) A single broken line when provided on sealed pavements 5.5 m or more wide and where the guides given in Clause 5.3.2.4 are met.
- (b) A barrier (double) line where crossing of the line must be prohibited in one or both directions, e.g. at a no-overtaking zone, or when entering or leaving the roadway (see Clause 5.3.3).

- (c) A single continuous barrier line as an alternative to a double barrier line but where the line may be crossed by traffic entering or leaving the roadway (see Clause 5.3.3.2).

5.3.2.3 Multi-lane roads

On undivided multi-lane roads having lane lines provided for one or both directions of traffic, a dividing line shall be provided as a dividing line of the type specified in Figure 5.1 for multi-lane undivided roads.

NOTE: A double two-way barrier line may be used to restrict turning movements.

5.3.2.4 Guides for the use of dividing lines

Dividing line markings should be used on sealed pavements 5.5 m or more wide if the traffic volume is in excess of the following:

- (a) On rural roads: 300 vehicles, AADT
- (b) On urban roads: 2500 vehicles, AADT

Respective of the above guidelines, marking of other continuous or isolated sections may be desirable under the following conditions:

- (i) Frequent horizontal or vertical curves.
- (ii) Substandard curves.
- (iii) Areas which are subject to fog.
- (iv) Minor road approaches to intersections with STOP or GIVE WAY signs.
- (v) Curves or crests in residential streets.
- (vi) Accident record indicates the need.
- (vii) Continuity of an arterial road.
- (viii) Heavy night traffic or tourist traffic.

The special purpose dividing line should be used for Items (iv) and (v).

5.3.3 Barrier lines

5.3.3.1 General

A barrier line is a dividing line which replaces the single dividing line to prohibit crossing movements from one or both directions, as described below:

- (a) *Single barrier line.* See Clause 5.3.2.2(c).
- (b) *Double one-way barrier lines.* A double one-way barrier line is continuous line beside a broken line. Overtaking or turning movements across the lines are permitted from the broken line side but not from the continuous line side.
- (c) *Double two-way barrier lines.* A double two-way barrier line comprises two continuous lines side by side. Movements across the lines, or to the right of the lines, for the purpose of overtaking or turning in either direction are prohibited.

5.3.3.2 No-overtaking zones

Barrier lines shall be used to create no-overtaking zones in rural areas where there is restricted overtaking sight distance due to horizontal or vertical curves, or both, or where a hazardous condition exists, e.g. at approaches to major intersections or intersections and mid-block central roadway obstructions. Requirements for the provision of no-overtaking zones are as follows:

- (a) *Roads 5.5 m or more wide.* Vertical and horizontal curves on which the overtaking sight distance falls below that shown in Column 2 of Table 5.1 shall be marked as no-overtaking zones.
- (b) *Roads less than 5.5 m wide.* Barrier lines may be marked if the conditions above occur, but the sealed roadway should preferably be widened to at least 5.5 m over the section containing the barrier lines.

If it is not practicable to mark the no-overtaking zone at vertical curves, the CREST warning sign (W5-11) (see Clause 4.5.4.1) should be erected.

- (c) *Two-lane bridges.* Barrier lines shall not normally be marked on two-lane bridges, unless the warrant in Item (a) indicates that a no-overtaking zone is required and the width is 5.5 m or greater between kerbs.

Gaps in double barrier lines in rural areas may be provided for turning traffic where there is adequate sight distance to oncoming traffic as follows:

