

2. Directional Information Signs

Traffic Signs Manual

Chapter 2 – Directional Information Signs

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2.1 Introduction

- 2.1.1 This Chapter describes the design rules and their application for directional information signs for use on motorways and national, regional and local roads in Ireland. Further information on the use of the Manual is given in Chapter 1.
- 2.1.2 For the purposes of this Manual:
- **Shall** or **must** indicates that a particular requirement is mandatory;
 - **Should** indicates a recommendation; and
 - **May** indicates an option.
- 2.1.3 For the purpose of this Chapter ‘Overseeing Organisation’ is defined as either the National Roads Authority (NRA) for national roads or the Department of Transport (DoT) for regional and local roads.
- 2.1.4 Design rules and guidelines for variable message signs and other information signs are outlined in Chapters 3 and 4 respectively.
- 2.1.5 Road traffic signs inform road users and provide direction, warning and guidance needed for the safe and efficient operation of traffic. Directional information signs are those which advise drivers of the correct route to their destination.
- 2.1.6 In this Chapter the guidelines have been split, for ease of use, to cover:
- Grade-separated carriageways:
 - Motorways;
 - Dual carriageways;
 - At-grade carriageways, including at-grade dual carriageways and all single carriageway roads; and
 - Signs for orbital routes in urban areas.
- 2.1.7 Unlike most other traffic signs, each directional information sign needs to be designed individually. However, for traffic to be directed safely and efficiently, it is vital that signs be consistent, clear and provide continuity of information. This Chapter, therefore, provides rules for the design of the sign faces on directional information signs and also gives guidelines for their deployment.

2.1.8 This Chapter describes the technical standards that should be adopted in the majority of situations. These include:

- a) The colour of directional signs will be appropriate to the route travelled and the route indicated. The relationship between the road hierarchy and colour coding of signs is defined in Section 2.2;
- b) A destination, once shown on a sign should be continued along the route until either the destination itself is reached or a turning for it is passed;
- c) The alphabet and text size (denoted by the 'x'-height) and the positioning of signs are determined by the type of road. See Section 2.3; and
- d) Where a road has a number, it should always be indicated, with M, N, R or L depending on the classification of the road. The continuity of route number signing is particularly important to enable through-traffic on main routes to negotiate the dense urban areas of the larger cities and towns.

2.1.9 Examples of sign face designs demonstrating the application of the different background colours, patches, panels, symbols, etc. are contained in subsequent Sections. Dimensions (in 'stroke widths' – see Section 2.3) and dashed red construction lines are displayed to assist understanding and should not appear on manufactured signs.

2.1.10 Directional information signs belong to one of six groups:

- a) Stack Type Advance Direction Signs (ADS) for T-junctions or staggered junctions, giving road users advance information of the destinations available from the next junction;
- b) Map Type Advance Direction Signs for grade-separated interchanges and roundabouts, giving road users advance information about the destinations available from the next junction together with an indication of the junction layout;



**Figure 2.1.1:
Typical Stack and Map
Type Advance Direction
Signs**

- c) Direction Signs (also known as Flag Signs) giving the route information or junction number at the point of manoeuvre at the junction;



- d) Overhead Gantry and Exit Taper Gantry Signs, which provide advance direction and directional information on overhead structures;



- e) Route Confirmatory, Route Marker and Route Direction Signs give information and confirmation about the route and destinations ahead;



- f) Other directional information signs giving additional information, such as the Next Exit Sign providing a menu of destinations available at the next exit and the Lane Destination Sign which gives drivers an indication of which lane they should be in to reach their specific destination.



- 2.1.11 On motorways and national routes directional signing will encompass a combination of all six groups of signs. Details as to where the different groups of signs are required are given in Section 2.2, which covers the principles of directional signing and the circumstances in which each type of directional information sign should be provided.



**Figure 2.1.2:
Typical Directional
Information Signs**

- 2.1.12 Any layout of signs for a particular junction must satisfy the basic requirements described in this Chapter.
- 2.1.13 A diagram showing the different types of directional information signs for use on various classes of road is shown in Figure 2.1.3.

APPROVAL PROCESS

- 2.1.14 The prior written approval of the Overseeing Organisation is required for the erection, removal or modification of directional signs. The NRA Traffic Signs Approvals Procedure (available on the NRA web site) explains the level of detail, drawings and schedules that are required to be submitted for approval to the National Roads Authority.
- 2.1.15 Since the permanent signage requirements may differ from the temporary requirements during a road improvement scheme, consideration should be given to both sets of requirements at an early stage in relation to the coordination and phasing of the works.

SIGN MOUNTING

- 2.1.16 Directional Signs should be positioned at the distance from an intersection indicated in Section 2.3. Deviation by more than 10% from the distances recommended shall only be permitted with the prior written approval of the Overseeing Organisation.
- 2.1.17 Adequate provision shall be made for the installation of directional signs on all new or improved roads, especially at roundabouts, splitter islands and verges. Due to the sizes of some directional information signs, it is important that signs be considered at a sufficiently early stage in the design of the road to ensure that adequate space is available and that signs do not obstruct visibility. Safety is of paramount importance when choosing sign positions and mounting heights.
- 2.1.18 The safety implications of sign supports should be a particular consideration on roads with speeds greater than 80km/h.
- 2.1.19 Further guidance on the siting and mounting of signs is provided in Chapter 1.

