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Government

MUNICIPAL INFRASTRUCTURE STANDARDS

Part 12 Guide Signs

TCCS
Transport Canberra City Services

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1 GUIDESIGNSGENERAL

1.1 General

The Australian Standard, *AS 1742 Manual of Uniform Traffic Control Devices*, and *AS 1743 Road signs – Specifications*, are the basic references for the design of all road signs in Australia. While both Standards provide comprehensive general guidance, this Design Standard has been compiled to provide more detailed information in particular areas to allow uniform urban signing and the accommodation of local ACT conditions and practices.

1.1.1 Responsibilities

1.1.1.1 Objectives

General: Provide guide signage design and documentation for guide signs, street name and community facility name signs and retrofit and upgrade existing signs, as documented.

1.1.1.2 Precedence

Requirement: Where any document except legislation or the *Territory Plan* issued referenced in this Design Standard includes technical requirements that conflict with this Design Standard, consult with the service authority and TCCS for clarification.

1.1.2 Cross references

1.1.2.1 ACT Legislation

The following ACT Legislation is relevant to this Standard:

Road Transport (General) Act

Road Transport (Safety and Traffic Management) Act

Road Transport (Mass, Dimensions and Loading) Act

Road Transport (Safety and Traffic Management) Regulation

Territory Plan and related Codes

Estate Development Code

National Capital Plan

1.1.2.2 Policy and guidelines

Australian Road Rules, National Road Transport Commission

Engaging Canberrans, A guide to community engagement

Public Unleased Land (Movable signs) Code of Practice

1.1.3 Referenced documents

1.1.3.1 Standards

General: The following documents are incorporated into this design standard by reference:

- AS 1742 Manual of uniform traffic control devices
- AS 1742.1 Part 1: General introduction and index of signs
- AS 1742.2 Part 2: Traffic control devices for general use
- AS 1742.5 Part 5: Street name and community facility name signs
- AS 1742.6 Part 6: Tourist and service signs
- AS 1742.15 Part 15 Direction signs, information signs and route numbering
- AS 1743 Road signs – Specifications
- AS 1744 Standard alphabets for road signs
- AS/NZS 1906.1
Retroreflective materials and devices for road traffic purposes Part 1: Retroreflective sheeting

Austrroads

- AGTM Austrroads Guide to Traffic Management
- AGTM10 Part 10: Traffic Control and Communication Devices

1.1.4 Standards

1.1.4.1 Design

Standards: To AS 1742 and AS 1473.

Proprietary products: To *TCCS Products previously considered for use list*

1.1.5 Interpretation

1.1.5.1 Abbreviations

TCCS: Transport Canberra and City Services Directorate

1.1.5.2 Definitions

General: For the purposes of this standard the definition given below applies:

Retroreflectivity: Material characteristic wherein a percentage of light impinging upon a surface at an angle other than 90 degrees is reflected back to the source through the use of spherical or prismatic lens encapsulated within the material.

1.1.6 Consultation

TCCS and other Authorities

General: Consult with TCCS and other relevant Authorities during the preparation of design.

1.1.7 Walking and cycling guide signs

General: All walking and cycling behavioural and wayfinding signage is to be designed in accordance with *MIS 05 Active travel facilities design*. Guidance on signage for use in the City centre can be referenced in the *Canberra Central Design Manual Part B2 and C2 - Signage*.

2 PRE-DESIGN PLANNING

2.1 Signage principles

General: The provision of a guide sign is dependent on the importance of the destination to which it refers, and the function of the road, according to its position in the road hierarchy, on which it is located. This standard specifies the destinations to be signed at any intersection and the processes for determining the sign type, sequence, location and letter height are detailed.

ACT specific: This Design Standard is based on the framework of the ACT hierarchy of roads and destinations. However the development of the road network and evolution of planning over the years has resulted in a variety of network characteristics which preclude the formulation of rigid signing rules.

Design: A flexible and rational approach, within the established framework, is required in guide-sign planning and design as a signage system cannot cater for the entire length of most journeys. Generally an additional form of aid will remain a necessity for most travellers (e.g. GPS, street directory, or verbal/written instructions).

2.2 Destinations overview

Destinations for which guide signs are provided are defined to be:

- > Urban destinations,
- > Services,
- > Tourist attractions and heritage sites, and
- > Rural destinations.

Urban destinations are classified as:

- > **Principal:** the metropolitan area of Canberra and its extension into neighbouring New South Wales. For details refer to **Principal destinations**.
- > **Primary:** the urban area districts of the ACT - Belconnen, City (used as a simpler, more familiar substitute for Central Canberra), Gungahlin, Molonglo, Queanbeyan, Tuggeranong, Weston Creek, and Woden. For details refer to **Primary destinations**.
- > **Secondary:** the City centre, the town centres, industrial areas and other areas having similar activity levels, plus the highways, which are included to provide guidance without the need to sign several destinations. For details refer to **Secondary destinations**
- > **Tertiary:** suburbs and group centres. For details refer to **Tertiary destinations**.

Services are defined according to their extent of influence and include the following.

- > Category 1 - Regional services,
- > Category 2 - Sub-regional services,
- > Category 3 - Community services,
- > Category 4 - Service stations,
- > Category 5 - Tourist services,

> Category 6 - Recreation services,

SUPERCEDED

For signage related to regional (Category 1) and sub-regional services (Category 2), these services include: (refer to **Services** for details)

- > Canberra International Airport
- > Canberra Hospital and Calvary Hospital
- > Australian Institute of Sport, including GIO Stadium
- > Exhibition Park of Canberra (EPIC)
- > Major retail centres in City and the Town Centres
- > Tertiary Educational Institutions
- > Mitchell and Mugga Resource Management Centres

Tourist attractions are treated both as individual locations and, where they are co-located with other attractions, as a group. A distinction is made between major tourist attractions and other attractions. Refer to **Tourist attractions and heritage sites** for details.

Rural destinations in the region are classified as primary, secondary and tertiary according to their importance. Refer to **Rural destinations** for details.

2.3 Wayfinding and road hierarchy

General: The progression from broad to local scale involves movement through a hierarchy of roads as described below, normally identified according to function, width and geometry. Some levels of signage will only be appropriate on roads of a particular level in the hierarchy.

2.3.1 Signage modes

General: Two modes of wayfinding are employed, - Destination Name and Street Name. The destination mode will predominate at the beginning of longer journeys, but regardless of the initial method, the street name gradually assumes greater importance, eventually becoming the only mode as the destination is approached.

To maintain clarity, it is necessary to limit the number of destinations signed at major intersections, thereby limiting the use of tourist guide signs to the immediate environs of the attraction. Generally, tourists are expected to find the general area or major address road, using the arterial signing network, and are provided with individual attraction signing only when the broad scale provided by this network is no longer adequate.

Tertiary destinations: mainly the residential suburbs, are signed on adjacent arterial roads between the arterial/arterial intersections. The intention is to provide direction to each suburb from all adjacent arterial roads, normally to the suburb shops, as a destination where further guidance may be obtained. Suburbs are further identified by black on white reflective suburb signs.

Service signs: are provided only when the particular service is located where it may not be reasonably expected to be found. The range of services normally found at suburb shops, group and town centres are not signed, while a well-equipped health centre or retirement village located within a suburb could not be anticipated and is therefore signed. Special provision is made for signing regional services and for service stations operating for extended hours.

Tourist signs: are provided to guide visitors to attractions endorsed by the Australian Capital Tourism Corporation rather than for promotional purposes attracting passing trade. In general, the most suitable method of promoting the tourist industry is to provide clear and uncluttered signing from the arterial network, with the addition of individual attraction signing when the broad scale guidance provided by arterial signing is no longer adequate.

2.3.2 Hierarchy of roads in the act

General: Conventionally, roads have been described according to a hierarchy based on function and geometric characteristics. Roads in the hierarchy range from the arterial road, which is designed to carry substantial through-traffic at high speeds, to the local access street, which is designed to accommodate local traffic at slow speeds.

The ACT road hierarchy is defined in terms of:

- > Arterial roads,
- > Major collector roads,
- > Minor collector roads, and
- > Access streets.

Requirement: This Design Standard applies to guide signs to be located on arterial and major collector roads only. Minor collector roads and access streets are to only be signed with a G5-1 street name blade sign unless the provision of wayfinding signage is required.

2.3.3 Guide signs and the road hierarchy

General: The road types for guide signs and the routes for signage are as follows:

Arterial roads

Arterial roads perform the main traffic-carrying function between and within towns. They include the state and national highways which pass through the ACT.