- (i) At intersections - min. 1 gap; max. 2 gaps

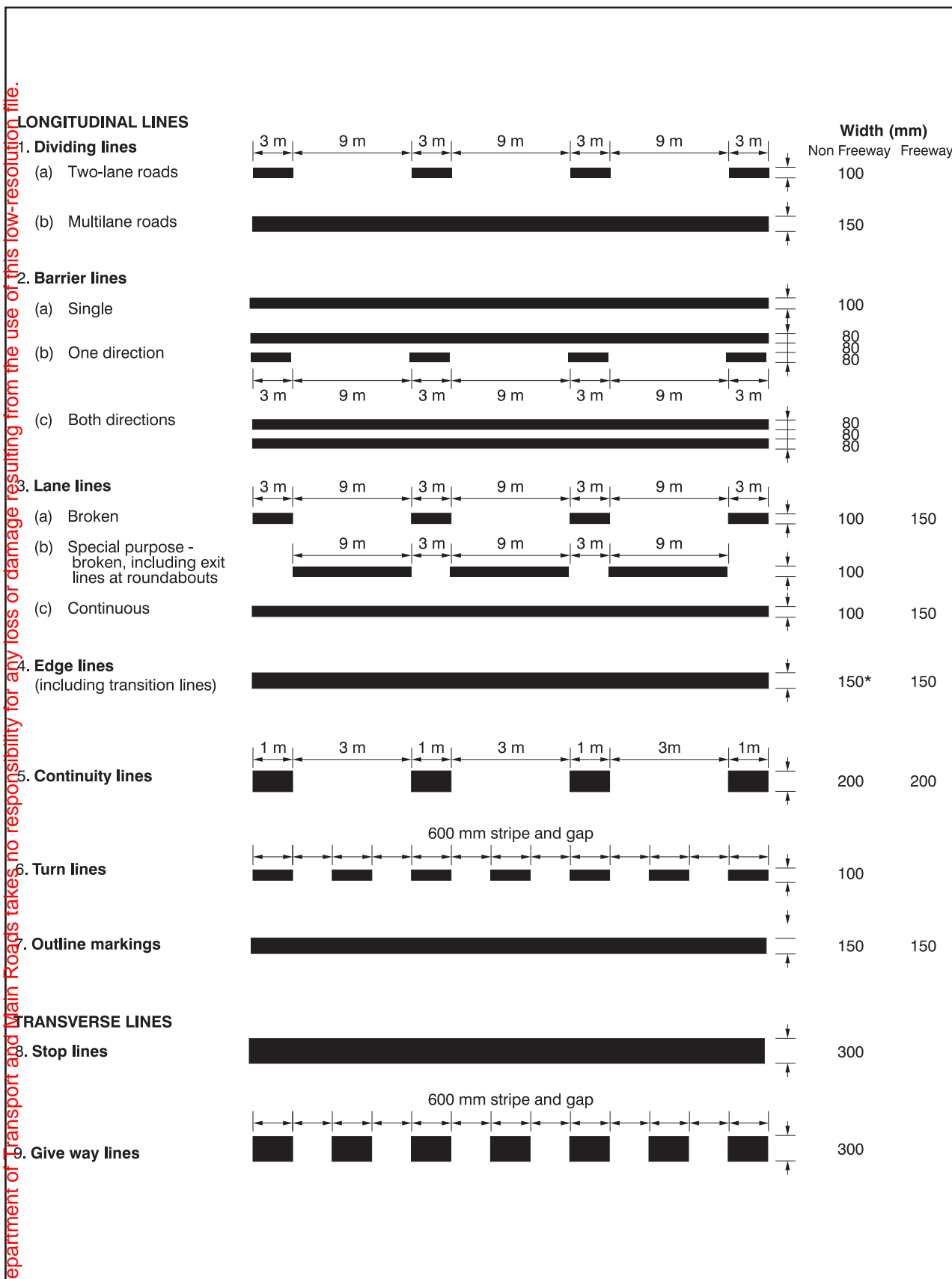
(ii) At private entrances - min. 1 gap

where a gap is the module length.

A single continuous dividing line shall be used instead of a barrier line only in urban areas and where it is necessary to permit crossing of the line by traffic entering or leaving the roadway.