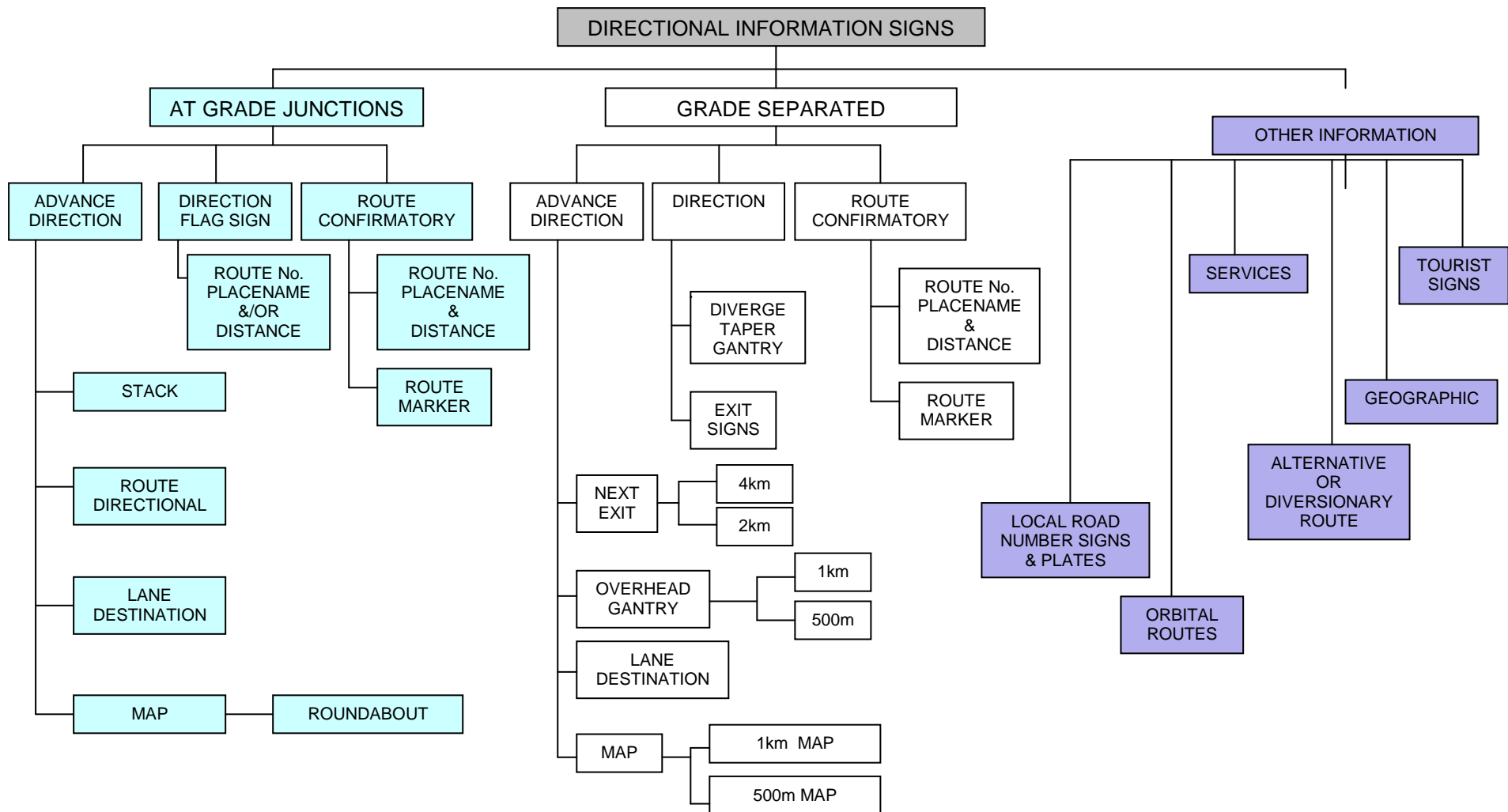


Figure 2.1.3:
Hierarchy of Directional Information Signs

2.2 General Principles of Sign Design

- 2.2.1 Directional signs provide information and guidance needed for the safe and efficient movement of traffic. To be effective, a sign should meet the following basic requirements:
- Command attention;
 - Convey a clear, consistent and concise message;
 - Provide continued information to the destination; and
 - Give adequate time for an appropriate response.
- 2.2.2 This Section defines the general principles of design for directional information signs, ensuring that a clearly legible, uniform, continuous message is conveyed and that drivers will be in no doubt as to the route they need to follow in order to reach their destination. The layout, placement, and consistency are aspects that must be considered carefully when designing a sign.
- 2.2.3 A destination, once included on a sign, must be continued through to the destination and the correct colours must be used to provide ease of legibility by the road user, as this is vital to their effectiveness. Consideration should be given to achieving a clear and aesthetically balanced sign.

THE ROAD HIERARCHY AND COLOUR CODING

- 2.2.4 The background colour of the different types of sign varies and is one of the following:
- The background colours for Direction and Stack Type signs depend on the classification of the road which is being signed; and
 - The background colour for most other directional information signs depends on the classification of the road where it is located.
- 2.2.5 The road classifications are:
- National Primary Roads**
These roads are generally the major long-distance through routes linking principal cities, large towns, ports and airports. They serve major geographical regions and a high percentage of the total population. They are designated by a number with a prefix **N** and have a **green** background. Motorways are essentially part of the national primary route system and are designated by a number with a prefix **M** and indicated on a **blue** background.

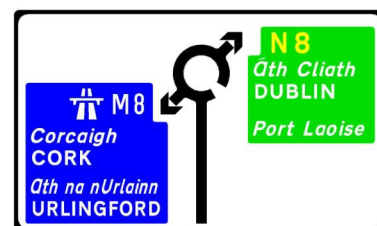


Figure 2.2.1:
Examples of Sign
Background Colour

- **National Secondary Roads**

These roads are generally medium-distance through routes serving medium to large geographical areas. They are designated by a number with a prefix **N** and indicated on a **green** background.

- **Regional Roads**






These roads are the main feeder routes for national primary and national secondary routes linking geographical areas over long distances. They are designated by a number with an **R** prefix and indicated on a **white** background.

- **Local Roads**

Local roads include all remaining rural and urban roads. They are designated by a number with an **L** prefix (or are not numbered) and are indicated on a **white** background.

2.2.6 The colour schemes to be used for the different classifications are shown in Table 2.2.1.

Table 2.2.1: Colour Schemes for Directional Information Signs

Route Indicated	Background Colour	Colour of Text, Border, Arrows and Chevrons	Colour of Route Number	Example
National Primary Motorway (M)	BLUE	WHITE	WHITE	
National Primary (N)	GREEN	WHITE	YELLOW	
National Secondary (N)	GREEN	WHITE	YELLOW	
Regional (R)	WHITE	BLACK	BLACK	
Local (L)	WHITE	BLACK	BLACK	

WHEN TO PROVIDE DIRECTIONAL SIGNS

- 2.2.7 The type of signage required at a junction depends upon the type of junction, i.e. the classification of the intersecting roads.
- 2.2.8 Table 2.2.2 gives guidance as to the signs that should be provided at the different types and combinations of National road junctions.
- 2.2.9 Table 2.2.3 gives guidance as to the signs that should be provided at the different types and combinations of Regional and Local road junctions.
- 2.2.10 A higher level of signage other than that indicated in Tables 2.2.2 and 2.2.3 may be provided to suit specific geometric conditions, traffic management or safety requirements.

Table 2.2.2: When to Provide Directional Signs on National Roads

Type of Junction	Type of Sign								
	Advance Direction Signs on (Note (b))			Direction Signs pointing along			Route Confirmatory Signs on		
	National	Regional	Local	National	Regional	Local	National	Regional	Local
National / National	Yes ^(b)			Yes			Yes		
National / Regional	Yes ^(b)	Yes ^(b)		Yes	Yes		Yes	Yes	
National / Local Primary	Yes ^(a)		Yes ^(a)	Yes		Yes	No		No
National / Local Secondary	No		No	Yes		Yes	No		No
National / Local Tertiary	No		No	Yes		Yes	No		No
Route Confirmatory signs shall be at most 12km apart on National roads and shall be used on such roads at the exit of towns/villages with a population greater than 500.									
Route marker plates shall be located midway between consecutive Route Confirmatory signs on National roads where the distance between Route Confirmatory signs is greater than 6km.									

Notes:

- (a) In general Advance Direction Signs are provided outside 60km/h areas. However, Advance Direction Signs may not be required at these junctions if the Annual Average Daily Traffic (AADT) on the minor road is less than 500 vehicles per day.
- (b) Within 60km/h zones Advance Direction Signs are not provided.
- (c) Requirements for Overhead Gantry Signs are described in Sections 2.4 and 2.5.
- (d) When designing directional signs, the requirements in Paragraphs 2.3.58 to 2.3.61 in relation to the "Proximity Rule" should be noted.

Table 2.2.3: When to Provide Directional Signs on Regional and Local Roads

Type of Junction	Type of Sign							
	Advance Direction Signs on		Direction Signs pointing along		Route Confirmatory Signs on		Route Marker Signs on	
	Regional	Local	Regional	Local	Regional	Local	Regional	Local
Regional / Regional	Yes		Yes		Yes		No	
Regional / Local Primary	Yes ⁸	No ⁵	Yes	Yes	No ⁶	No	Yes	No
Regional / Local Secondary	No ¹	No	Yes	No ²	No ⁶	No	No ⁷	No
Regional / Local Tertiary	No	No	No	No ³	No	No	No ⁷	No
Local / Local		No		Yes ⁴		No		No
Route Confirmatory signs shall be at most 12km apart on Regional roads and shall also be used on such roads at the exits of towns and villages with a population of more than 100.								
All public roads will be provided with a road number either within the directional signage where provided or as a Local Road Number Plate (see Section 2.6).								

Notes:

1. Except in exceptional circumstances.
2. Except where there is a town or village, in which case a Fingerpost Sign (see Section 2.6) should be used. At all other locations the Local Road Number Plate is to be provided.
3. Except in exceptional cases where a Fingerpost Sign may be required for a significant local feature.
4. Where all roads at a junction are Local roads the following criteria are appropriate for Direction Signs:
 - (a) Low-level Direction Signs should be provided on Local Primary roads;
 - (b) Fingerpost Signs may be provided, where required, on Local Secondary roads and in exceptional circumstances on Local Tertiary roads.
 - (c) Local Road Number Plates (one on each side of the local road) adjacent to and parallel to the road fence/hedge may be provided.
5. Except when the junction is a roundabout.
6. Except on the exit route from a town/village/settlement with a population in excess of 100.
7. Except on the exit route from a town/village/settlement with a population in excess of 50.
8. Sign the most important destination or relevant destination, which may be on an adjoining route.

THE SELECTION OF DESTINATIONS

- 2.2.11 Directional information signs help drivers to navigate the road network by providing information on the destinations that may be reached on the route or on an intersecting route.
- 2.2.12 Consistency and continuity of destinations displayed is important. A destination mentioned on one sign should be repeated on all subsequent signs until the destination or turn-off for it is reached.
- 2.2.13 The selection of destinations to be displayed on a sign is determined by the classification of the route to be signed. Table 2.2.4 indicates the types of destinations to be displayed on all directional signs according to the classification of the route travelled and the route intersected.
- 2.2.14 When the destinations have been selected, they should be arranged in distance order with the furthest at the top for each direction. 'Furthest' depends on the distance along the travelled route or the distance to the junction at which the route to the named destination branches off. For example, the mainline destinations on the Route Confirmatory sign at Junction X in Figure 2.2.2 are Sligo, Westport and Galway: Westport is the furthest away in kilometres but is positioned below Sligo as Sligo is the furthest away on the route travelled. Also Westport is positioned above Galway as junction Z for Westport is the next furthest away followed by junction Y for Galway. This applies to all types of signs.
- 2.2.15 The number of destinations on any directional sign should be kept to a minimum and in general a maximum of four destinations may be signed in any one direction. Overall a maximum of seven destinations may be displayed on the complete sign.

