

AS 1742.13:2023



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Manual of uniform traffic control devices

Part 13: Local area traffic management



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AS 1742.13:2023

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Manual of uniform traffic control devices

Part 13: Local area traffic management

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Preface

This Standard was prepared by the Standards Australia Committee MS-012, Road Signs and Traffic Signals, to supersede AS 1742.13—2009.

The objective of this document is to specify requirements for the signs, pavement marking and other devices to be applied to commonly used local area traffic management (LATM) schemes.

A list of all parts in the AS 1742 series can be found in the Standards Australia online catalogue.

The major changes in this edition are as follows:

- (a) Harmonization of the device terminology used by this document and Austroads, *Guide to Traffic Management Part 8: Local Street Management*.
- (b) Inclusion of road cushions and raised pavements as vertical deflection devices.
- (c) Inclusion of road narrowing/kerb extensions and centre blister island treatments as horizontal deflection devices.
- (d) Inclusion of left-in/left-out island treatments as diversion devices.
- (e) Design guidance for devices has been removed. Refer to the relevant Austroads guides.

The relationship between Australian Standards and publications produced by Austroads is to be noted. Australian Standards provide specifications and procedures that aim to ensure that products and services are safe and reliable, and consistently perform the way they are intended. Austroads provides guidance documents that deal with the design, construction, maintenance and operation of the road network. Austroads documents are also used by road authorities in New Zealand.

In cases of similar subject matter, this is dealt with across both sets of documents. Where this occurs, each document aims to provide information that is consistent, complimentary and supportive of the other.

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Introduction

There is a general community awareness of the need to maintain quality of life on residential streets by creating an environment that discourages unnecessary motorized traffic and inappropriate speeds.

The main objectives of local area traffic management (LATM) are to attain acceptable levels of speed, volume and composition of traffic within a local area and thereby to reduce the severity and number of road crashes and improve the general amenity of an area. These objectives may be achieved by modifying the street environment through the installation of various control devices in a traffic management scheme.

The complete signing and pavement marking schemes illustrated for the various LATM devices are generally appropriate where the devices are installed in isolation or during staged implementation of an area-wide LATM scheme. As indicated in the relevant sections, both in the text and on the drawings, many such signs and markings may be omitted when the device is part of a fully implemented area-wide scheme, thus conserving the visual amenity of the area.

NOTES

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Manual of uniform traffic control devices

Part 13: Local area traffic management

Section 1 Scope and general

1.1 Scope

This document specifies requirements for the signs, pavement marking and other devices to be applied to commonly used LATM schemes.

This document describes the following commonly used LATM devices:

- (a) Vertical deflection devices:
 - (i) Road humps.
 - (ii) Flat-top road humps.
 - (iii) Road cushions.
 - (iv) Wombat crossings.
 - (v) Raised pavements.
- (b) Horizontal deflection devices:
 - (i) Lane narrowing/kerb extensions.
 - (ii) Slow points.
 - (iii) Centre blister islands.
 - (iv) Driveway links.
 - (v) Mid-block median treatments.
 - (vi) Roundabouts.
- (c) Diversion devices:
 - (i) Full road closures.
 - (ii) Half road closures.
 - (iii) Diagonal road closures.
 - (iv) Modified T-intersections.
 - (v) Left-in/left-out islands.
- (d) Signs, pavement marking, line marking and other treatments:
 - (i) Speed limit signs.
 - (ii) Prohibited traffic movement signs.
 - (iii) One-way (street) signs.
 - (iv) Give way signs.

- (v) Stop signs.
- (vi) Shared zones.
- (vii) School zones.
- (viii) Threshold treatments.
- (ix) Continuous footpath treatments.
- (x) Bicycle facilities.

This document also specifies appropriate signs, delineation and pavement markings to be used in association with each device to achieve uniformity of practice in LATM schemes.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1742.2, *Manual of uniform traffic control devices, Part 2: Traffic control devices for general use*

AS 1742.4, *Manual of uniform traffic control devices, Part 4: Speed controls*

AS 1742.9, *Manual of uniform traffic control devices, Part 9: Bicycle facilities*

AS 1742.10, *Manual of uniform traffic control devices, Part 10: Pedestrian control and protection*

AS 1742.12, *Manual of uniform traffic control devices, Part 12: Bus, transit, tram and truck lanes*

1.3 Terms and definitions

For the purposes of this document, the terms and definitions given in AS 1348, AS 1742.0 and the following apply.