NOTE: General use of single continuous barrier lines to form no-overtaking zones is discouraged on safety grounds as they do not have the impact and better understood meaning of the double barrier line. Furthermore they are not able to indicate places where crossing the line is permitted in one direction of travel but not the other.

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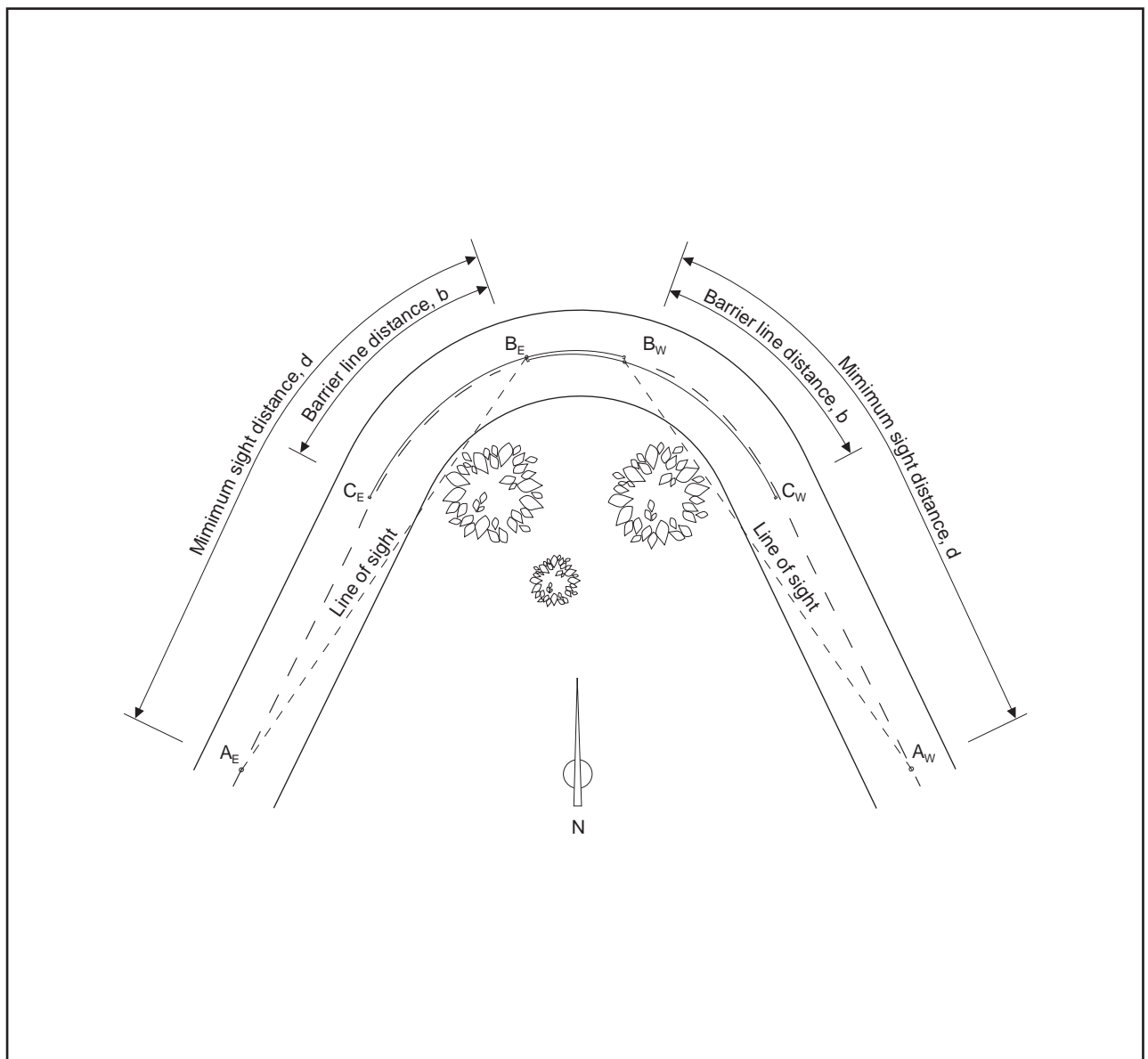
* This width may be reduced to 100 mm on rural roads with unsealed shoulders and on urban roads with a 60 km/h or lower speed zone.