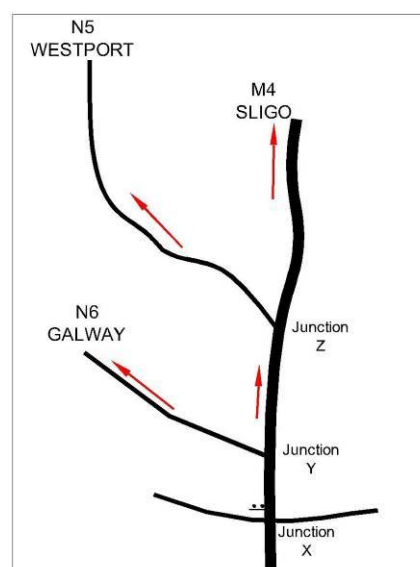


Figure 2.2.2:
Example of Destinations
Along a Route and How
They are Signed

Table 2.2.4: Destinations to be Signed

INTERSECTING ROUTE									
ROUTE TRAVELLED		National Primary		National Secondary		Regional		Local Primary	
		ADS	Direction Sign	ADS	Direction Sign	ADS	Direction Sign	ADS	Direction Sign
	NATIONAL PRIMARY	MANDATORY Terminal of NP intersected and terminal of NP travelled.	MANDATORY Destinations as per ADS plus nearest town	MANDATORY Terminal or intermediate terminal of NS intersected and terminal of NP travelled	MANDATORY Destinations as per ADS	MANDATORY Terminal or next significant destination along Regional intersected and terminal of NP travelled.	MANDATORY Destinations as per ADS	MANDATORY Nearest town or village or other relevant destination as agreed with the Overseeing Organisation. (See Note 4)	MANDATORY Destinations as per ADS
		OPTIONAL Next significant destination on travelled and intersected routes	OPTIONAL Other town	OPTIONAL Next significant destination on travelled and intersected routes	OPTIONAL Next town	OPTIONAL Another significant destination on travelled and intersected routes	OPTIONAL Other towns	OPTIONAL Next significant destination on travelled and intersected routes	OPTIONAL Next town
	NATIONAL SECONDARY	MANDATORY Terminal of NP intersected and terminal or intermediate terminal of NS travelled. One destination on each	MANDATORY Destinations as per ADS plus nearest town	MANDATORY Terminal or intermediate terminal of NS intersected and terminal or intermediate terminal of NS travelled	MANDATORY Destinations as per ADS	MANDATORY Terminal or next significant destination along Regional intersected and terminal or intermediate terminal of NS travelled	MANDATORY Destinations as per ADS	MANDATORY No ADS except where NS intersects Local road as stagger. If staggered junction, terminal or intermediate terminal of NS travelled	MANDATORY Next significant destination along Local road intersected and, if stagger junction, as per ADS
		OPTIONAL Next significant destination on travelled and intersected routes	OPTIONAL Other town	OPTIONAL Next significant destination on travelled and intersected routes	OPTIONAL Next town	OPTIONAL Another significant town or village on travelled and intersected routes	OPTIONAL Other towns	OPTIONAL Next town on travelled and intersected routes	OPTIONAL Other town

Notes:

1. The table is read by choosing the route travelled and the text shows the destinations to be signed on that route at the type of road intersecting.
2. NP = National Primary; NS = National Secondary; ADS = Advance Direction Sign.
3. When designing directional signs, the requirements in Paragraphs 2.3.58 to 2.3.61 in relation to the "Proximity Rule" should be noted.
4. Advance Direction Signs may not be required on these junctions if the Annual Average Daily Traffic (AADT) on the minor road is less than 500 vehicles per day.

Table 2.2.4: Destinations to be Signed (Continued)

	INTERSECTING ROUTE								
ROUTE TRAVELLED		National Primary		National Secondary		Regional		Local Primary	
		ADS	Direction Sign	ADS	Direction Sign	ADS	Direction Sign	ADS	Direction Sign
	REGIONAL	MANDATORY Terminal of NP intersected and if stagger junction the terminal or next significant town along regional route travelled.	MANDATORY Destinations as per ADS	MANDATORY Terminal or intermediate terminal of NS intersected and if stagger junction terminal or next significant destination along Regional travelled.	MANDATORY Destinations as per ADS plus next significant destination. (See Note 6)	MANDATORY The most significant town or a relevant destination as agreed with the Overseeing Organisation.	MANDATORY Destinations as per ADS	MANDATORY Nearest town or village or other relevant destination as agreed with the Overseeing Organisation.	MANDATORY Destinations as per ADS
		OPTIONAL Next significant destination on travelled and intersected routes	OPTIONAL Next town	OPTIONAL Next significant destination on travelled and intersected routes	OPTIONAL Other town	OPTIONAL Other relevant town on an adjoining Regional or National route	OPTIONAL Relevant town on an adjoining route	OPTIONAL Next town	OPTIONAL Additional destination if beneficial.
	LOCAL	No ADS (See Note 5)	Terminal on NP intersected and next significant destination.	No ADS (See Note 5)	Terminal or listed terminal on NS intersected and next significant destination. (See Note 6)	No ADS (See Note 5)	Nearest Town and Terminal or next significant destination on Regional intersected (See Note 6)	No ADS (See Note 5)	Next significant destination on Local road intersected

Notes (continued):

5. Where a local road intersects at a roundabout, an ADS should be provided.
6. A 'Significant Destination' on an intersected or travelled route is defined as any of the following:
 - For National Routes
 - Population > 5,000 on a National Primary;
 - Population > 1,500 on a National Secondary;
 - National / National intersection with population > 500.
 - For Regional Routes
 - Population > 500;
 - Regional / National intersection with population > 200;
 - Regional / Regional intersection with population > 200.
7. Local Tertiary – No directional signs unless warranted e.g. interpretive centre.
8. Local Secondary – fingerpost direction sign only to town or village.
9. All Local roads to be signed with Local Road Number Plates or Local Road Direction Signs.

TERMINAL DESTINATIONS

2.2.16 Destinations on National Primary and National Secondary roads are shown in Tables 2.2.5 and 2.2.6 respectively. They are towns, cities or ports at the terminals of National routes or at the terminals of the extended route in the case of cross border routes.

Table 2.2.5: Terminal Destinations for National Primary Route Signage

National Route No.	Terminal Destinations	Terminal Destinations	Notes
M 1 (N 1)	BELFAST – <i>Béal Feirste</i>	DUBLIN – <i>Áth Cliath</i>	Include A1 north of Dundalk
N 2 (M 2)	DERRY - <i>Doire</i>	DUBLIN – <i>Áth Cliath</i>	Include LETTERKENNY – <i>Leitir Ceanainn</i> on Route Confirmatory signs from Monaghan northbound Include A5 north of Monaghan
N 3 (M 3)	BALLYSHANNON – <i>Béal Átha Seanaidh</i>	DUBLIN – <i>Áth Cliath</i>	Use CAVAN – <i>An Cabhán</i> as terminal from Dublin to Cavan
N 4 (M 4)	SLIGO - <i>Sligeach</i>	DUBLIN – <i>Áth Cliath</i>	
N 5 (N 4, M 4)	WESTPORT - <i>Cathair na Mart</i>	DUBLIN – <i>Áth Cliath</i>	Include BALLINA – <i>Béal an Átha</i> on Route Confirmatory signs from Longford
N 6 (M 4, M 6)	GALWAY - <i>Gaillimh</i>	DUBLIN – <i>Áth Cliath</i>	
N 7 (M 7)	LIMERICK - <i>Luimneach</i>	DUBLIN – <i>Áth Cliath</i>	
N 8 (N 7, M 8)	CORK - <i>Corcaigh</i>	DUBLIN – <i>Áth Cliath</i>	
M9 (M7)	WATERFORD - <i>Port Láirge</i>	DUBLIN – <i>Áth Cliath</i>	
N 10 (N 9)	KILKENNY - <i>Cill Chainnigh</i>	DUBLIN – <i>Áth Cliath</i> , WATERFORD – <i>Port Láirge</i>	
N 11	WEXFORD - <i>Loch Garman</i>	DUBLIN – <i>Áth Cliath</i>	Include ROSSLARE – <i>Ros Láir</i> southbound from Wicklow (J16) on mainline signage only
N 12	MONAGHAN - <i>Muineachán</i>	ARMAGH - <i>Ard Mhacha</i> (A3)	
N 13	STRANOLAR - <i>Srath an Úrláir</i>	LIFFORD - <i>Leifear</i>	
N 14 (N 2)	LETTERKENNY – <i>Leitir Ceanainn</i>	DUBLIN – <i>Áth Cliath</i> (A5)	Include LIFFORD - <i>Leifear</i>
N 15	SLIGO - <i>Sligeach</i>	DERRY - <i>Doire</i>	Include LIFFORD – <i>Leifear</i> (A5) and LETTERKENNY – <i>Leitir Ceanainn</i>
N 16	SLIGO - <i>Sligeach</i>	ENNISKILLEN - <i>Inis Ceithleann</i> (A4)	
N 17	SLIGO - <i>Sligeach</i>	GALWAY - <i>Gaillimh</i>	Include KNOCK - <i>Chnoc Mhuire</i> and Airport symbol northbound from Claremorris and southbound from Collooney