1.3.1

area speed zone

network of roads (e.g. a local area) to which a single speed limit other than the default limit applies and which is signposted

1.3.2

arterial road

road that has the primary traffic function of carrying through traffic between localities

1.3.3

centre blister

traffic island placed in the centre of a two-way carriageway to create a symmetrical horizontal deflection in both directions

1.3.4

collector road

non-arterial road that has the traffic function of collecting and distributing traffic within a locality, as well as providing access to abutting properties

Note 1 to entry: The term includes connector road and distributor road.

1.3.5

driveway link

extended form of slow point stretching for two or more property frontages

1.3.6**isolated device**

stand-alone device such as a road hump or slow point that is not part of an area-wide traffic management scheme

Note 1 to entry: A device may also be isolated if it is built as the first part of a staged traffic management scheme.

1.3.7**kerb extension**

local reduction in the width of a road typically to assist pedestrians, reduce speed or improve line of sight delineation

1.3.8**lane narrowing**

method to decrease the width of the road to reduce vehicle speed and pedestrian crossing distances

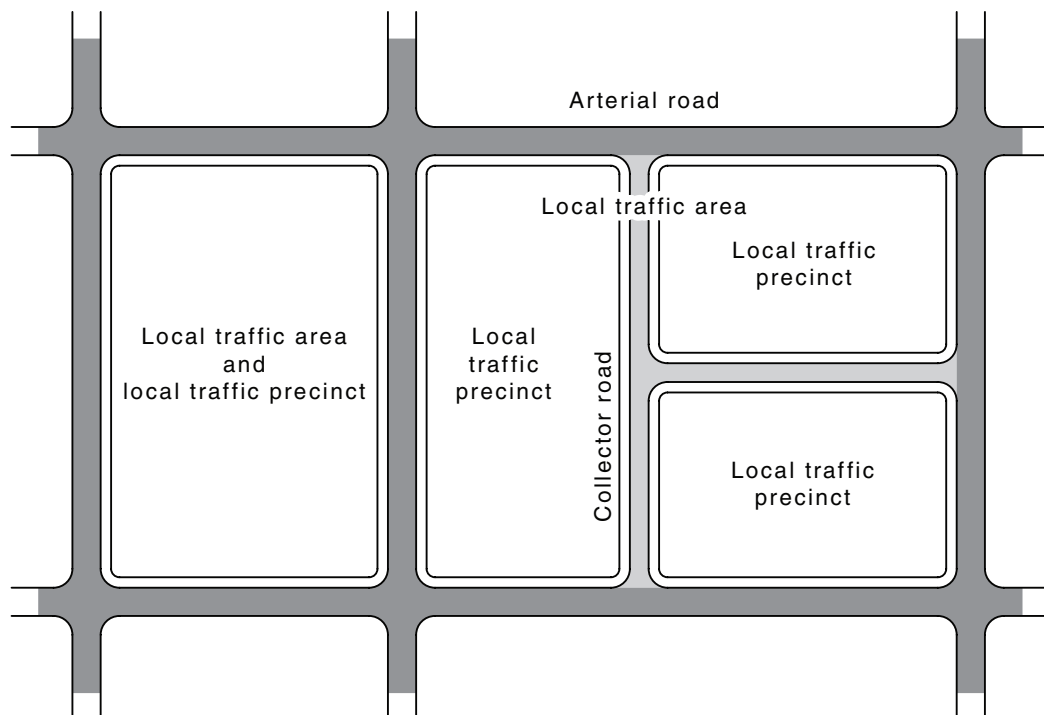
1.3.9**left-in/left-out island**

partial road closure incorporating a raised triangular island at an intersection approach that obstructs right turns, and through movements, to and from the intersection, street or driveway

1.3.10**local area**

area containing only local streets and collector roads, which is bounded by arterial roads or features such as rivers, railway lines, or the limit of urban development

Note 1 to entry: See [Figure 1.1](#) for an illustration.



NOTE Local streets are not shown.