Major collector roads:

Major collector roads provide the link between the arterial road network and lower order roads within the suburbs. They are generally either the main access roads into the suburb, connecting the suburb shops with the adjacent arterial roads or are located between suburbs and serve a maximum of four suburbs.

Estate development:

The Estate Development Code provides the road hierarchy definitions applicable for estate development.

Requirements: The following rules are linked directly to the urban road hierarchy:

- > Route numbering where appropriate.
- > Normally, only primary and secondary destinations are signed at intersections between arterial roads. The main exception occurs where one of the four approaches is a major collector road, when it may be necessary to sign a tertiary destination.
- > Intersections on arterial roads are signed with at least a G2-1 sign.
- > Signs on major collector roads are normally located within the intersection. An exception may be made if traffic volume is uncharacteristically high.
- > Minor collector roads are signed from major collector and arterial roads with G2-1 signs. Refer Section 4.1.4 for requirement for signing of the Suburb.
- > All intersections are provided with G5-1 street name signs.

Road Hierarchy Classifications:

Road hierarchy Classifications are shown at:

<http://activeinfrastructure.net.au/practitioner-tool/index.php>

2.3.4 Rural road hierarchy

General: Rural roads are classified into three main types:

- > Trunk routes (National Highways and National Routes)
- > Rural main roads
- > Rural secondary roads

The influence of the urban area of Canberra tends to distort the usage of the rural main and rural secondary roads to the extent that they are classified by designation rather than by description. For details refer to **Rural destinations**.

Requirement: Roads which are not all-weather are not signed for external destinations, except at the ACT border.

2.4 Roads with national route markers

Requirement: Route markers (integrated with destination signage where possible) are to be provided on the following roads:

- > M23 - Federal Highway to Majura Parkway, Majura Parkway, Monaro Hwy (Majura Pwy to Canberra Av).
- > A23 - Federal Highway (south of Majura Parkway), Northbourne Avenue, Vernon Circle Commonwealth Avenue, Capital Circle (Commonwealth Avenue to Canberra Avenue), State Circle East (Northbound Canberra Avenue to Commonwealth Avenue), Canberra Avenue (Capital Circle to Monaro Highway) and Monaro Highway (to ACT Border).
- > A25 – Barton Highway.
- > B23 - Monaro Highway (ACT Border to Cann River (Victoria) via Cooma).
- > B52 - Hindmarsh Drive (Monaro Highway to Canberra Avenue), Canberra Avenue (east of Hindmarsh Drive), King's Highway.

These are shown on **Figure 12-1 Roads with Route Numbering**

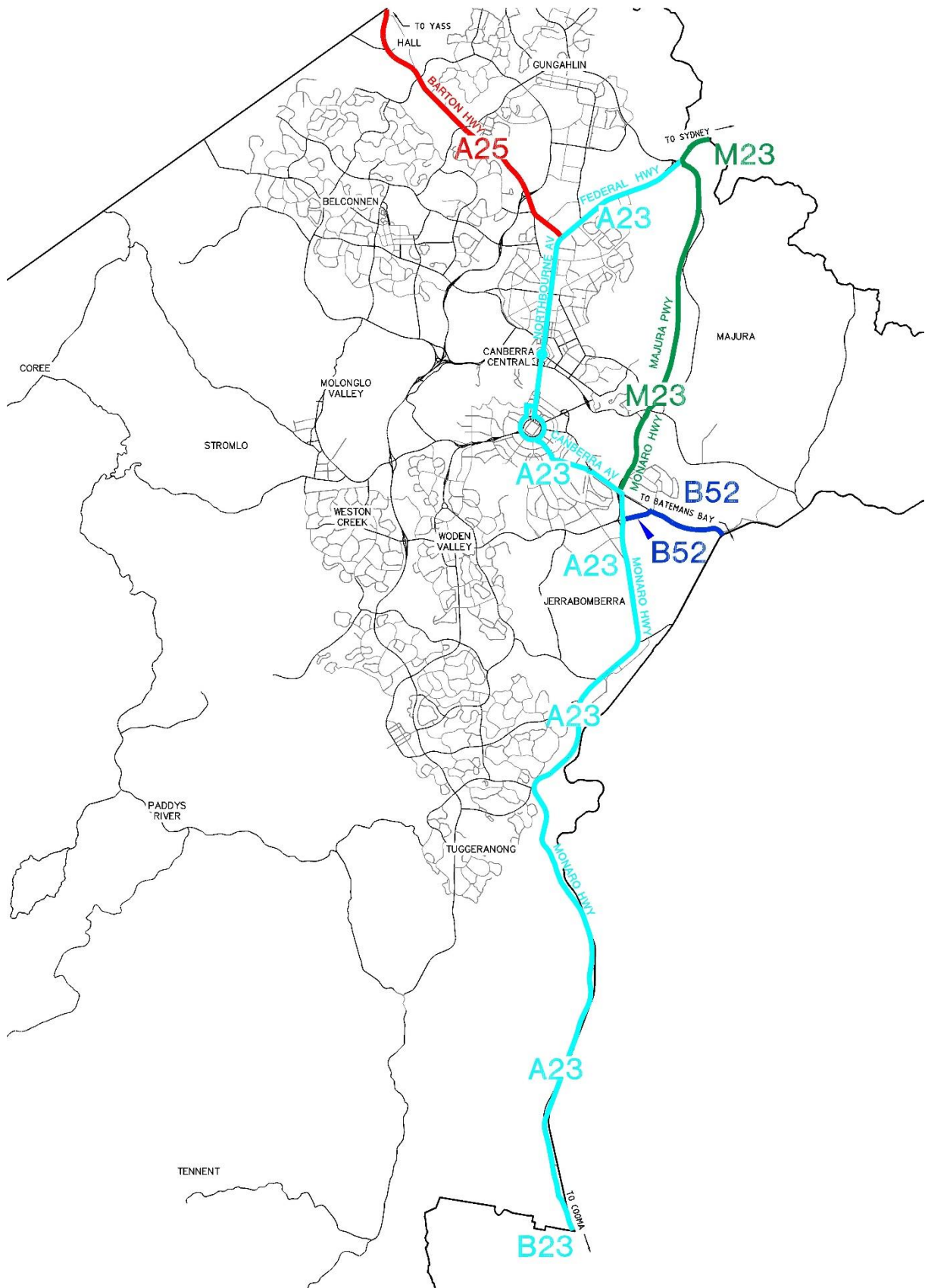


Figure 12-1 Roads with Route Numbering

2.5 Designated areas and the main avenues and approach routes

General: The National Capital Plan sets out the broad planning framework for the ACT. Many destinations, particularly the main tourism attractions, are in designated areas or are located off the main avenues and approach routes. Signage must comply with the requirements of the National Capital Authority in these instances.

Locations: The Main avenues and approach routes where signage must comply with the requirements of the National Capital Authority include the land within the boundaries of the reservations of the following main roads and other designated areas:

Main Avenues

- > Northbourne Avenue, between Antill/ Mouat Streets and Barry Drive/ Cooyong Street
- > Adelaide Avenue, outside the Central National Area
- > Canberra Avenue, between Hume Circle and the Central National Area
- > Brisbane Avenue outside the Central National Area
- > Constitution Avenue.

Approach Routes

- > the Barton and Federal Highways from the ACT borders to their junction with Northbourne Avenue, and extending to include Northbourne Avenue north of Antill Street/Mouat Street
- > the Monaro Highway from the ACT border through to Fairbairn Avenue
- > Canberra Avenue from the ACT border to Capital Circle
- > Pialligo Avenue from the ACT border to Morshead Drive
- > Fairbairn Avenue

Requirements: Detailed conditions of planning, design and development as specified by the National Capital Authority require that:

- > Road pavements, medians, footpaths and verges will be developed to consistently high standards.
- > Signs will generally comprise traffic, directional and visitor information signs, and unnecessary repetition will be avoided.
- > Commercial roadside signs are not permitted in road reservations, except on bus shelters.
- > Refer to *ACTmapi – National Capital Authority and Territory Plan Map*.

2.6 Signs in heritage precincts

Requirement: The ACT Heritage Unit shall be consulted in relation to the replacement or repair of a sign in a designated heritage precinct where the sign's appearance and materials are integral to the character of the precinct. The ACT Heritage Register provides guidance on locations where preservation of existing features may be required.

3 DESIGN

3.1 Wayfinding signage

General: Wayfinding using road signage requires that destinations be ranked in a hierarchical structure, with the position in the hierarchy determining the extent of influence, or geographical limit to the signing of the destination. The following sections describe the hierarchy system utilised for guide signs in the ACT.