Figure 5.1 LONGITUDINAL AND TRANSVERSE LINE TYPES

5.3.3.3 Location and setting out

The method for locating and setting out barrier lines is shown in Figure 5.2, and the steps to use are as follows (see also Clauses 5.3.3.4 and 5.3.3.5):

- As the point A_E approaches the curve, overtaking sight distance progressively decreases.
- Where the overtaking sight distance $A_E B_E$ (Column 2 of Table 5.1) reaches the minimum for the 85th percentile speed selected (Column 1 of Table 5.1), a barrier line should commence at C_E , the barrier line distance (Column 3 of Table 45.1) from B_E .
- After further eastward travel from C_E , the minimum overtaking sight distance is regained at B_W and the barrier line is terminated.



NOTES:

- For convenience, overtaking sight distance is measured along the centre-line. It is not worth taking account of the slight difference between left-hand and right-hand curves, i.e. for a left-hand curve the overtaking vehicle is on the outside of the curve, and for a right-hand curve it is on the inside.
- The marking of vertical curves is similar to that for horizontal curves.

Figure 5.2 METHOD FOR LOCATING A NO-OVERTAKING ZONE ON AN ISOLATED CURVE

Table 5.1 REQUIREMENTS FOR ESTABLISHMENT OF NO-OVERTAKING ZONES

1	2	3
V_{85} km/h	Minimum overtaking sight distance* (1.05 m to 1.05 m) m	Barrier line distance [†] m
0 to 40	120	120 (10)
41 to 50	150	120 (10)
51 to 60	180	120 (10)
61 to 70	210	144 (12)
71 to 80	240	168 (14)
81 to 90	270	192 (16)
91 to 100	300	216 (18)
101 to 110	330	240 (20)
>110	360	264 (22)

Overtaking at crests or curves is permitted if the overtaking sight distance between two points 1.1 m driver eye height to 1.25 m object height above the centre-line does not fall below the minimum overtaking sight distance. This is based on what is assumed to be a typical overtaking manoeuvre, i.e. a vehicle travelling at the 85th percentile speed overtakes a slower vehicle and is opposed by an oncoming vehicle also travelling at the 85th percentile speed.

The number of 12 m modules corresponding to this distance is shown in brackets. For example, the barrier line distance for 80 km/h approximates 14 x 12 m (the linemarking module).

5.3.3.4 Modification of barrier line requirements

The application of the method specified in Clause 5.3.3.3 will, in some instances, result in too short a length of barrier line or too short a distance between barrier lines for passing to be accomplished. If this occurs, the barrier line should be either eliminated or lengthened, depending on the circumstances.

Some typical instances and suggested modifications are as follows:

- Where only a short length of road (see Column 2 of Table 5.2) has substandard overtaking sight distance, barrier lines should not be marked, e.g. within a short sag (floodway, ford) in an otherwise level road.
- Where a barrier line marked in accordance with Clause 5.3.3.3 is very short, it will not have sufficient visual impact and will not give the impression of continuity. The distance $C_E B_W$ of Figure 5.2 in some circumstances will be less than the minimum length of barrier line (Column 3 of Table 5.2) and in rare situations C_E will occur after B_W . In these cases the minimum length of barrier line (Column 3 of Table 5.2) should be marked to terminate at the point B_W at which minimum overtaking sight distance (Column 2 of Table 5.1) is regained.
- Where the distance between the end of one barrier line and the start of the succeeding barrier line restricting overtaking in the same direction is equal to or below the minimum (see Column 4 of Table 5.2), the barrier line should be joined to form one continuous line. For example, this may occur on a short straight between two curves in opposite directions.