Figure 1.1 — Typical local area

1.3.11**local area traffic management****LATM**

use of physical devices, streetscaping treatments and other measures (including regulations and other non-physical measures) to influence vehicle operation, in order to create safer and more pleasant streets in local areas

1.3.12**local street**

road or street that has the primary traffic function of providing access to abutting properties within a locality

1.3.13**may**

indicates the existence of an option

See also *shall* ([1.3.21](#)) and *should* ([1.3.22](#))

1.3.14**median**

portion of a road, not normally intended for use by traffic, which separates traffic in opposite directions. Usually formed by kerbed and paved or grassed areas, painted lines and diagonal bars

1.3.15**modified T-intersection**

three-way intersection treatment using medians, signs and other delineation to modify the priority and to slow and physically direct traffic through an intersection

1.3.16**perimeter**

outer extremity of a local area, across which vehicles travel to enter or exit a local area

1.3.17**raised pavement**

raised flat section of roadway that may be formed mid-block or extending across the apron of an intersection ramped up from the normal level of the street

1.3.18**road cushion**

type of road hump that does not extend fully across the width of a traffic lane

1.3.19**road hump**

raised transverse section of road which extends either fully or partially across the width of the road, where the profile encourages drivers to slow their vehicles down to the design speed

1.3.20**roundabout**

intersection designed for the movement of traffic in one direction around a central island

1.3.21**shall**

indicates that a statement is mandatory

See also *may* ([1.3.13](#)) and *should* ([1.3.22](#))

1.3.22**should**

indicates a recommendation

See also *may* ([1.3.13](#)) and *shall* ([1.3.21](#))

1.3.23**slow point**

section of roadway that has been reduced in width, with or without a sharp kink in alignment, as a speed reduction (traffic calming) measure

1.3.24**threshold treatment**

coloured and/or textured road surface treatments that contrast with the adjacent roadway

Note 1 to entry: Threshold treatments may incorporate either raised or flush median treatments.

Note 2 to entry: Threshold treatments are commonly used at the interface with the arterial road network and at the boundaries of different land uses, such as at the interface of residential and commercial properties or on either side of a school. This treatment of an intersection aims to discourage through or heavy traffic.

1.3.25**traffic control device**

any sign, signal, pavement marking or other installation placed or erected by a public authority or official body, having the necessary jurisdiction, for the purpose of regulating, warning or guiding traffic

1.3.26**wombat crossing**

pedestrian crossing (zebra) on a raised platform

1.4 Local area traffic management — General principles

As the primary aim of any LATM scheme is to improve the safety and amenity of the local area, the traffic control devices used shall be designed and positioned so that both their presence and the appropriate way to negotiate them are clearly evident to approaching road users.

Full signing and pavement marking shall be provided for any device that may not be visible to approaching drivers at prevailing traffic speeds under all reasonably expected weather conditions.

However, if an LATM device is part of a fully developed area-wide LATM scheme, certain signs and pavement markings may be omitted. These are indicated in the descriptions or the arrangement diagrams for each device.

During staged construction of a scheme, all signs and pavement markings shall be provided for each LATM device until the scheme is fully developed.

If an LATM device is found to require substantial signing to guide motorists through it, thought should be given to simplifying the device.

Guidance on the procedures for the development of LATM schemes together with technical guidance on the design and implementation of the various LATM devices covered in this document is given in Austroads, *Guide to Traffic Management Part 8: Local Street Management*.

In locations where normal street lighting may provide inadequate illumination, additional lighting at LATM devices should be considered, refer to AS/NZS 1158 series.

1.5 Signs — General requirements

Signs at or in the vicinity of LATM devices shall be coordinated with other street furniture to ensure that —

- (a) intersection sight distance is not affected at critical locations;
- (b) the signs are not obscured by other street furniture or vegetation; and
- (c) as much use as possible is made of existing poles and other street furniture for mounting signs so as to avoid unnecessary additional posts and unsightly clutter.

This is particularly important where signs may need to be carefully placed with respect to traffic signals (on the perimeter of the local area), lighting columns, electrical distribution poles or trees.

Specifications for the manufacture of traffic signs are given in AS 1743. Standard alphabets for road signs are given in AS 1744.

Requirements for the reflectorization and illumination of signs which are required to be seen at night are provided in AS 1742.2.

Guidance on the installation and location of signs is given in AS 1742.2.

Guidance on the selection of sign sizes is given in AS 1742.2.

1.6 Pavement markings — General requirements

A system of clear and effective pavement markings is essential for the proper guidance and control of all road users.

Pavement markings guide traffic or give advance warning, or they may impose restrictions that are supported by traffic regulations. They may act as a supplement to other road and traffic control devices, but they are often the only effective means of conveying certain regulations and warnings to drivers. Full details of pavement markings are provided in AS 1742.2.