3.1.1 Principal destinations

General: The metropolitan area of Canberra, for which the extent of influence extends throughout the ACT and into New South Wales. Other regional destinations include Queanbeyan, Yass, Melbourne, Goulburn, Sydney and Cooma. Braidwood is also included on the Kings Highway at the NSW border.

Requirements:

- > The extent of influence of the principal destinations is illustrated on *ACTSD-3810 to 3815* respectively.
- > The appropriate G1 and/or G2 signs are provided at the locations shown on the *ACTSD*.
- > Also refer to **Rural destinations** for details and methodology on signing rural destinations.

3.1.2 Primary destinations

General: Primary destinations include: Belconnen, City (used as a simpler, more familiar substitute for Central Canberra), Gungahlin, Molonglo, Queanbeyan, Tuggeranong, Weston Creek and Woden.

Requirements:

- > The extent of influence of the primary destinations is illustrated on *ACTSD-3820 to 3826* respectively.
- > The appropriate G1 and/or G2 signs are provided at the locations shown on the *ACTSD*. The towns are further identified by G6-1 signs located on the arterial roads entering them at the point where the towns are first sighted by the motorist.
- > North Canberra and South Canberra may only be used with approval of the Road Authority as destinations where their use does not create a conflict between the two commonly accepted meanings of these terms. These are:
- > That Canberra includes Woden and Belconnen, etc. and that North and South Canberra are, therefore, the urban areas north and south of Lake Burley Griffin; and
- > That North and South Canberra are divided by Lake Burley Griffin and extend to Watson to the north and Red Hill to the south.

3.1.3 Secondary destinations

General: The City centre and the town centres, industrial areas and other areas having similar activity levels. National Highways are included to provide guidance without the need to sign several destinations.

Requirement: The appropriate G1 and/or G2 signs are to be provided at the locations shown on the extent of influence plans for each of the individual categories as follows:

- > City centre and town centres refer to *ACTSD-3830*.
- > Industrial areas refer to *ACTSD-3831*.
- > Employment/ activity centres refer to *ACTSD-3832*.
- > Barton and Monaro Highways refer to *ACTSD-3833*.

Destinations: Further detail on the destinations allowed on the G1 and/or G2 signs are as follows:

City Centre and the town centres

Civic, Belconnen, Gungahlin, Tuggeranong and Woden Town Centres are defined as the areas subject to Commercial A and B Land Use Policies in the Territory Plan.

Requirements:

- > Beyond two kilometres from the perimeter of the centre (measured from the GPO) they are to be signed respectively as:
 - > "City Centre"
 - > "Belconnen Town Centre"
 - > "Gungahlin Town Centre"
 - > "Tuggeranong Town Centre"
 - > "Woden Town Centre"
- > Within two kilometres as:
 - > "City Centre" or "Town Centre" for all other town centres other than City Centre.

Industrial areas

Requirement: The following industrial areas are to be signed:

- > Beard
- > Belconnen Minor Industrial Area
- > Fyshwick
- > Hume
- > Mitchell

Employment centres

Requirement: The following employment areas are to be signed:

- > Bruce
- > Parliamentary Zone
- > Russell
- > Symonston North
- > Symonston West

Highways

Requirement: The highways are to be signed as:

- > "TO BARTON HIGHWAY"
- > "TO MONARO HIGHWAY"

3.1.4 Tertiary destinations

General: Tertiary destinations comprise the suburbs and group centres

Suburbs

Requirement: Suburbs are signed as follows

- > On adjacent arterial roads by the following methods:
 - G2 signs to indicate street name, suburb name and presence of shops.
 - G6 suburb identification signs at the corner of each suburb.
- > Suburbs are not signed at arterial road intersections, except where the need is clearly demonstrated. The most common exception is where one of the four approaches is a major collector road.
- > G2 signs are used to direct users to named suburb shops, give clear direction to the suburb, and indicate the shops as the suburb's activity centre where further direction-finding information can be obtained.
- > The use of "Suburb shop" signs is determined by the following considerations:
 - Only one "Suburb shop" sign is provided for each suburb on any major collector road along the edge of a suburb for each direction of travel along that road;
 - Generally, only two pairs of "Suburb shop" signs are provided for each suburb;
 - The route signed to the shops is the most easily followed and, preferably, the shortest;
 - Turns required within a suburb are delineated by a G2-1 (white on blue) with the legend "Shops";
 - In the case of a large suburb, where there are several unnamed activity centres which include shops (e.g. Kambah), the "Suburb Shop" sign may be replaced by a sign with the legend "Local Shops"; and
 - Where a suburb is bordered by a major collector road, and that suburb is signed at the intersection of the major collector and arterial roads, then a G2-1 is provided on the major collector road.
- > For suburbs without shops, signing is by suburb name on a G2 sign, one for each direction of travel on each adjacent arterial road or major collector road signed for access to the suburb. Generally, the sign is located at the first access encountered in the direction of travel, unless a later access is more appropriate.
- > With the exception of Swinger Hill all suburbs shall be signed with the same name as the suburb.
- > The methodology for the signing of suburbs is illustrated in **Figure 12-2 Signing of suburbs**.

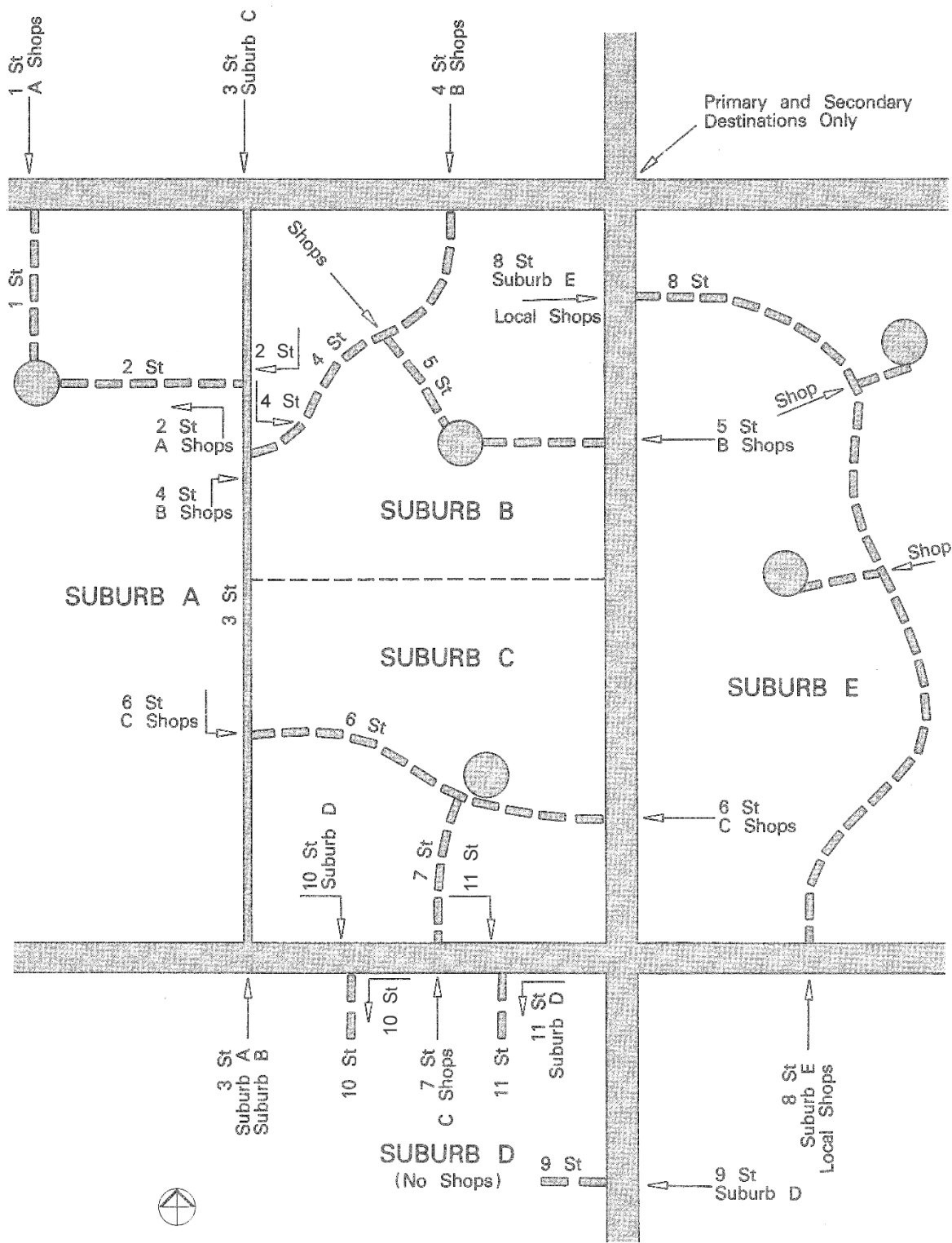


Figure 12-2 Signing of suburbs

3.1.5 Rural destinations

General: The extent of influence of rural destinations is based on the RMS NSW practice of establishing the extent of influence linearly between focal points.