Table 5.2 MINIMUM CONDITIONS TO MODIFY STANDARD BARRIER LINE REQUIREMENTS

1	2	3	4
V₈₅ km/h	Minimum length of road with overtaking sight distance below minimum m	Minimum length of barrier line m	Minimum distance between barrier lines m
0 to 40	20	87 (8)	165 (13)
41 to 50	25	87 (8)	165 (13)
51 to 60	30	99 (9)	165 (13)
61 to 70	35	111 (10)	165 (13)
71 to 80	40	123 (11)	189 (15)
81 to 90	45	135 (12)	213 (17)
91 to 100	50	147 (13)	237 (19)
101 to 110	55	159 (14)	261 (21)
>110	60	171 (15)	285 (23)

5.3.3.5 Checking marked barrier lines

Barrier lines marked strictly in accordance with Clauses 5.3.3.3 and 5.3.3.4 will occasionally produce no-overtaking zones which err on the safe side and may be too restrictive.

To check this, the road should be traversed at about the 85th percentile speed when marking is complete. At this speed all barrier lines should appear reasonable and not unduly restrictive. Particular attention should be given to sections of steep or winding alignment where little opportunity remains for overtaking. If the markings are considered too restrictive, the barrier lines should be reviewed as follows:

- (a) Check that the appropriate 85th percentile approach speed was used at each sight distance restriction. For example, while the 85th percentile approach speed to a section of winding alignment may be 100 km/h, the first curve may so reduce vehicle speeds that the approach speed to subsequent curves may be as low as 40 km/h.
- (b) See if short gaps can be left in the barrier line to allow cars to overtake slow-moving trucks. These gaps should, desirably, be not less than 100 m long. If necessary, the barrier line distance should be reduced to permit overtaking opportunities at the safest places consistent with shoulder width, roadside obstacles and other potential hazards, as well as sight distance.

5.3.4 Lane lines

A lane line shall be used to separate lanes of traffic moving in the same direction. It is normally a broken line, but a continuous line may be used where it is desired to discourage lane changing or to improve lane delineation through sharp curves or lateral lane shifts.

5.3.5 Edge lines

Edge lines are used as follows:

- (a) *General delineation*

Edge lines are used where specified or recommended in Clause 4.2.2 to provide a continuous guide to the driver and to discourage traffic from travelling on shoulders, thereby making driving safer and more comfortable, particularly at night.

Where used for this purpose they shall be placed on both sides of the sealed surface of the roadway as follows:

- (i) Sealed shoulder - at edge of traffic lane.
- (ii) Unsealed shoulder - 75 mm clear of edge of seal.

(iii) Kerbed pavement—300 mm clear of face of kerb.

(b) *Lane boundaries*

Edge lines may be used to define the boundaries between moving traffic lanes and parking lanes and between traffic lanes and bicycle lanes.

(c) *Guidance past objects and through width transitions*

Short lengths of edge line or a local widening of a continuing edge line may be used to guide traffic past an object that is close enough to the road to constitute a hazard, or to transition the road past a traffic island or at a narrowing of the pavement.

Where used to deflect traffic at a pavement narrowing, the length (L) of the edge lined transition shall be determined as follows:

$$L = 0.5 V W$$

where

V = 85th percentile speed, in kilometres per hour

W = lateral offset, in metres

Examples of such transitioning are shown in Figure 4.17.

5.3.6 Continuity lines

A continuity line may be used to indicate the edge of that portion of a roadway assigned to through traffic, and where it is intended that the line be crossed by traffic turning at an intersection, or lane changing when entering or leaving an added lane at its start or finish.

Its use to delineate trap lanes is shown in Figures 2.10 and 3.5.

NOTE: Where a zip-merge is required (see Clause 4.7.2(a)), the continuity line is omitted.