Table 2.2.5: Terminal Destinations for National Primary Route Signage (Continued)

National Route No.	Terminal Destinations	Terminal Destinations	Notes
N 18 (M 18)	GALWAY - <i>Gaillimh</i>	LIMERICK – <i>Luimneach</i>	Include SHANNON – <i>Sionainn</i> and Airport symbol southbound from Oranmore and northbound from Limerick
N 19 (N 18)	SHANNON – <i>Sionainn</i>	LIMERICK – <i>Luimneach</i> / GALWAY - <i>Gailliamh</i>	
N 20	LIMERICK - <i>Luimneach</i>	CORK - <i>Corcaigh</i>	Include SHANNON – <i>Sionainn</i> and Airport symbol northbound from M20/N21 junction
N 21	LIMERICK - <i>Luimneach</i>	TRALEE - <i>Trá Lí</i>	Include KILLARNEY – <i>Cill Airne</i> southbound from M20/N21 junction on Route Confirmatory signs only
N 22	TRALEE – <i>Trá Lí</i>	CORK - <i>Corcaigh</i>	Include KILLARNEY - <i>Cill Airne</i> on Route Confirmatory signs only
N 23	LIMERICK - <i>Luimneach</i>	KILLARNEY - <i>Cill Airne</i>	
N 24	LIMERICK - <i>Luimneach</i>	WATERFORD - <i>Port Láirge</i>	
N 25	CORK - <i>Corcaigh</i>	ROSSLARE – <i>Ros Láir</i>	Use WATERFORD - <i>Port Láirge</i> eastbound from Cork to Kilmeadan and then use ROSSLARE – <i>Ros Láir</i> . Westbound use WATERFORD – <i>Port Láirge</i> until Belview and then use CORK – <i>Corcaigh</i>
N 26	BALLINA – <i>Béal an Átha</i>	DUBLIN - <i>Áth Cliath</i>	
N 27	CORK - <i>Corcaigh</i>	CORK AIRPORT - <i>Aerfort na Chorcaí</i>	
N 28	CORK - <i>Corcaigh</i>	RINGASKIDDY - <i>Rinn an Scidígh</i>	
N 29	WATERFORD - <i>Port Láirge</i>	BELVIEW PORT - <i>Port Belview</i>	
N 30	NEW ROSS – <i>Ros Mhic Thriúin</i>	ENNISCORTHY – <i>Inis Córthaidh</i>	
N 31	BLACKROCK – <i>An Charraigh Dhubh</i>	<i>Dún Laoghaire</i>	
N32	M50	MALAHIDE – <i>Mullach Íde</i>	
N33	ARDEE – <i>Baile Átha Fhirdhia</i>	M1	Use BELFAST – <i>Béal Feirste</i> and DUBLIN – <i>Áth Cliath</i> when signing the M1 from the N33
M50	The M50 ring road includes the following as straight ahead destinations: NORTHBOUND – <i>Ó Thuaidh</i> , SOUTHBOUND – <i>Ó Dheas</i> , AIRPORT – <i>Aerfort</i> , DUBLIN PORT - <i>Calfort Áth Cliath</i> and <i>Dún Laoghaire</i> .		

Note: Refer to www.transport.ie for most up to date details.

Table 2.2.6: Terminal and Intermediate Destinations for National Secondary Route Signage

National Route No.	Terminal Destinations	Intermediate Destinations	Terminal Destinations
N 51	MULLINGAR – <i>An Muileann gCearr</i>	NAVAN – <i>An Uaimh</i>	DROGHEDA – <i>Droichead Átha</i>
N 52	NENAGH – <i>An tAonach</i>	TULLAMORE – <i>Tulach Mhór</i> MULLINGAR – <i>An Muileann gCearr</i>	DUNDALK – <i>Dún Dealgan</i>
N 53	CASTLEBLANEY – <i>Baile Na Lorga / DERRY - Doire</i>		DUNDALK – <i>Dún Dealgan</i>
N 54	MONAGHAN – <i>Muineachán</i>		CAVAN – <i>An Cabhán</i>
N 55	ATHLONE – <i>Baile Átha Luain</i>		CAVAN – <i>An Cabhán</i>
N 56	DONEGAL – <i>Dún na nGall</i>	KILLYBEGS – <i>Na Cealla Beaga</i> GLENTIES – <i>Na Gleannta</i> DUNGLOW – <i>An Clochán Liath</i> DUNFANAGHY – <i>Dún Fionnachaidh</i>	LETTERKENNY – <i>Leitir Ceanainn</i>
N 58	FOXFORD – <i>Béal an Easa</i>		CASTLEBAR – <i>Caisleán an Bharraigh</i>
N 59	SLIGO – <i>Sligeach</i>	BALLINA – <i>Béal an Átha</i> BANGOR – <i>Beannchar</i> WESTPORT – <i>Cathair na Mart</i> CLIFDEN – <i>An Clochán</i>	GALWAY – <i>Gaillimh</i>
N 60	CASTLEBAR – <i>Caisleán an Bharraigh</i>		ROSCOMMON – <i>Ros Comáin</i>
N 61	SLIGO – <i>Sligeach</i>	ROSCOMMON – <i>Ros Comáin</i>	ATHLONE – <i>Baile Átha Luain</i>
N 62	ATHLONE – <i>Baile Átha Luain</i>	BIRR – <i>Biorra</i> ROSCREA – <i>Ros Cré</i> THURLES – <i>Durlas</i>	CASHEL – <i>Caiseal</i>
N 63	GALWAY – <i>Gaillimh</i>	ROSCOMMON – <i>Ros Comáin</i>	LONGFORD – <i>An Longfort</i>
N 65	GALWAY – <i>Gaillimh</i>	PORTUMNA – <i>Port Omna</i>	BORRISOKANE – <i>Buiríos Uí Chéin</i>
N 66	GORT – <i>An Gort</i>		LOUGHREA – <i>Baile Locha Riach</i>
N 67	GALWAY – <i>Gaillimh</i>	ENNISTIMON – <i>Inis Díomáin</i> KILKEE – <i>Cill Chaoi</i> Include ferry symbol southbound from Ennistimon	KILRUSH – <i>Cill Rois</i>
N 68	KILRUSH – <i>Cill Rois</i> (Include ferry symbol)		ENNIS – <i>Inis</i>
N 69	TRALEE – <i>Trá Lí</i>	LISTOWEL – <i>Lios Tuathail</i> and include FOYNES – <i>Faing</i> southbound on DS and RC	LIMERICK – <i>Luimneach</i>
N 70	TRALEE – <i>Trá Lí</i>	CAHERSIVEEN – <i>Cathair Saidhbhín</i> KILLORGLIN – <i>Cill Orglan</i>	KENMARE – <i>Neidín</i>

Table 2.2.6: Terminal and Intermediate Destinations for National Secondary Route Signage (Continued)