Requirements:

- > Focal points are the terminals or major junctions of rural, main or secondary roads and are, generally, primary or secondary destinations outside the urban area of Canberra.
- > Only focal points appear on G1, G2, G3 and G10 signs. Focal point and intermediate destinations appear on G4 and G6 signs. Once the name of a destination appears on a G1, G2 or G3 sign, it must appear on all subsequent guide signs until the destination is reached.
- > The hierarchy and a list of rural destinations is given below and the signing of these destinations is illustrated in Figure 12-3.

Primary rural destinations

Requirement: Primary rural destinations are the same as the principal destinations detailed in **Principal destinations**.

Secondary rural destinations

Requirement: The following secondary rural destinations are to be signed:

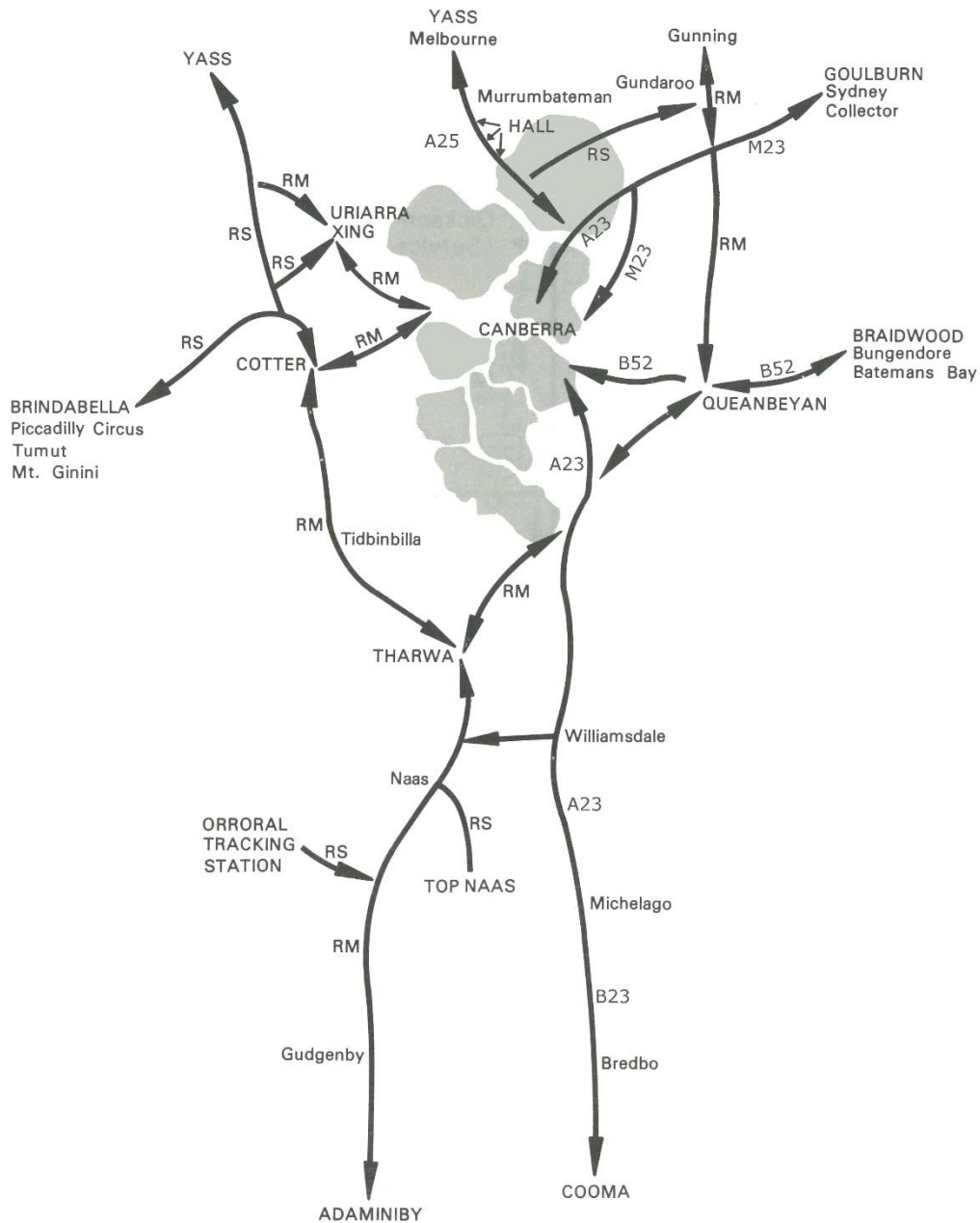
- > Adaminaby
- > Tumut

Tertiary rural destinations

Requirement: The following tertiary rural destinations are to be signed:

- > Bredbo
- > Brindabella*
- > Bungendore
- > Collector
- > Cotter*
- > Hall*
- > Michelago
- > Murrumbateman
- > Naas
- > Royalla
- > Sutton
- > Tharwa*
- > Top Naas*
- > Williamsdale
- > Wee Jasper

* Focal point



LEGEND

- ← Limit of sign posting
- YASS Upper case names are focal points. Only focal points signed on G1, G2, G4, G6 and GIO signs are indicated
- Tumut Lower case names signed on G4 and G5 sign only
- A A Route
- B B Route
- M M Route
- RM Rural Main Route
- RS Rural Secondary Route

Figure 12-3 Signing rural destinations

3.2 Services

General: Service signs are provided only in locations where the particular service would not normally be anticipated. For example, public telephones are signed if located in an isolated position on an arterial road, but are not signed if located in a suburban shopping centre, many of which have public telephones. Continuity of signing from the first sign to the destination is to be maintained.

Information: Services are grouped for the purpose of determining the extent of influence for signage:

3.2.1 Category 1: Regional services

General: The extent of influence for the regional services destinations is as follows

- > Canberra International Airport as shown on *ACTSD-3840*.
- > Hospitals providing emergency services - The Canberra Hospital and Calvary Hospital as shown on *ACTSD-3841*.
- > Australian Institute of Sport (AIS), Exhibition Park in Canberra (EPIC) and GIO Stadium as shown on *ACTSD-3842*.

Requirements: The wayfinding signage for ACT public and private hospitals is as follows

- > Use of the S1 (white cross on blue background) service symbol is restricted to Hospitals providing emergency services - i.e. The Canberra Hospital and Calvary Hospital only.
- > Public hospitals:
 - The public hospitals shall be signed from the adjacent arterial road e.g. Yamba Drive for “The Canberra Hospital”, Calvary Hospital shall be signed from Haydon Drive. The lettering shall be modified E and shall be white on blue. The sign shall also include the S1 service symbol.
 - S1 service symbol signed continuously along the route from each major entry road into Canberra.
- > Private hospitals (i.e. National Capital, John James) are signed in upper case Series D lettering with black legends on white plates incorporated into bi-directional signage at all major or minor collector roads or access street intersections leading to the address road. Legends are:
 - “CALVARY PRIVATE HOSPITAL”, is located within the grounds of Calvary Hospital, and, given the similarity of the name, is not provided with additional specific directional signage.
 - "JOHN JAMES PRIVATE HOSPITAL"
 - "THE NATIONAL CAPITAL PRIVATE HOSPITAL"
 - “UNIVERSITY OF CANBERRA HOSPITAL”

3.2.2 Category 2: Sub-regional services

General: The extent of influence for the sub-regional services destinations as listed is as follows

- > Canberra Railway Station as shown on *ACTSD-3842*, and Mitchell and Mugga Resource Management Centres as shown on *ACTSD-3831*.
- > Major retail centres as shown on *ACTSD-3843*.
- > Tertiary educational Institutions as shown on *ACTSD-3844*

Canberra Railway Station

Requirements: The facility is to be signed as:

- > "Canberra Railway Station"

Mitchell and Mugga Resource Management Centres

Requirements: The facilities are to be signed as:

- > "Mitchell Resource Management Centre"
- > "Mugga Resource Management Centre".

Major retail centres

Requirements:

- > The major retail centres in City and the Town Centres are classified as destinations in their own right, and may be signed with the following names as an adjunct to the City and town centre signs:
 - "Canberra Centre"
 - "Gungahlin Marketplace"
 - "Tuggeranong Hyperdome"
 - "Westfield Belconnen"
 - "Westfield Woden"
- > The signs are to be limited to a distance of two kilometres from City or town centre perimeters and are only to be located on major arterial roads approaching the centres.