5.3.7 Turn lines

For use of turn lines at intersections with signals to indicate the proper course to be followed by turning vehicles, see Part 14. Turn lines should generally be used only at intersections with traffic signals.

5.3.8 Outline markings

The outline marking of splays, medians, islands, safety bars and shoulders shall be a single continuous line.

5.3.9 Longitudinal lines at intersections and roundabouts

Use of longitudinal lines at, and on the approaches to intersections and roundabouts shall be as follows:

(a) *Dividing, barrier and lane lines*

These lines shall be used as follows:

- (i) At minor side roads with or without STOP or GIVE WAY sign control, these lines, where existing on the major road approach, shall be carried through the intersection, except that a gap shall be left in a double barrier line for turning or crossing traffic see Clause 5.3.3.2.
- (ii) At signalized intersections, the lines shall be discontinued at the stop line on each approach.
- (iii) Where lane changing just in advance of the intersection is a problem and needs to be prohibited, the last 10 m to 12 m of lane line on the approach shall be continuous.
- (iv) On an intersection approach controlled by STOP or GIVE WAY signs or across which is marked a give-way line, a dividing line terminating at the stop or give-way line comprising either -
 - (A) a single continuous dividing line 10 m to 12 m in length; or
 - (B) a special purpose broken dividing line (see Figure 5.1) up to 30 m in length unless a single continuous line is required for another purpose, e.g. to control overtaking;

shall be marked wherever the sealed pavement width or width between kerbs is at least 6 m over the length of the line. It shall also be provided at lesser widths if the rest of the approach road is dividing line marked, or if there is a crest or curve on the immediate approach. The marking may need to be extended in the latter case.

- (v) Exit lines shall be marked at multilane roundabouts, except where geometric restrictions prohibit their safe use or where combinations of single lane exits and high turning traffic volumes can lead to operational difficulties. A typical example is shown in Figure 2.7.

Exit lines shall -

- (A) comprise a special purpose lane line (see Figure 5.1);
- (B) have a minimum of three segments marked per exit line;
- (C) commence from a line drawn tangentially from the central island to the splitter island exit edge line at the previous exit; and
- (D) extend far enough into the roundabout exit to provide satisfactory guidance for exiting vehicles.

(b) Edge lines

Where edge lines are used they shall be discontinued through a major intersection or past intersecting roads or streets which have STOP or GIVE WAY signs. If the intersection is wide, a continuity line should be used.

5.4 TRANSVERSE LINES

5.4.1 General

Transverse lines should be wider than longitudinal lines to compensate for the low angle at which they are viewed.

5.4.2 Give-way lines

A give-way line shall comprise a broken line a minimum of 300 mm wide with line segments 600 mm long separated by 600 mm gaps. It shall be placed in a similar position to that specified for a stop line. The give-way line shall be used as follows:

- (a) To indicate the safe position for a vehicle to be held at a GIVE WAY sign at an intersection.
- (b) 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 along the edge of the circulating roadway (see Figures 2.7 and 2.8). Markings shall not be placed across the exits from a roundabout.

It may be used to indicate the safe position for a vehicle to be held at a T-intersection or in any other location where a driver is legally required to give way to an intersecting or conflicting traffic stream.

5.4.3 Stop lines

A stop line is a continuous line that shall be marked across the traffic lanes approaching a traffic control device at which traffic is required to stop. It shall extend from the left-hand edge of pavement to the dividing line, median, or in the case of a one-way street, to the right-hand edge of pavement. It shall only be used in conjunction with another device which legally requires a driver to stop under prescribed conditions, and indicates the point behind which vehicles must stop when required.

At STOP signs where visibility is often restricted, the driver's line of sight both to left and right, the needs of pedestrians and the clearance from traffic in the intersecting road shall be considered when positioning the stop line. It shall be a minimum of 300 mm wide at a STOP sign and shall be parallel to the line of the intersecting road.