National Route No.	Terminal Destinations	Intermediate Destinations	Terminal Destinations
N 71	KILLARNEY - <i>Cill Airne</i>	SKIBBEREEN – <i>An Sciobairín</i>	CORK - <i>Corcaigh</i>
N 72	KILLORGLIN – <i>Cill Orglan</i>	KILLARNEY - <i>Cill Airne</i> MALLOW - <i>Mala</i>	DUNGARVAN – <i>Dún Garbhán</i>
N 73	MALLOW - <i>Mala</i>		MITCHELSTOWN – <i>Baile Mhistéala</i>
N 74	TIPPERARY – <i>Tiobraid Árann</i>		CASHEL - <i>Caiseal</i>
N 75	THURLES - <i>Durlas</i>		DUBLIN - <i>Áth Cliath</i>
N 76	CLONMEL – <i>Cluain Meala</i>		KILKENNY – <i>Cill Chainnigh</i>
N 77	KILKENNY – <i>Cill Chainnigh</i>	DURROW - <i>Darú</i>	<i>Port Laoise</i>
N 78	KILKENNY – <i>Cill Chainnigh</i>	ATHY – <i>Baile Átha Í</i>	DUBLIN - <i>Áth Cliath</i> . Include M9 from Athy
N 80	TULLAMORE – <i>Tulach Mhór</i>	<i>Port Laoise</i> CARLOW – <i>Ceatharlach</i>	ENNISCORTHY – <i>Inis Córthaidh</i> Include ROSSLARE – <i>Ros Láir</i> southbound from Carlow
N 81	DUBLIN - <i>Áth Cliath</i>	BLESSINGTON – <i>Baile Coim</i>	ENNISCORTHY – <i>Inis Córthaidh</i>
N 82	TALLAGHT - <i>Tamhlacht</i>		RATHCOOLE – <i>Ráth Cúil</i>
N 83	TUAM – <i>Tuaim</i>	BALLYHAUNIS – <i>Béal Átha hAmhnais</i>	CHARLESTOWN – <i>Baile Chathail</i>
N 84	GALWAY - <i>Gaillimh</i>		CASTLEBAR – <i>Caisleán an Bharraigh</i>
N 85	ENNIS - <i>Inis</i>		ENNISTIMON – <i>Inis Diomáin</i>
N 86	TRALEE - <i>Trá Lí</i>		<i>An Daingean</i>
N 87	BELTURBET – <i>Béal Tairbirt</i>		SWANLINBAR – <i>An Muileann Iarainn</i>

Note: Refer to www.transport.ie for most up to date details.



Figure 2.2.3: Map of Ireland showing Terminal and Intermediate Destinations for National Primary and National Secondary Route

- 2.2.17 Directional information signs on National Primary routes must display the listed terminals indicated in Table 2.2.5 and in accordance with the rules in Table 2.2.4. Intermediate destinations shall not be used on National Primary routes without prior approval from the National Roads Authority.
- 2.2.18 Directional information signs on National Secondary routes must display either the terminal destinations or intermediate destinations as indicated in Table 2.2.6. The destinations signed must be in accordance with the rules of Table 2.2.4.
- 2.2.19 Where a route crosses the border, Advance Direction Signs should show cross-border routes: e.g. N16/A4 Sligo – Enniskillen.
- 2.2.20 Destinations shown on National Primary roads may include terminal destinations of spur routes. Examples of spur routes include:
- The N5 and N6 which branch from the N4;
 - The N8 and N9 which branch from the N7.
- In general the maximum number of spur routes to be shown on each route signed is two per direction.

OTHER DESTINATIONS

- 2.2.21 Other destinations to show on directional information signs will usually be a county town or town of sizeable population. Such locations may be off the travelled route or have been bypassed.
- 2.2.22 In the case of National Secondary roads where no significant location exists between the junction to be signed and the end of the route, the nearest significant location on an adjoining route may be displayed. This should be included on any bypass route and displayed as an intermediate destination.
- 2.2.23 The design of tourist signs for tourist and leisure destinations are detailed in Chapter 4. Tourist information should generally be separated from directional information signage and be sited in accordance with the general principles described in Chapter 1.

GENERIC PHRASES – LOCAL ACCESS, HOSPITAL, etc.

- 2.2.24 'CITY CENTRE – *An Lár*' should be used on signs to indicate the city centres of Dublin, Cork, Limerick, Galway and Waterford from relevant points within the city boundaries.
- 2.2.25 'TOWN CENTRE' with the town name in Irish, should be used on signs indicating the town centre of all other towns from relevant points within the town boundaries.
- 2.2.26 Outside these boundaries, the city or town name should be used as normal on directional information signs.
- 2.2.27 On National Primary routes the term 'NORTHBOUND – *Ó Thuaidh*', 'SOUTHBOUND – *Ó Dheas*', 'EASTBOUND – *Ó Thoir*' or 'WESTBOUND – *Ó Thair*' may be used as a destination: e.g. 'M50 SOUTHBOUND – *Ó Dheas*'.
- 2.2.28 The use of compass-point terms describing regional destinations (such as 'the Southwest' or 'the North') do not provide clear information to the driver and such terms shall not be used as destinations on directional information signs.
- 2.2.29 Terms like 'Local Access', 'Local Road', 'Local Traffic' and 'Cul-de-Sac' should not be used on directional signage. Instead of 'Local Access' or 'Local Road', a specific destination such as a townland and local road number on a direction sign should be used when a townland name is appropriate, or a Local Road Number Plate if there is no significant townland.
- 2.2.30 'Industrial Estate', 'Technical Park', 'IDA Ireland' and other generic terms give very little information to a driver, especially when used repeatedly along a route. Some like 'Industrial Estate' and 'Technical Park' also take up large areas of the sign and as a result decrease the clarity of other information. Only the townland/district name and local road number or just the road number shall be used in such situations.
- 2.2.31 Industrial estates and technical parks should be signed only from the nearest junction accessing the estate or park from a National route. The symbol for industrial estate should be used instead of the words 'Industrial Estate / Ionad Tionscoil', 'Technical Park / Pairc Teicneolaíochta'. The symbol is illustrated in Figure 2.2.5 and detailed in Chapter 4. It can be augmented by the specific name of the estate or park, excluding the above terms.



Figure 2.2.4:
Extract from
Map Type Sign
Showing 'SOUTHBOUND'
as a Destination.



Figure 2.2.5:
Symbol F 22 – Industrial
Estate

- 2.2.32 Colleges, institutions and conference centres may be signed only if the student or delegate capacity is greater than 3,500. Any such signs should be displayed on brown tourist/amenity signs separate from route directional signage (see Chapter 4). It shall be signed once only on the nearest National route and followed through at all subsequent decision points to the destination.
- 2.2.33 Hospitals with 24-hour accident and emergency facilities should be signed on directional signs, using the hospital symbol illustrated in Figure 2.2.6 and detailed in Chapter 4.
- 2.2.34 Where there is more than one accident and emergency hospital in a town or city, a signage strategy should be agreed between the hospital and the Overseeing Organisation.



Figure 2.2.6:
Symbol F 13 – Hospital

2.3 Text and Dimensions Used in Sign Face Design

ALPHABETS

- 2.3.1 The alphabet prescribed for use on directional information signs is that known as “Transport Heavy”. The only exceptions in the use of this type face are the upper case 'A', 'M' and 'N' and the lower case 'a' and 'i' letters in the Irish script for which a special form is prescribed.
- 2.3.2 The Irish script is inclined at 15 degrees and also includes a fada (accent).

'X'-HEIGHT AND STROKE WIDTH DIMENSIONS

- 2.3.3 The 'x'-height and stroke width (s/w) are the common dimensions used when designing sign faces. The 'x'-height is the vertical height of the lower case 'x'. The stroke width is the dimension used when specifying clearances between the different elements of the sign face. It is equal to one quarter of the 'x'-height.
- 2.3.4 All upper and lower case letters, numerals and associated characters are placed on individual “tiles” to assist in the correct spacing of text. The tile height is twice the 'x'-height. The ratio, therefore, of stroke width to 'x'-height to tile height is 1:4:8. This relationship is illustrated in Figure 2.3.1.
- 2.3.5 The tile embodies the recommended horizontal clearances in the total space occupied by each character of the Transport Heavy typeface. Consequently each character has its own tile width and this is expressed as a percentage of the 'x'-height. Figures 2.3.2 and 2.3.3 show how the characters are placed in tiles. They also indicate the special tiles of lesser width for the letters T, V, or Y when they are followed by a, e, g, o, r or u. A specially increased tile width, also defined, for the upper case 'W' is to be used when any other upper case letter follows it.
- 2.3.6 The size of a sign is determined by its 'x'-height. The appropriate recommended 'x'-height for different speed categories of road is given in Table 2.3.1. The sign face is designed by arranging the different elements of the sign according to dimensions in stroke widths, of borders, tiles and symbols and the recommended clearances stipulated later in this section. The overall sign size can be calculated by applying the selected 'x'-height.

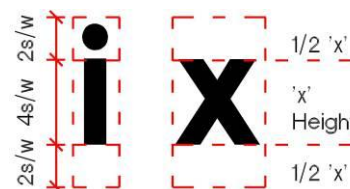


Figure 2.3.1:
'x'-height and Stroke
Width Relationship

Table 2.3.1: Letter Size and Siting Details for Directional Information Signs.