Tertiary educational institutions

Requirements: The institutions are to be signed as:

- > "Australian National University"
- > "University of Canberra"
- > "Australian Defence Force Academy"
- > "Australian Catholic University"
- > "National Theological Centre"
- > "Canberra Institute of Technology"

3.2.3 Category 3: Community services

General: The City and town centres are assumed to provide all services so services are not signed externally. There are very few services which are signed for group or local centres. Examples of the type of community services which could be signed are police stations and the government shop fronts.

Requirement: Services which may be signed, if located outside the above areas are:

- > Cafeteria/kiosk
- > Parking area
- > Health centre (full medical facilities)
- > Police station
- > Post Office
- > Restaurant
- > Shops
- > Telephones
- > Toilets
- > Recycling depots

Signage location requirements: The above services may be signed on arterial roads, subject to the following conditions:

- > They are not clearly visible from the road under consideration.
- > They are less than 500 m along the road which intersects the route under consideration.
- > Telephones are not signed more than once per kilometre.

3.2.4 Category 4: Service stations

Requirement: Service stations are signed only if they operate for a minimum of 16 hours per day, 7 days per week. Signs may then be provided on:

- > Group or local centre signs provided for that particular centre.
- > On town centre signs on the arterial roads, peripheral to that centre
- > On the nearest arterial road, providing the service station is not more than 500 m along the road which intersects, and is not clearly visible from the road under consideration.

3.2.5 Category 5: Tourist services

General: Tourist services are not signed if located within town, group or local centres.

Requirement: The following tourist services may be included:

- > Camp ground
- > Caravan park
- > Information centre
- > Hostel
- > Hotel
- > Motel
- > Tourist bureau

Signage location requirements: These are signed on arterial roads providing they are not clearly visible from and are within 1 km of the road for which signposting is being considered. For complexes offering more than one of the above services, the signing normally directs to the primary service only.

3.2.6 Category 6: Recreation services

Requirement: The following tourist services are included:

- > Barbeque area
- > Boat hire
- > Boat ramp
- > Bicycle hire
- > Canoeing area
- > Ferry terminal
- > Picnic area
- > Sailing area
- > Swimming area
- > Water-ski area
- > Lookout

Signage location requirements: These services are signed to the periphery of the services area or the junction of their exclusive access road and the road for which signposting is being considered.

3.3 Tourist attractions and heritage sites

General: The intent of this type of signage is to provide tourist direction signs to guide visitors to tourist attractions and heritage sites endorsed by the Australian Capital Tourism Corporation or the National Capital Authority, and to promote the tourist industry in general by excellent arterial network guide signing. The promotion of individual tourist attractions is not an explicit objective.

To maintain clarity, it is necessary to limit the number of destinations signed at major intersections, thereby limiting the use of tourist guide signs to the immediate environs of the attraction. Generally, tourists are expected to find the general area or major address road, using the arterial signing network, and are provided with individual attraction signing only when the broad scale provided by this network is no longer adequate.

Requirements: The extent of influence of a tourist attraction or heritage site is along the road on which it is located to the road of the next highest order in the hierarchy.

This is modified by the following:

Group signing

- > The development of a number of tourist attractions in a tourist group, which can be defined under a group name and which has become generally accepted, allows a greater extent of influence under a group name. In this way the group name can be effectively promoted by the Australian Capital Tourism Corporation and signposted by the Road Authority. This is determined on a case by case basis with participation by tourist attraction operators and includes the replacement of the individual tourist attraction signs at the address road/next highest order road with group name signage.
- > Each group (the boundary of which is defined by the entrance roads of the outlying attractions) is entitled to 'National Signage' as defined below. In addition, each attraction within the group would also be entitled to 'ACT Signage' as defined below, but only within the confines of the group boundary.
- > Examples of locations where group signage should be implemented are as follows:
 - Cotter Reserve
 - Tidbinbilla (Nature Reserve, Canberra Deep Space Communication Centre)
 - Corin (Dam, ski area)
 - Yarramundi (National Zoo and Aquarium, Government House, Scrivener Dam)
 - Black Mountain (Telstra Tower, Australian National Botanic Gardens)
 - Gold Creek Village
 - Parliamentary Zone
 - Commonwealth Park/Acton Park
 - Tharwa / Namadgi National Park

Individual signage

Individual attractions which have a location unsuitable for inclusion in an Attraction Group must be assessed for individual signage at the discretion of Australian Capital Tourism Corporation or the National Capital Authority. This is most likely to apply to attractions such as the Royal Australian Mint and the Australian Institute of Sport.

The type and extent of signage for individual attraction would consider the eligibility criteria shown in **Table 12-1 Eligibility Criteria**

Table 12-1 Eligibility criteria

Eligibility criteria	C Signage	B Signage	A Signage
Has all the relevant approvals and licenses and complies with all relevant laws.	X	X	X
Actively undertakes marketing and promotions that reflects tourism as an important part of the business, and provides a substantial tourism experience	X	X	X
Adequate parking is located at, or in the vicinity of, the tourist attraction	X	X	X
Produce a promotional leaflet or brochure that includes a map and is stocked at the Canberra and Region Visitor Centre	X	X	X
Be signed at the property line	X	X	X
The tourist attraction is open for a minimum of 7 hours per day	X	X	X
Clean washroom facilities must be available onsite	X	X	X
Is open to the general public with no pre-booking required		X	X
The tourist attraction must be a member of a relevant association		X	X
Have a minimum annual patronage of 100,000 per annum		X	X
The tourist attraction is open 5 days per week		X	X
The tourist attraction has a staffed reception or permanent interpretive facilities			X
Have a minimum annual patronage of 300,000 per annum			X
The tourist attraction is open 7 days per week			X

Note: C Signage – Fingerboard signage, B Signage – Signage within 1-2 km radius, A Signage – Signage from main arterial roads

Major Tourist Destination signage

- > Individual attractions in this category would need to consider the eligibility criteria of “A Signage”. In this category attractions are entitled to direction signage from the nearest arterial road connection and subsequent roads along the route. At these designated intersections, direction signs are to be implemented on all inbound approaches to the destination.
- > Where these designated intersections are located in high speed (80 km/h +) or non-urban areas, full advance warning signs are required.

Major tourist destinations are to be in upper and lower case modified E lettering. All tourist destinations shall be white on brown. The Australian Capital Tourism Corporation shall determine which tourist destinations are major or minor.

Minor Tourist Destination signage

- > This category makes up the eligibility criteria for “B Signage” and “C Signage”, and which cannot be included in an Attraction Group.
- > Extent of signage shall be in accordance with AS 1742.6.
- > Minor Tourist destinations shall be upper case Series D lettering. All tourist destinations shall be white on brown.

The Australian Capital Tourism Corporation shall determine which tourist destinations are major or minor.

Service signage

- > Services that provide for tourist needs are signed in accordance to the type of service offered.
- > In the instances where many services need to be signed from a single direction, small individual symbols are not appropriate and a finger-board containing all the individual service symbols is required.
- > Extent of signage shall be in accordance with AS 1742.6.
- > Accommodation sites are to be provided with symbol signage at the nearest two intersections of their address road with the next road a hierarchical level above if the address road is not an Arterial route.

4 SIGN DETAILS AND LOCATIONS

4.1 Sign types

General: The following details provide basic information on the most commonly used sign types.

Services and tourist destinations: The preferred method of signing tourist destinations and services is by using symbols on standard square grids, the size of which is determined by speed. Services and tourist destinations, for which there is no symbol, are preferably signed with a written legend on G7 or G8 signs, providing this allows use of a reasonable letter height. Directional arrows may be included on the G7 or G8 where space permits. The use of symbols on G1, G2 and G3 signs for services is considered the desirable option subject to the number of symbols required.

Service signs: Care must also be taken in determining whether the destination to be signed is a service location or not. Service signs are generally used for an activity rather than a named place.

Requirements:

- > **Table 12-2 to Table 12-7** provide details of the sign types to be used.
- > Fingerboards (G3 signs) are generally not used in the ACT. Use G2 or G5 sign types unless otherwise approved by the Road Authority.
- > For service signs other than those in **Table 12-7 Service, tourist signs and hospital signage** refer to *AS 1742.5*.