The use of stop lines at signalized intersections, railway crossings and at mid-block pedestrian crossings is given in Parts 14, 7 and 10 respectively.

5.4.4 Positioning of lines at STOP and GIVE WAY signs

The stop and give-way lines to be used with STOP and GIVE WAY signs shall be as illustrated in Figure 5.3. Figure 2.1 shows the use of the GIVE WAY signs and the associated markings on roads of various widths with and without a median. The use of STOP signs and associated lines shall be similar. Requirements and recommendations for these pavement markings are as follows:

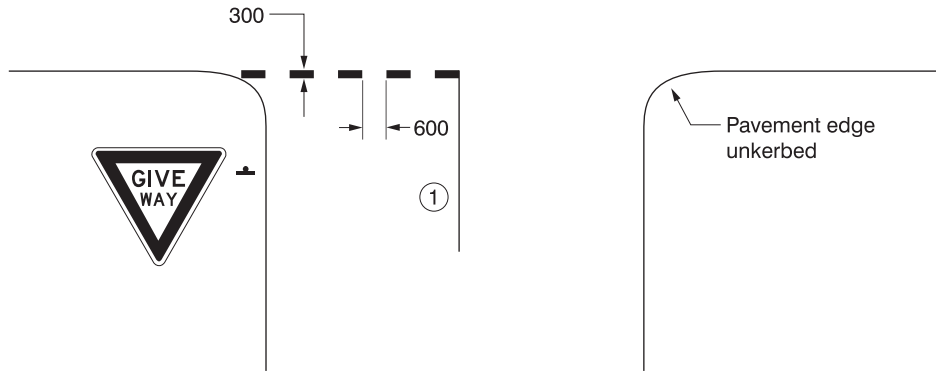
- (a) The minimum pavement marking associated with STOP and GIVE WAY signs shall be a stop or give-way line (see Clauses 5.4.2 and 5.4.3) normally placed in prolongation of the kerb line or edge line, but may be set back if there is a problem of vehicles over-running the line, or if it is desired to hold vehicles back some distance from the intersecting roadway.
- (b) If the intersection is wide, e.g. two lanes entering with a large radius kerb return, a continuity line should be used across the right hand side of the approach.

5.4.5 Pedestrian crosswalk lines

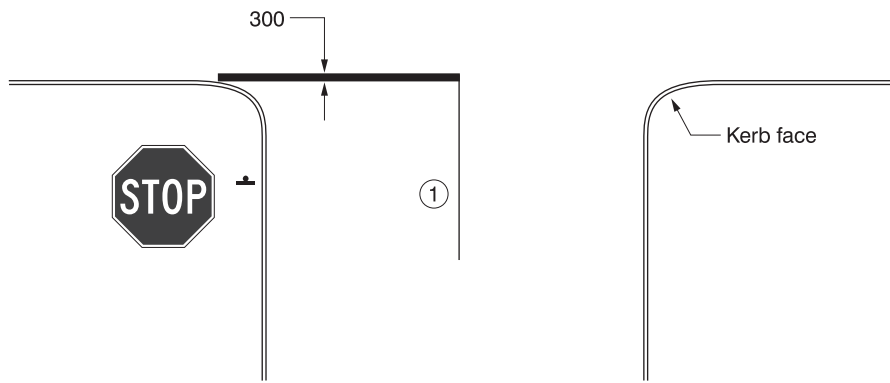
Crosswalk lines shall only be used in conjunction with intersection or mid-block signals.

The use and positioning of crosswalk lines at intersection and mid-block signals are given in Parts 14 and 10 respectively.

For requirements for pedestrian crossing (zebra) and children’s crossing markings, see Part 10.



(a) Pavement markings at GIVE WAY signs



(b) Pavement markings at STOP signs

NOTE:

① Dividing line marked in accordance with Clause 4.3.10(a)(iv).

DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN

Figure 5.3 PAVEMENT MARKINGS AT STOP AND GIVE WAY SIGNS

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