Type of Road or Sign	Advance Direction Signs			Direction Signs		Route Confirmatory Signs	Route Direction Sign	Route Marker Sign
	'x' height (mm)	Distance of Sign from Intersection (m)	Minimum Clear Visibility Distance of Sign (m)	x-height (mm)	Minimum Clear Visibility Distance of Sign (m)	x-height (mm)	x-height (mm)	x-height (mm)
Overhead Gantry	250	Standard Siting (1km / 500m) (Notes 9 and 10)	300 (Note 10)	-	-	-	-	-
Exit Taper Gantry	-	-	-	250	300 (Note 9)	-	-	-
Exit Sign	-	-	-	200	140	-	-	-
Motorway	200 (250) (Note 3)	Standard Siting (Notes 4, 9 and 10)	180	200 (Note 5)	140	200 (Note 13)	-	120-150 (100) ¹¹
Dual Carriageway with speed limit $\geq 100\text{km/h}$	200 (250) (Note 3)	Standard Siting (Note 4)	180	200 (Note 5)	140	200	150	150-120 (100) ¹¹
Diverge Slip Road at Grade Separated Junction (Note 6)	100 (80) (Note 3)	50m or halfway along slip road whichever is less	60	100 (Note 5)	60	-	-	-
Dual Carriageway with speed limit $<100\text{km/h}$	200 (150) (Note 3)	230 (Note 2)	140	150 or 100 (Note 5)	110 (75)	150	150	120-150 (100) ¹¹
Single Carriageway with speed limit of 100km/h.	100 (120) (Note 3)	150 (Note 2)	120	100 (Note 5)	75	100	100	150-120 ¹¹
Single Carriageway with speed limit $\leq 80\text{km/h}$	100 (80) (60) (Note 3)	100 – 150	60	100 (Note 5)	30	100	100	100
<p>Notes</p> <ol style="list-style-type: none"> Every effort should be made to provide the requirements in the table above. Designers should only reduce the provision in cases of severe restrictions, such as in urban areas where the environmental impacts of large signage can be severe. The siting distances in the table above apply to level roads: they should be decreased on uphill gradients and increased on down-hill gradients (see Chapter 1). Un-bracketed x-heights shall be used on new or improved routes. The size in brackets may be used with prior approval from the Overseeing Organisation. At the terminal of a motorway or a high speed dual carriageway road ADS signs should be positioned at 500m and again at 100m to 150m from the junction or roundabout. Direction Signs at roundabout islands are to be designed with 80mm x-height for high-level signs and 100mm x-height for low-level signs. For this purpose the diverge slip road is defined as the slip approaching the interchange roundabout or junction, not any part of the slip running parallel to the mainline. Fingerpost Signs are to be designed using 50mm x-height. Route Marker Signs may be used with an 80mm x-height in lieu of Route Confirmatory Signs where space is restricted. An x-height of 50mm should only be used at local road junctions or restricted junctions and with prior approval from the Overseeing Organisation. Route Confirmatory Signs should be placed approximately 200m downstream from the end of the merge taper or junction. Lane Drop Gantry Sign should be sited at the start of the nosing and Exit Taper Gantry Signs should be sited at the start of the exit taper. Gantry and ADS Map type signs on grade separated roads should generally be sited at 1km and 500m from the start of the diverge taper. Route Marker Signs have 150mm 'x'-height on single digit routes (M1) and 120mm 'x'-height on double digit routes (M50). Local Road Direction Signs and Name Plates shall be 70mm 'x'-height (or 60mm or 80mm as required) Next Exit Signs have the same 'x'-height as a Route Confirmatory Sign and are positioned at 2km and 4km in advance of the start of the taper for a Motorway/National Primary intersection. Butterfly Signs have an 'x'-height of 300mm on motorways and 250mm on dual carriageways and are positioned in the diverge taper. 								

LETTER AND BLOCK SPACING

2.3.7 Each character available in the English and Irish script is illustrated mounted on a tile in Figures 2.3.2 and 2.3.3. Both scripts are mounted on rectangular tiles that stand upright. As the Irish script is inclined at 15 degrees, letters in the Irish language stand on slanted (rhomboidal) tiles.

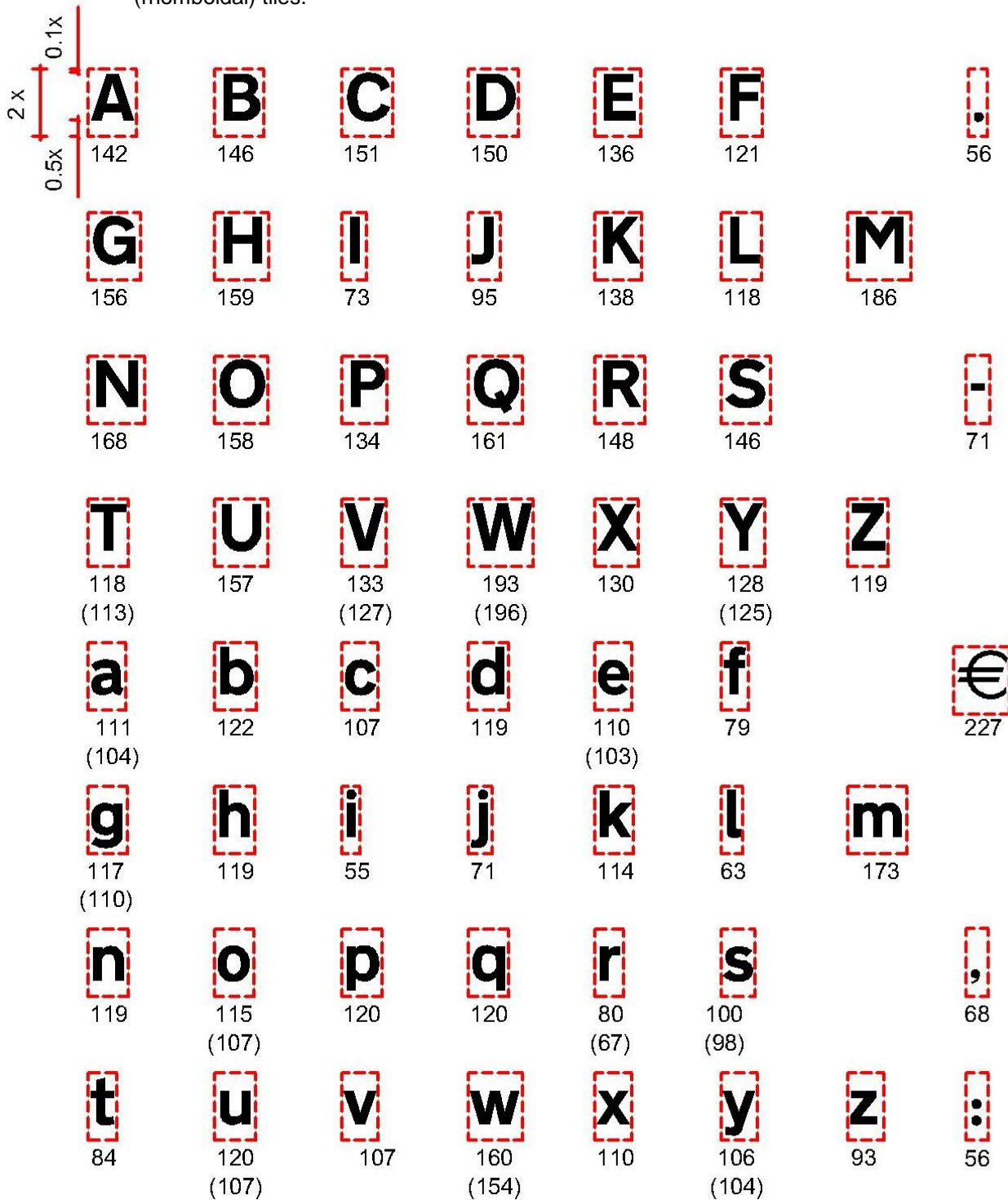


Figure 2.3.2:
English Upper and Lower Case Transport Heavy Alphabet
(TP Heavy Font)