Examples of commonly used guide signs within the ACT are detailed on Standard Drawings:

- > Advanced Direction (G1-1 & G1-2) - *ACTSD-3850*
- > Roundabout (G1-5) - *ACTSD-3851 TO 3852*
- > Intersection Direction (G2-1, G2-2 & G2-4) - *ACTSD-3860 to 3864*
- > Reassurance Direction (G4-1) - *ACTSD-3870*
- > Geographical Feature - Suburb (G6-1) - *ACTSD-3871*
- > White class 400 legend on standard green class 400 background, except:
- > White class 400 on blue class 400 when service locations are displayed.
- > White class 400 on brown class 400 when tourist destinations are displayed.
- > Street names have black ECF or digital printed legend on white class 400 plate

Table 12-2 Advanced direction signs (G1)

Examples	G1-1 Two panel stack with suburb and sub-regional services, refer to <i>ACTSD-3850</i> G1-2 Three panel stack with suburb and group centres, refer to <i>ACTSD-3850</i> G1-5 Roundabout and diagrammatic, refer to <i>ACTSD- ACTSD-3851</i> or <i>3852</i>
Colour	White class 400 legend on standard green class 400 background, except where: (a) the whole panel or sign displays a service location, then white class 400 legend on blue class 400 is used; and, (b) where the whole panel or sign displays a tourist destination then white class 400 legend on brown class 400 is used. Street names have black ECF or digital printed legend on white class 400 plate and should be provided within each stack panel.
Legend	Maximum number of lines – 5 (unless otherwise approved), with initial capitals left justified unless modified for special circumstances – refer example designs.
Letter style & height	Refer to Sign legends . Instructions such as TO, LEFT LANE, EXIT etc. should all be capital letters, the height should be the same letter height as the lower case height used for destinations.
Symbols	Refer <i>AS 1742.15</i> & <i>AS 1743</i> for colours and placement.
G1-3	Used where staggered T-junctions on arterial roads are less than 120 m apart. They may be also used on grade-separated "diamond" interchanges.
G1-5	Used on approaches to roundabouts on Arterial Roads and Major Collector Roads, except where diagrammatic sign is clearly not justified.

Table 12-3 Intersection direction signs (G2)

Examples	Intersection Direction (G2-1, G2-2 & G2-4) - <i>ACTSD-3860 to 3864</i>
Colour	White class 400 legend on standard green background, except: White class 400 on blue class 400 when service locations are displayed. White class 400 on brown class 400 when tourist destinations are displayed. Street names have black ECF or digital printed legend on white class 400 plate.
Legend	Maximum number of lines - 3, including the street name. Street plates shall be centred on the blade. Destinations are to be left justified and the widest destination aligned centrally with the street plate.
Letter style & height	Refer to Sign legends . Instructions such as TO or VIA should be all Series D capital letters, and equal to the letter height of the road name.
Symbols	Refer to <i>AS 1742.6</i> and <i>AS 1742.15</i> for colours and placement.
Location	G2 signs may also be erected in the advance direction sign location – see Intersection sign sequence
G2-2 Signs	Are preferred at diverge points, roundabouts and angled intersections or where the blade height exceeds 1200 mm.

Table 12-4 Reassurance direction signs (G4)

Examples	Reassurance direction sign, refer to <i>ACTSD-3870</i>
Colour	White class 400 legend on standard green class 400 background.
Legend	Maximum five destinations, or the route name and four destinations.
Letter style & height	Refer to Sign legends . Instructions such as TO or VIA should be all Series D capital letters, and equal to the letter height of the road name.
Symbols	Refer to <i>AS 1742.6</i> and <i>AS 1742.15</i> for colours and placement.

Table 12-5 Street name signs (G5)



Examples	G5 Street name sign
Colour	Black ECF or digital printed legend on white class 400 plate.
Legend	Maximum number of lines – 2.
Letter style & height	Letter style to be Series D. Series C may be used if the use of Series D makes the sign > 1200 mm long. 150 mm blade – 100 mm lettering – single destination. 200 mm blade – 175 mm lettering – single destination. 200 mm blade – 80 mm lettering – two destinations.
Symbols	Symbols are only provided with approval of the Road Authority and if included on the blade shall be on the opposite end of the blade to the post.

Table 12-6 Geographical feature signs (G6)



Examples	G6 Suburb sign, refer to <i>ACTSD-3871</i>
Colour	Black ECF or digital printed legend on white class 400 plate.
Legend	Maximum number of line – 2. Legend centred on the panel.
Letter style & height	Letter style to be Series D – Height to be 240 mm
Location	Preferably on the left side of the road, at a point on the road where the destination is clearly visible.

Table 12-7 Service, tourist signs and hospital signage (G7)

Examples	Refer to <i>AS 1742.6</i>
Colour	White class 400 legend on class 400 blue or brown background as indicated.
Assemblies	G7 signs may be grouped in horizontal or vertical assemblies to a maximum of 4 signs (including arrows)

4.2 Intersection sign sequence

4.2.1 Urban intersections

General: The sequence of signs at intersections is designed to respond to wayfinding methods adopted by users. For primary and secondary destinations in urban areas and for most rural destinations, many users depend on destination signing. When seeking tertiary destinations in the urban area, however, dependence on street name signing increases as the destination is approached. Therefore, it is important to adequately sign street names in the urban area, including advanced sign locations.

Sign location terminology: Three sign locations are recognised – advanced, intersection and reassurance, as detailed in *AS 1742 parts 5, 6, 8 and 15*.

Advanced sign location

General: The provision of a sign at the advanced location is dependent on geometry and traffic conditions except where a straight ahead destination is to be signed, and is, therefore, guided by the following considerations. These are applied with discretion, thus allowing provision of an advanced location sign where a number of factors, none of which individually meet the requirements, combine to provide justification.

Requirement:

- > Advanced location signs are to be provided:
 - where the approach speed limit is 100 km/h or greater;
 - on approaches to roundabouts (diagrammatic G1-5) except within suburbs, or suburb / local access roads where the roundabout's main function is speed control. In this case, provision of an advanced sign is discretionary;
 - on the stem of a T-intersection where the AADT is 10,000 or greater;
 - on multi-lane approaches to four-way intersections and on the head of a T-intersection; and
 - on Arterial Roads on entry to the urban area.
- > Advanced location signs are not normally provided:
 - on single lane approaches, even where additional turning lanes are provided within the intersection area; or
 - on the stem of a T-intersection where the AADT is less than 10,000.

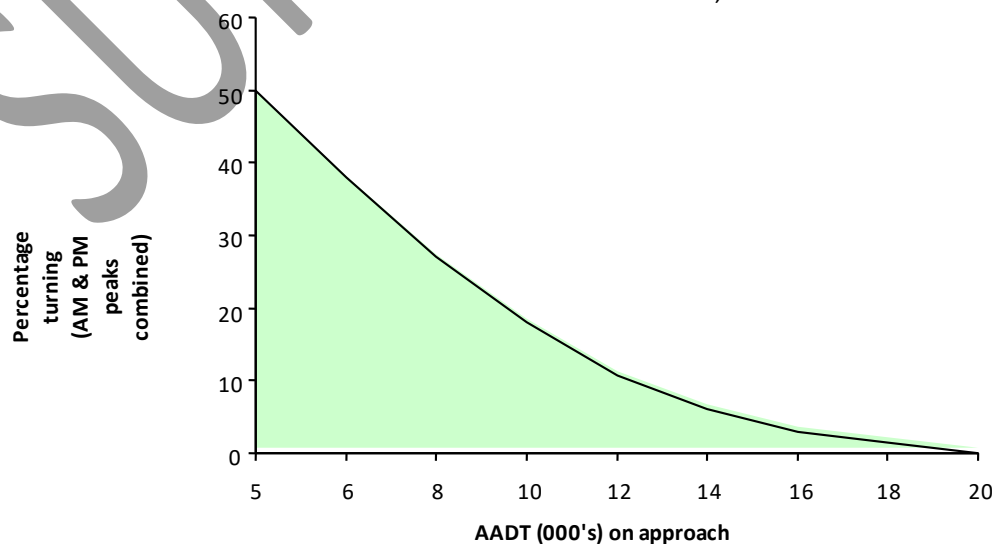


Figure 12-4 Advanced location sign warrant

Intersection sign location

Requirement: In addition to other signs provided as appropriate, a G5 fingerboard sign is required.

4.2.2 Rural intersections

Requirement: The sign sequence on rural roads is determined by turning traffic volumes in **Table 12-8 Rural intersection direction sign warrant**.

Table 12-8 Rural intersection direction sign warrant

AADT Turning	Sign Sequence
0 – 25	G3
6 – 125	G2
Over 125	G2 (intersection) and G4

4.2.3 Route markers

Requirement: Route markers are located on intersection signs in accordance with *AS 1742.15*.