Coloured surface treatments may be used to distinguish between facilities for different road treatments, such as bus lanes (refer to AS 1742.12), bicycle conflict areas (refer to AS 1742.9) and at LATM treatments. It is important not to confuse these treatments with decorative surface treatments, which are generally installed on the road surface and adjacent paths for aesthetic purposes for a particular area.

Decorative surface treatments do not have any legal status and therefore should not be used as a traffic management treatment.

Decorative surface treatment shall not be installed where —

- (a) it confuses the intended purpose for road users;
- (b) it gives the impression of priority to a particular road user where the priority does not exist;
- (c) it detracts from the significance or confuses the legal requirement of existing regulatory devices; and
- (d) it may create a road safety risk to road users, such as a slippery surface for motorcyclists, cyclists and pedestrians.

Section 2 Vertical deflection devices

2.1 General

This section specifies vertical deflection devices commonly used in LATM schemes. Vertical deflection devices are used to reduce vehicle speed through the introduction of a physical feature that forces a vertical change in the road alignment. The devices can be installed in various forms and their design shall take into account the needs of all road users, including buses, motorcyclists, cyclists and pedestrians.

For guidance on the design of vertical deflection devices, refer to Austroads, *Guide to Traffic Management Part 8: Local Street Management*.

2.2 Signs

Signing of road humps or raised pavements that include a pedestrian priority treatment shall be provided in accordance with AS 1742.10. Signs used at or near vertical deflection devices are listed in [Table 2.1](#).

NOTE 1 A pedestrian priority treatment means a pedestrian crossing (zebra), children's crossing, pedestrian actuated traffic signals (mid-block) or a crossing at which Australian Road Rule 71 applies.

NOTE 2 A revision of AS 1742.10 was in preparation at the time of publication of this document.

Table 2.1 — Signs for vertical deflection devices

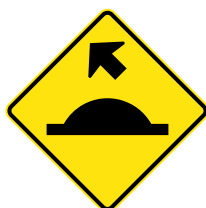
Sign	Sign number	Size, mm	Clause
Road Humps Ahead — Straight	W3-4-1A	600 × 600	2.2(a)
	W3-4-1B	750 × 750	
Road Humps Ahead — 45°	W3-4-2A (L, R)	600 × 600	2.2(a)
	W3-4-2B (L, R)	750 × 750	
Road Humps Ahead — 90°	W3-4-3A (L, R)	600 × 600	2.2(a)
	W3-4-3B (L, R)	750 × 750	
Road Hump	W5-10A	600 × 600	2.2(b)
	W5-10B	750 × 750	
	W5-10C	900 × 900	
Advisory Speed	W8-2A	600 × 400	2.2(c)
	W8-2B	750 × 500	
	W8-2C	900 × 600	
	W8-2D	1 200 × 800	
NEXT x m	W8-17-2A	600 × 400	2.2(d)
	W8-17-2B	750 × 500	

Signs used at or near vertical deflection devices are as follows:

(a) *Road Humps Ahead (W3-4-1, W3-4-2 (L, R), W3-4-3 (L, R))*



W3-4-1



W3-4-2(L)



W3-4-2(R)



W3-4-3(L)



W3-4-3(R)

The Road Humps Ahead sign (W3-4-1, W3-4-2, W3-4-3) is used in advance of an isolated hump or at the start of a section of road in which a series of road humps have been installed. The arrow may be orientated to point to a side road where a device is installed. The sign is not normally required where the road humps form part of an area-wide LATM scheme.

The NEXT x m sign (W8-17-2) may be used to indicate the length of road over which a series of road humps has been installed.

(b) *Road Hump (W5-10)*

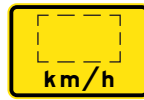


W5-10

The Road Hump sign is used for all types of hump regardless of length or cross-sectional shape. For a zebra crossing on a raised platform (wombat), refer to AS 1742.10.

It is generally used only at isolated road humps, or at the leading hump in a series of humps in a linear scheme. It is not normally required when road humps form part of an area-wide LATM scheme. It may be used at any hump that is more than 120 m from the previous hump or is not clearly visible from the previous hump.

The Advisory Speed sign (W8-2) may be used with the Road Hump sign.