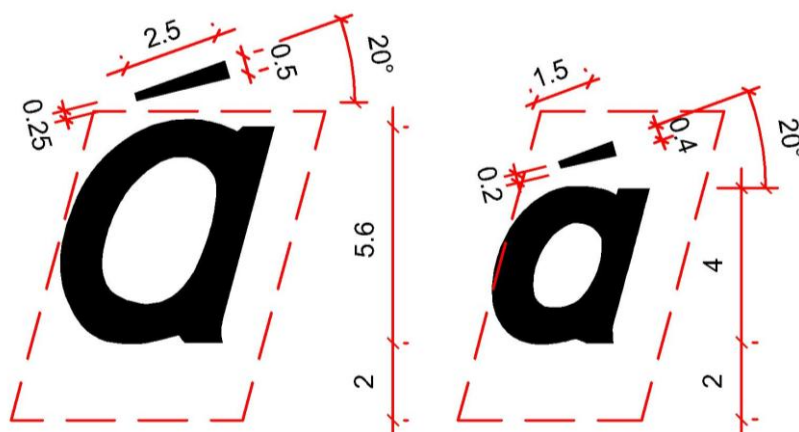
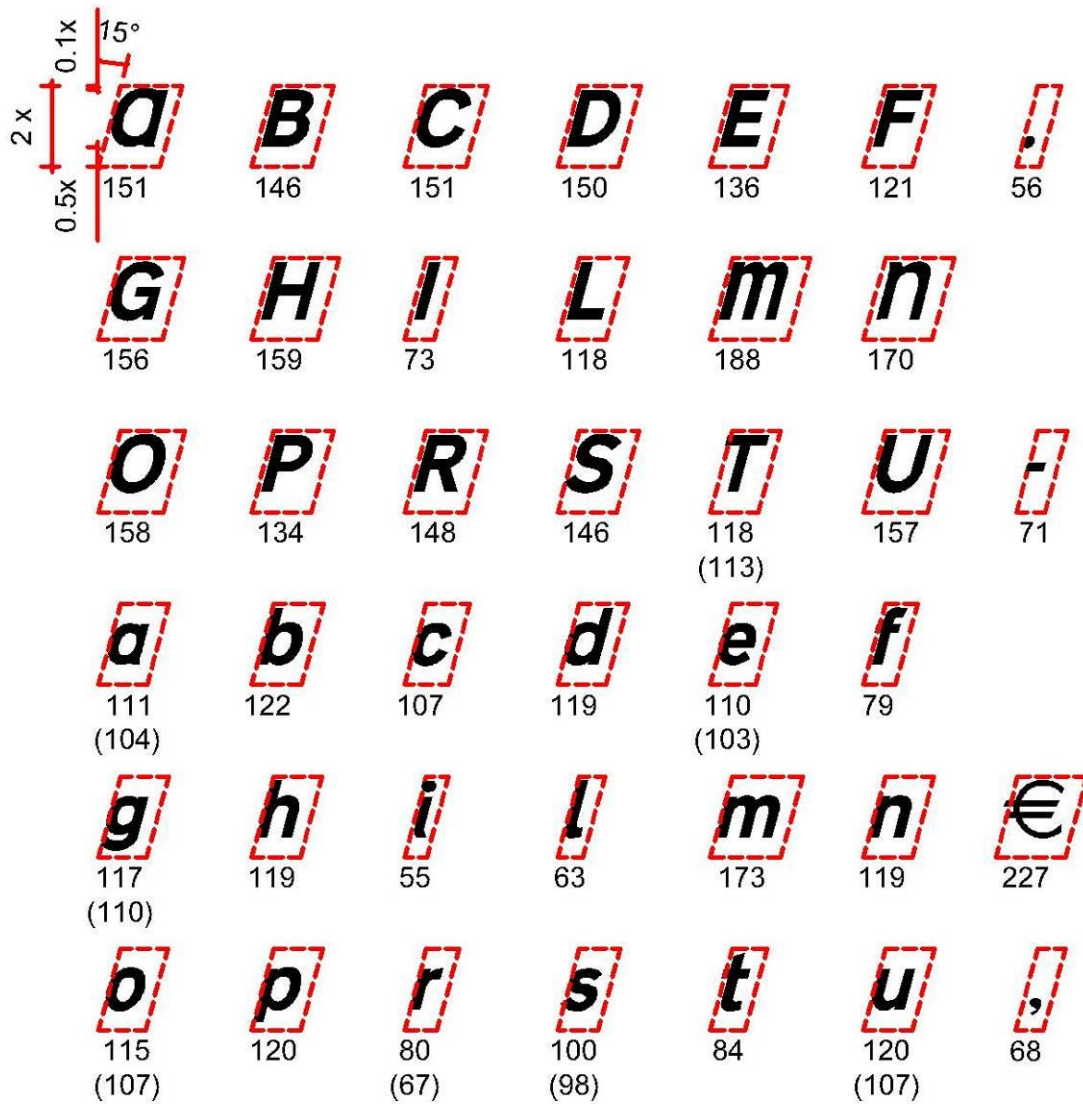


Figure 2.3.3:
Irish Upper and Lower Case Transport Heavy Alphabet
(EI-TP Heavy Font)

- 2.3.8 Words, in either language, are formed by butting the tile edges of each letter together. The tile width for each character has been designed to ensure that when the edges of tiles for adjacent characters are butted together the correct spacing between the characters will result. Additional spaces (measured in stroke widths) are formed between words, place names and route numbers as noted in Table 2.3.2. Note that the spacings are measured between tiles. The assembly of a number of tiles to form a word or of a number of words, place-names or route numbers which are associated is called a block.

Table 2.3.2: Spacing Between Words, Route Numbers and Distances

Description of Horizontal Clearance	Dimension s/w
Between Related Words	3
Between Letters and directly associated numerals (N 17, R 403)	1
Between Place-names and associated Route Numbers	3
Between Place-names or Route Numbers and a chevron	3
Between Place-names or Route Numbers and an arrow	4
Between Place-names and associated distances on Direction Signs	3
Between Place-names and associated distances on Route Confirmatory Signs	4
Between different Route Numbers on the same line	3

- 2.3.9 For bilingual signs, Irish script should always be positioned above its English equivalent. A clearance between the top of the English tiles and the bottom of the Irish tiles should be maintained. This clearance is normally 0.5s/w but varies according to the type of sign and the number of destinations displayed, and is defined later in this Section. Bilingual blocks are formed by justifying both sets of tiles to the left. The Irish tiles should be offset so that the mid-point of the incline on the first Irish tile is in line with the left side of the first English tile, as shown in Figure 2.3.4.

Baile an Bhuinneánaigh
BALLYBUNNION

**Figure 2.3.4:
Forming Bilingual Blocks**

2.3.10 The Irish and English language versions of place-names may be different in length. Where this difference is excessive and would lead to uneconomic design the following alternatives may be used:

- a) **Indentation:** In order to reduce the overall width of a place-name, the Irish or English script may follow onto a second line and be indented. This is achieved by left justifying the top line. The second line is indented by one tile at least and right justified with the un-indented text. This should only be done if the place-name is made up of two or more words as shown in Figure 2.3.5.
- b) **Abbreviation:** Either the Irish or English place-names may be abbreviated, but only to the permitted abbreviations in Table 2.3.3 or approved versions issued by the Department of Transport. Figure 2.3.6 shows the Irish text for Baile being abbreviated to B.

Table 2.3.3: Permitted Abbreviations

Term	Abbreviation
<i>Baile</i>	<i>B.</i>
<i>Caisleán</i>	<i>Cais.</i>
<i>Droichead</i>	<i>Dr.</i>
<i>Mainistir</i>	<i>Main.</i>
<i>Bóthar</i>	<i>Br.</i>

- c) **Condensing:** Condensing may be used to reduce the length of the Irish or English place-name by reducing the widths of the appropriate tiles in steps of 5% to a limit of 80% of their normal size. The use of multiple condensing factors within a sign so as to utilise all of the available space on a sign should be avoided. Condensing of route letters or numbers is not allowed. Figure 2.3.7 shows the Irish text being condensed to 80%.

2.3.11 If a destination has the same spelling in both Irish and English and is to be shown on a sign with other bilingual destinations, it is only displayed once using the Irish italicised font. The vertical space allowed for this destination is equivalent to that required by a bilingual destination (16.5 or 17s/w depending of the vertical gap between the Irish and English) plus the 3s/w separation to the next destination. This also applies to Gaelteacht destinations included on bilingual signs.