4.2.4 Kilometre posts and markers

Requirement: Route markers are located as specified in *AS 1742.15*.

4.2.5 General guidance

Visibility: Conventionally and in accordance with *AS1742.15*, guide signs have normally been located on the left hand side of the roadway and this has, therefore, become the expected location. This may, however, be modified to provide adequate visibility, where visibility would be otherwise limited by obstructions (e.g. landscaping, buildings, light or signal columns, etc.) or by horizontal and/or vertical geometry.

Requirements:

- > The visibility requirement to be achieved is that the whole sign must be clearly seen from all appropriate lanes for the following distances:
 - 60 km/h - visibility distance 80 m
 - 70 km/h - visibility distance 100 m
 - 80 km/h-visibility distance 120 m
 - 90 km/h - visibility distance 150 m
 - 100 km/h-visibility distance 180 m
- > The lateral placement and height mounting of signs is in accordance with *AS 1742.15* and Standard Drawing *ACTSD-3630*.
- > In some cases signs on medians or traffic islands may need to be lower. In these instances, consideration should be given to sight distance, the potential of injury to pedestrians or of obscuring pedestrians on the median or island in determining the location and height of the sign.

4.2.6 Preferred sign location by sign type

Advance Direction Signs (G1), Intersection Direction (G2, G3), Reassurance Direction (G4), and Street Name Plates (G5).

Requirements: The preferred placement for this group of signs is generally in accordance with details shown in AS 1742.6 and AS 1742.15 with the following exceptions:

- > AS 1742.15 Fig 2.8 - Major Rural Intersection
 - G2-4 sign located at the head of the T in lieu of the G2-1 sign located in the side road slip lane island
- > AS 1742.15 Fig 2.9 - Minor Rural Intersection - Straight Approach.
 - Replace G3-3 with G2-1 signs located 30 m from intersection.
 - Back-to-back G3-3 signs not used for right turns - G2-1 sign located on left verge only.
 - G1-1 signs - dimension A measured from modified G2-1 location.
 - G1-1 signs to include street name plates.
- > AS 1742.15 Fig 2.10(a) - Minor Rural Intersection
 - G2-4 sign used in lieu of G5-1 and G3-6.
 - G5-1 sign at centre of G2-4.
- > AS 1742.15 Fig 2.11 - Major Urban Intersection.
 - G4-1 re-assurance direction sign generally not provided in urban environment.
 - G2-1 chevron or if >1200 mm high G2-2 signs used in lieu of G2-5 and located 30 m from intersection or 10-30 m upstream of commencement of turn lanes.
 - Location first preference for Intersection direction signs is 10-30 m upstream of commencement of turn lanes, with Advance Direction signs located at dimension A from the G2-1.
 - Street name plates (G5) located within median islands preferably adjacent or close to hold or stop lines and where practicable should be installed on traffic signal pedestals or street lights.
 - G2-1 to be provided on Major Collector roads on approach to intersection and G2-4 or G2-1's at the intersection.
- > AS 1742.15 Fig 2.12 - Major Urban Intersection - Divided Road
 - G4-1 re-assurance direction sign is generally not provided in urban environment except at the last major intersection on Territory exit routes - e.g. Monaro Highway, Barton Hwy, Federal Hwy.
 - Location first preference for Intersection direction signs is 10-30 m upstream of commencement of turn lanes, with Advance Direction signs at dimension A from the G2-1.
 - Street name plates (G5) located within median islands preferably adjacent to or close to hold or stop lines and where practicable should be installed on traffic signal pedestals or street lights.
- > AS 1742.15 Fig 2.13 - Minor Urban Intersections
 - G2-1 chevron or if >1200 mm high G2-2 signs used in lieu of G2-5.

> AS 1742.15 Fig 2.14 - Large Roundabout

- G4-1 re-assurance direction sign is generally not provided in urban environment except at the last major intersection on Territory exit routes - e.g. Monaro Highway, Barton Hwy, Federal Hwy.

Street name blades (G5) signs

Requirement: Street name blades are to be located generally in accordance with details shown in AS 1742.5 and with the following notes:

- > The positions shown are indicative only and the actual position should be chosen so as to maximise visibility and to utilise existing light columns, traffic signal pedestals or sign posts wherever possible.
- > No more than five (5) fingerboards should be attached to any single post or pole.
- > If there is an agreed need for a large number of 'destinations' to be signposted in a single street, consideration must be given to alternative sign designs, i.e. providing multiple signs spaced to meet standard requirements.
- > 200 mm high fingerboard signs should be used on roads with posted speed greater than 70 km/h.

Geographical Feature Signs (G6)

Requirements:

- > The preferred placement for this group of signs is generally in accordance with AS 1742.15
- > Suburb name signs are to be located at the corners of each suburb located to be easily read for approaching road users.

Service Signs (G7)

Requirements:

- > The preferred location for service signs is on the first guide sign passed on the approach to an intersection.
- > Symbols are generally incorporated on the blade of the guide sign.
- > Service signs mounted under or above a stack G2 sign require a supplementary arrow.
- > Generally, service signs are located on the main sign post on the side to which the service sign refers, but exceptions are made for adequate visibility.

Miscellaneous G7 Signs

Requirement: Refer to AS 1742.15 and AS 1743 for details of G7 signs.

Route Numbering (G8)

Requirement: Route markers are located as specified in AS 1742.15.

Tourist Drive Markers

General: Tourist Drives routes are no longer signed within the ACT.

Kilometre posts (G10)

General: Refer to AS 1742.2 for general details

Requirements: Kilometre posts are to be installed on National Highway, National Routes and Rural Main Roads outside the urban area. The abbreviations to be used for the destinations are as per **Table 12-9 Kilometre posts (G10) abbreviations.**

Table 12-9 Kilometre posts (G10) abbreviations

Destination	Abbreviation
Adaminaby	A
Braidwood	B
Canberra	C
Cooma	Co
Goulburn	G
Queanbeyan	Q
Yass	Y
Tumut	T

4.3 Sign legends

4.3.1 Alphabets

General: AS 1744 specifies six standard alphabets for letters, numerals and symbols, ranging from Series B to Series F.

Requirements:

- > Unless special conditions prevail, all ACT guide signs use Series D for capital letters.
- > All destinations are signed using the Series E Modified alphabet. This is an upper-case alphabet combined with a compatible lower-case alphabet, where the lower case alphabet letter height is nominally 75% of the upper case alphabet.

4.3.2 Letter heights

General: The required letter height is dependent on:

- > Lateral placement with respect to the driver's position; and
- > Vehicular speed;

Requirement: For all signs except for G5 signs, the letter height is to conform to **Table 12-10 Letter heights table** with the following notes:

- > For G5 signs, the minimum letter height is 100 mm or 80 mm if two rows of destinations are required on a 200 mm high sign blade.
- > Overhead sign letter heights shall conform to AS 1743.
- > The minimum letter height for all other vehicular signs is 120 mm.
- > The speed selected is normally the speed limit of the road at the point where a driver needs to make a decision based on the signage information, but this may be adjusted upward if the 85th percentile speed is clearly well in excess of the speed limit.

Table 12-10 Letter heights table

Speed Limit (km/h)	No of Lanes in direction of Travel	Capital Letter Height	
		Destination (E Mod)	Street name(D)
100	2+	240	200
	1	200	160
80 and 90	2+	200	160
	1	180	140
60 and 70	2+	180	140
	1	160	120
Roundabouts	2 Lane Departure	160	120
	1 Land Departure	140	120

4.3.3 Service and tourist symbols

Requirements:

- > Service symbol sizes are as detailed in **Table 12-11 Service and tourist symbols table**.

Table 12-11 Service and tourist symbols table

Speed Limit	Symbol Size (refer AS 1743)
Less than or equal to 70 km/h	A
Greater than 70 km/h	B

4.3.4 Justification

In general, street name plates are to be centred on the horizontal length of the blade and destinations are to be left justified. To reduce blade sizes it may be necessary in some signs to offset the groups of destinations so that they are not vertically aligned.

4.3.5 Order of lettering

Destinations should always have the nearest destination at the top of the sign and the most distant destination at the bottom of the sign. Where practical, it is preferred that tourist symbols and service symbols be placed adjacent to the destination that contains or is closest to the tourist attraction or service.

4.3.6 Major tourist destination names

The following list identifies the legend used for major tourist destinations.