(c) *Advisory Speed (W8-2)*

W8-2

The Advisory Speed sign may be used to supplement the Road Hump sign (W5-10). The recommended advisory speed is 20 km/h.

(d) *NEXT x m (W8-17-2)*

W8-17-2

The NEXT x m sign is used in conjunction with the Road Humps Ahead sign (W3-4-1, W3-4-2, W3-4-3) to indicate the length of road over which a series of road humps has been installed.

2.3 Pavement markings

All pavement markings shall be white, reflectorized and have similar skid resistance to surrounding pavement for the benefit of bicycles and motorcycles. Full details of pavement markings are provided in AS 1742.2.

The following pavement markings are used as follows:

- (a) *Dividing line:* A dividing line may be 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, refer to AS 1742.2.
- (b) *Road hump markings:* The pavement markings used at road humps shall consist of a marking on each face of the hump in the form of a transverse line with a series of alternate long and short lines running up the face of the hump. [Figure 2.1](#) provides an illustration of the road hump markings. The layout and dimensions of road hump markings shall be as set out in AS 1742.2.

The marking may be omitted on road humps if a contrasting colour pavement material has been used such that the hump is clearly visible under all conditions. Contrasting pavement material should have similar skid resistance to surrounding pavement for the benefit of bicycles and motorcycles.

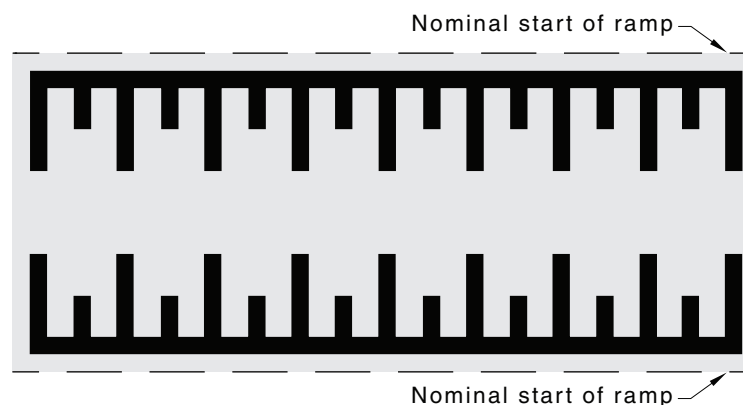


Figure 2.1 — Pavement marking for road humps

- (c) *Raised retroreflective pavement markers (RRPM)*: Raised retroreflective pavement markers may be used to augment pavement markings on the road surface. Figures may illustrate the optional use of RRPMS for a particular LATM device. They are not necessarily shown in all places where they might be used, refer to AS 1742.2 for details.

2.4 Road humps

2.4.1 General

The function of a road hump is to reduce vehicle speeds through the introduction of vertical displacement to cause occupant discomfort when the hump is traversed at a speed above its design speed. The road hump design shall be safe for negotiation by all road users including buses, motorcyclists, cyclists and pedestrians. The road hump shall have similar skid resistance to the surrounding pavement for the benefit of people riding bicycles and motorcycles.

Road humps should be clearly visible to all approaching road users and illuminated by street lighting, refer to AS/NZS 1158 series. If the road hump markings are omitted, the Road Hump sign shall be used.

2.4.2 Hump profiles

This section specifies two varieties of road hump as follows:

- (a) The “Watts” profile, see [Clause 2.4.3](#).
(b) The “flat-top” road hump, see [Clause 2.4.4](#).