Table 12-12 Major tourist destination names and legends table

Place name	Legend on sign
Australian Defence Force Academy	Australian Defence Force Academy
Australian Institute of Sport	AIS
Australian National University	Australian National University
Australian War Memorial	Australian War Memorial
High Court of Australia	High Court
National Arboretum Canberra	National Arboretum Canberra
National Botanic Gardens	Botanic Gardens
National Gallery of Australia	National Gallery
National Library of Australia	National Library
National Museum of Australia	NMA
National Zoo and Aquarium	National Zoo and Aquarium
Old Parliament House	Old Parliament House
New Parliament House	Parliament House
Royal Australian Mint	Australian Mint
Royal Military College, Duntroon	RMC Duntroon

4.3.7 Place name abbreviations

Guide sign abbreviations for street names should be used to reduce sign sizes and reduce the information on the sign. The abbreviations in AS 1742.5 shall be used. The following additional abbreviations may be used:

Table 12-13 Place name abbreviations table

Name	Abbreviation on sign	Name	Abbreviation on sign
Above Sea Level	ASL	Mountain	Mtn
Alternative	Alt	Mountains	Mts
Creek	Ck	North	Nth
Croft	CROFT	Number	No
Crossing	Xing	Numbers	Nos
Department	Dept	Park	Pk
East	East	Point	Pt
Elevation	Elev	Population	Pop
Government	Govt	Railway	Rly
Glen	Glen	Range	Ra
Harbour	Hbr	Reserve	Res
Height	Ht	Rise	Rise
Heights	Hts	River	R
Island	Is	Row	Row
Kilometre	Km	South	Sth
Kilometres per hour	km/h	Station	Stn
Maximum	Max	Through	Thru
Metre	m	Tonnes(s)	t
Minimum	Min	Way	WAY
Mount	Mt	West	West

4.3.8 Legend layout

General: AS 1743 is used as guide to the minimum and maximum spaces between lines of legend and edge of sheets. It is preferred that the following ACT modified layout distances are adopted unless it is not economical due to sheet sizes or other influences:

Requirements:

- > Vertical spacing between lines of legend = 0.6 times the capital letter height of the adjacent legend or 0.75 if the legend has a descender.
- > Spacing between lines of the legend shall be increased where two plates are beside each other by the gap between the lettering and the edge of the plate.
- > Signs without borders (e.g.; suburb signs, some geographical features):
 - Top and bottom spaces = 50% of the Capital letter height of the adjacent legend.
 - End Spaces = 80% of the Capital letter height of the adjacent legend.

- > Signs with borders (space measured to inside of border):
 - Top and bottom spaces = 50% of the Capital letter height of the adjacent legend.
 - End spaces = 75% of the Capital letter height of the adjacent legend.
- > Border widths and radii:
 - The border widths and radii listed in Tables 2 and 4 of AS 1743 are to be adopted in the ACT. End, top or bottom spaces may need to be increased where large border radii are used.

4.3.9 Arrow heads

Requirements:

- > The 'width' of the arrow head (perpendicular to the pointing direction) is to be 1.5 x the largest letter height contained on the sign blade (usually E Modified).

4.3.10 Chevrons

Requirements:

- > In most circumstances chevrons should not be used for signs with a blade height greater than 1200 mm.
- > For signs greater than 1200 mm in height an arrow should be used within a rectangular border, for details refer to sign G2-2 ACTSD-3863.
- > Chevrons are to be scaled to size using the proportions as shown on **Figure 12-5 Chevron diagram** with reference to **Table 12-14 Chevron Proportions table** for D and W.
- > The gap between the edge of the chevron and the edge of the finished blade is to be as follows:
 - top / bottom: 4 x the border thickness (usually 100 mm or 64 mm)
 - side (pointed): 0.8 x the largest letter height contained on the sign blade (usually E Modified).

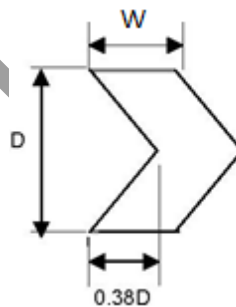


Figure 12-5 Chevron diagram

Table 12-14 Chevron proportions table

D	W
<=600	0.5D
>600 to 1200	0.4D or 250, whichever is less

4.3.11 Plates

General: Where a legend is required to be on a different colour background than the general sign background colour it is placed on a plate. Depending on the method of sign blade manufacture, plates are either placed on top of or cut into the main background.

Requirements: The gap between the edge of lettering and the plate is to be:

- > 0.25 x the capital letter height in the panel rounded up to the nearest 10 mm increment. e.g. 160 D lettering would be $0.25 \times 160 = 40$ mm or 140 D lettering would be $0.25 \times 140 = 35$ mm, therefore round up to 40 mm.
- > Where the EC Film (reverse cut) method of manufacture is used, the background film surrounding the plate is cut to an enlarged size to provide a 12 mm white border between the two coloured overlay films to avoid the need for precise matching of the plate and background films. It also provides a visual enhancement to the plate.

4.3.12 Alphanumeric

Requirements:

- > Alphanumeric details shall be in accordance with AS1742.15 and as shown in **Figure 12-6 Alphanumeric details**.
- > All Alphanumeric routes shall have a white border including if located with or within a street name or destination.
- > Alphanumeric legend shall be yellow class 400 on green class 400 background with white class 400 border.



Figure 12-6 Alphanumeric details

4.4 Logos

4.4.1 Size

General: Logos are not normally permitted. If approved for use the maximum height of a logo shall be 1.5 x the capital letter height.

Requirements:

- > If a logo is to match an existing logo, the existing logo height may be retained as long as the details of the logo including dimensions and locations are submitted to the Road Authority for prior approval.
- > It is preferred that the logo is vertically placed so that the centre of the logo is aligned with the centre of the capital letter height of the text it is associated with.

4.4.2 Colours

Requirement: Except for some ACT specific colours which are listed below, the standard colours specified in *AS 1742.15* and *AS 1743* shall be used.

Major Retail Centres:

- > Major retail centre destinations are signed using a white legend on a blue plate.

University of Canberra:

- > University of Canberra signage is to consist of a white Series E Modified legend on blue background and is to incorporate the University 'pentagonal C' logo.

4.5 Sign supports

General: Details of sign posts and supports design are shown on Standard Drawings *ACTSD-3630*.

Frangibility: Designers should take particular care to ensure that posts meet frangibility requirements. Where practicable non frangible posts should be located in a safe location behind safety barriers or beyond the clear zone. If these conditions are not met then frangible posts are required.

Sign replacement: Frangibility requirements extend to the replacement of existing non-frangible posts when sign replacement work requires adjustment to the posts.

Proprietary frangible post systems: If post sizes within frangibility limits cannot be used due to design loads, then proprietary frangible posts are to be used. Current standards adopted within the ACT preclude the use of light duty propped posts, and frangibility systems utilising slip bases and 'fuse' plates or fluted aluminium posts are used. Due to the high cost of these items, designers should investigate all possible location and/or sign design solutions to avoid unnecessary use of proprietary frangible supports.

5 MATERIALS

5.1 Retroreflective sheeting

5.1.1 Class 100 (previously Class 2)

Not be used for guide signs.

5.1.2 Class 400 (previously Class 1)

Description: Sheeting that provides an intermediate level of photometric performance as specified in *AS1906.1*

Uses: Used for general traffic control and guide signs in non-disadvantaged positions.

5.1.3 Class 1100 (previously Class 1X)

Description: Sheeting that provides a high level of photometric performance as specified in *AS1906*

Uses: Used for guide signs in disadvantaged positions e.g. overhead signs, signs located outside the clear zone, high levels of truck traffic.

5.1.4 Class 400 on Class 400

Descriptive term for the traditional method of building up a sign face by overlaying white Class 400 letters on coloured Class 400 background material. Often involves 3 layers (background, plate and lettering/numerals). Note materials used may be class 400 or class 1000.

5.1.5 EC film (ECF)

Translucent adhesive film used as an overlay to white Class 400 material to replicate standard colours in Class 400 material (commonly known as reverse cut). The film is stencil cut in such manner as to allow the white Class 400 background to form the legend and borders. Allows panels of differing colours to be inserted without multi layering of Class 400 materials.

To achieve an increased warranty period, black ECF or digital printed black lettering shall be used in lieu of vinyl lettering.

5.1.6 Digital printed

Digitally printed ink onto a Class 400 material. The ink is applied in such manner as to allow the white Class 400 background to form the legend and borders. Allows panels of differing colours to be inserted without multi layering of Class 400 materials.

5.2 Sign supports

Requirements: Sign supports materials are to be in accordance with the requirements of *MIS 14 Public lighting*.

6 DOCUMENTATION

Requirement: Comply with *TCCS Reference Document 6 Requirements for Design Acceptance submissions*



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