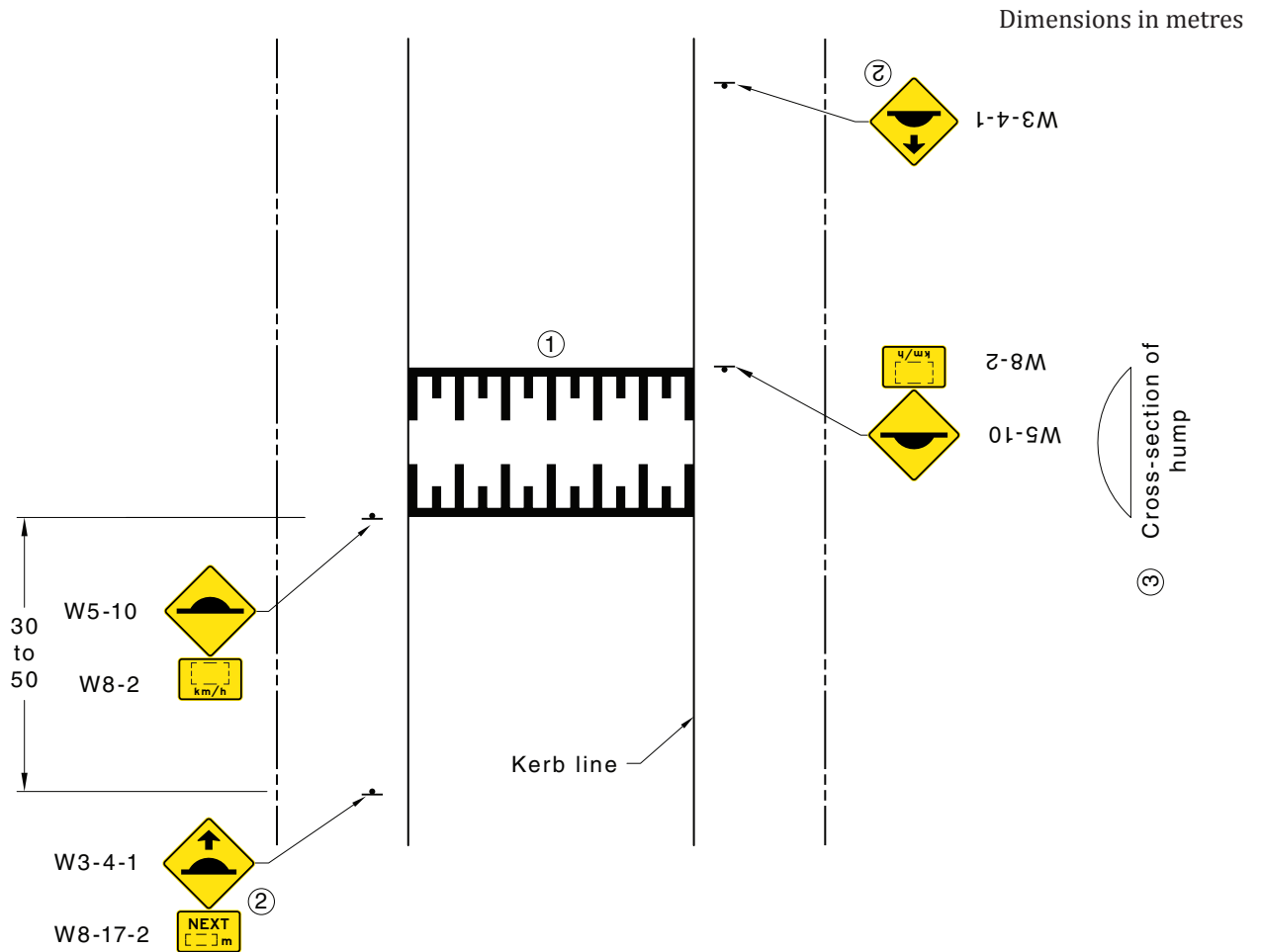
For guidance on the design of road hump profiles, refer to Austroads, *Guide to Traffic Management Part 8: Local Street Management*.

NOTE A different profile is used for the raised pedestrian crossing (zebra) or wombat crossing, see [Clause 2.5](#).

2.4.3 Watts profile road hump

The Watts profile road hump has a circular arc cross-section and is of fixed length in the direction of travel. The road hump may be installed as an isolated device or in a series of humps in a linear scheme.

[Figure 2.2](#) shows signs and pavement markings that may be used for a Watts profile road hump.



NOTE 1 For details of road hump pavement marking, refer to AS 1742.2.

NOTE 2 Sign W3-4-1 may not be required, see [Clause 2.2\(a\)](#).

NOTE 3 The hump profile is provided in Austroads, *Guide to Traffic Management Part 8: Local Street Management*.

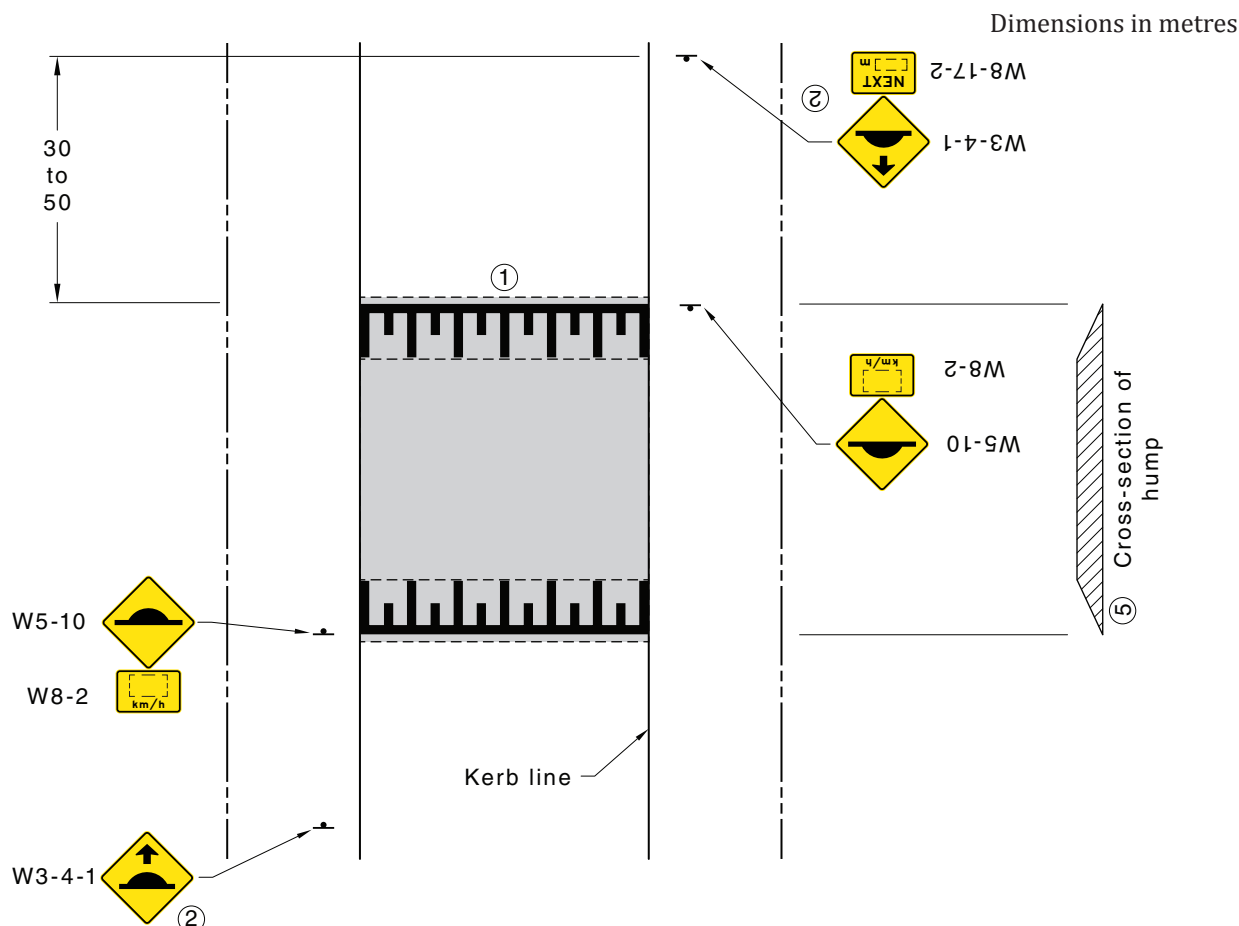
NOTE 4 The hump may be supplemented with kerb extensions, e.g. of the type illustrated in [Figure 3.2](#).

Figure 2.2 — Watts profile road hump

2.4.4 Flat-top road hump

The flat-top road hump has a flat cross-section in place of the circular arc of the Watts profile. The flat-top road hump may be installed as an isolated device or in a series in a linear scheme.

Figure 2.3 shows signs and pavement markings that may be used for a flat-top road hump.



NOTE 1 For details of flat-top road hump pavement marking, refer to AS 1742.2.

NOTE 2 Sign W3-4-1 may not be required, see [Clause 2.2\(a\)](#).

NOTE 3 The hump may be supplemented with kerb extensions, e.g. of the type illustrated in [Figure 3.2](#).

NOTE 4 If the device is to be a raised pedestrian crossing (zebra) (i.e. a wombat crossing), it is to be constructed, pavement marked and signed in accordance with AS 1742.10.

NOTE 5 The hump profile is provided in Austroads, *Guide to Traffic Management Part 8: Local Street Management*.

Figure 2.3 — Flat-top road hump