Baile an
Bhuinneánaigh
BALLYBUNNION

Figure 2.3.5:
Indentation

B. an Bhuinneánaigh
BALLYBUNNION

Figure 2.3.6:
Abbreviation

Baile an Bhuinneánaigh
BALLYBUNNION

Figure 2.3.7:
Condensing



Figure 2.3.8:
Irish Destination

ROUTE LETTERS AND NUMERALS

- 2.3.12 There are two separate alphabets for route letters, numerals and distances on motorway and other direction signs. On motorway signs the alphabet and numerals to be used are shown in Figure 2.3.11 (Motorway font). On all other signs the letters and numerals to be used are shown in Figure 2.3.12 (Route font).
- 2.3.13 On motorway Map Advance Direction signs all primary routes (L, M, N and R) are 8 s/w while supplementary routes (L, M, N and R) are 6 s/w and in brackets. On all other signs the route letter and numeral 'N' is 8 s/w, 'R' is 6 s/w and 'L' is 6s/w (on motorways and grade-separated dual carriageways) or 5.6s/w (on all other roads) when indicating those routes on signs located on the travelled route. Motorway route letters and numerals are 8s/w size when used in patches and all other routes are 6s/w size when used in patches. Other supplementary route numbers are 6s/w regardless of the road classification. See Figure 2.3.9.
- 2.3.14 Numerals or route numbers shall never be condensed or inclined when used on directional signage.
- 2.3.15 When signing a national, regional or local route on a motorway mainline sign the N and R shall be in Route font and the associated number shall be Motorway font with a 1s/w gap between the two as shown in Figure 2.3.10. When signing a local route on a motorway mainline sign the L shall be in Route font and the associated number shall be Motorway font with a 0.5s/w gap between the two.



Figure 2.3.9:
Extract Showing Use of 6 and 8s/w Route Numbers



Figure 2.3.10:
Extract from a Motorway Sign Showing a Regional Route using the Motorway Font.

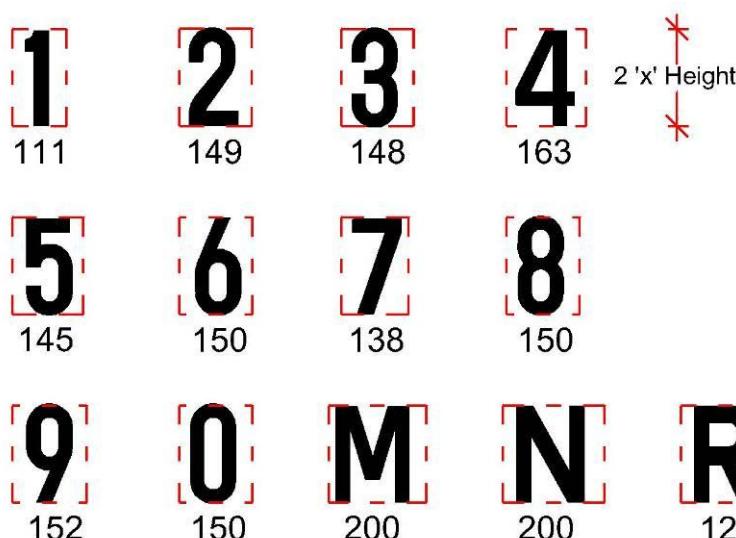


Figure 2.3.11:
Motorway Text and Numerals
(Motorway Route Font)

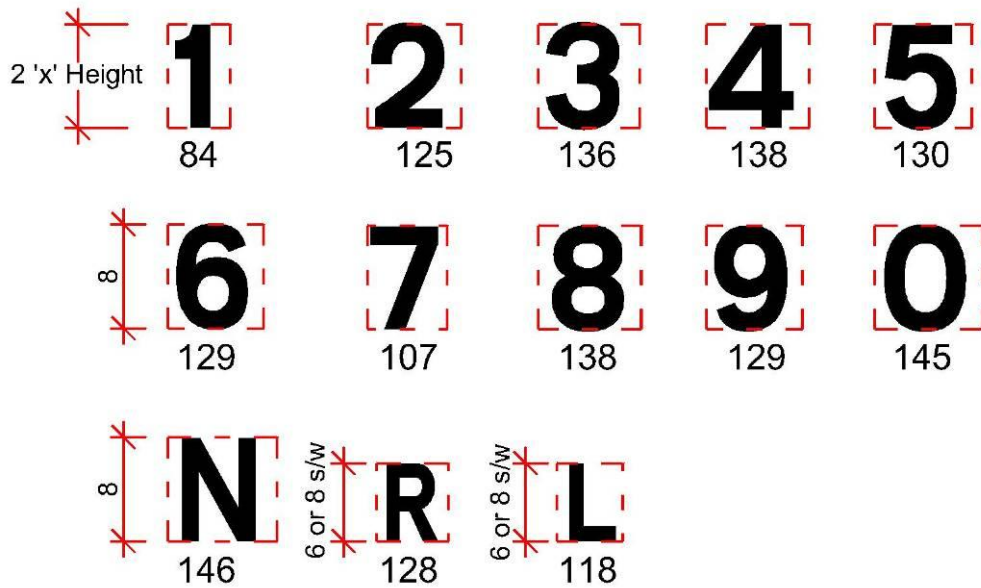


Figure 2.3.12:
Distance Numerals and Route Letters and Numerals
(Route Font)

2.3.16 The Motorway Symbol shall be shown on Advance Direction and Direction Signs leading directly to the motorway. The symbol dimension is generally 16s/w high but may be reduced to 12s/w (see Paragraphs 2.3.45 to 2.3.48).

2.3.17 The spacing between route letters and numbers shall be in accordance with Table 2.3.4.

Table 2.3.4: Spacing Between Route Letters and Numbers

Description of Horizontal Clearance Between Route Letter and Number	Dimension s/w
M	0
N and R (6 or 8 s/w)	1
L	0.5

DISTANCES

2.3.18 For Direction and Route Confirmatory Signs the 'km' symbol is 6s/w (Transport Heavy font) and the numerals are 6s/w (Route font). See Figure 2.3.13.

2.3.19 For map type signs the distance is displayed by providing the distance (Route Font) at 4.2s/w followed by the 'km' or 'm' text (Transport Heavy font) at 6s/w. The 4.2s/w numeral is placed 1s/w from the 'km' text or butted up to the 'm' text (see Figure 2.3.14).

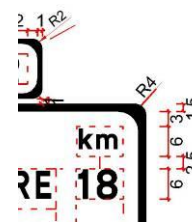


Figure 2.3.13:
km and Distance on a
Route Confirmatory Sign

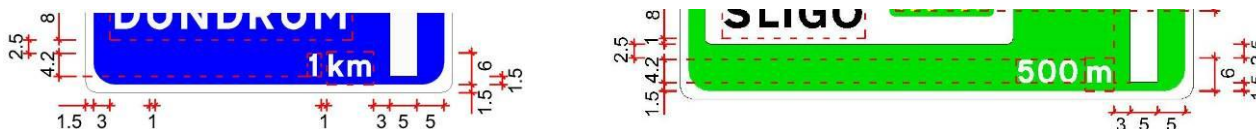


Figure 2.3.14:
1km and 500m on Advance Direction Signs

2.3.20 For gantry signs the distance is displayed by providing the 'km' or 'm' text (Transport Heavy font) at 6s/w and is positioned 1.5s/w below the numeral tile mark. The numeral (Route font) is provided at 6s/w and butted up to the 'm' and positioned 1 s/w from the 'km' tile (see Figure 2.3.15).



Figure 2.3.15:
1km and 500m on Gantry Direction Signs

2.3.21 For Next Exit signs the distance is displayed by providing the 'km' or 'm' text (Transport Heavy font) at 6s/w and is positioned 1.5s/w below the numeral tile mark. The numeral (Route font) is provided at 8s/w and butted up to the 'km' or 'm' tile (see Figure 2.3.16).

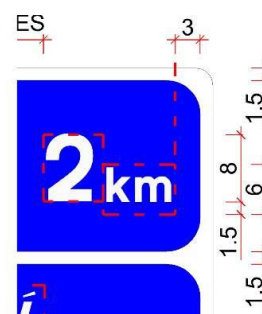


Figure 2.3.16:
2km on a Next Exit Sign

- 2.3.22 On directional signs distances to destinations are displayed in whole kilometres with no decimal point.
- 2.3.23 Where the distance to the junction is shown on an Advance Direction Sign, the distance displayed shall be rounded from the actual distance in accordance with Table 2.3.5. Note that distances of approximately 1km shall be displayed as '1km', whereas other distances up to 1900m shall be displayed in metres.

Table 2.3.5: Distances for Signs and Supplementary Plates

Measured Distance to Feature	Distance to be Rounded to Nearest	Distance Displayed in:
< 100m	10m	m
≥ 100m < 800m	50m	m
≥ 800m < 950m	100m	m
≥ 950m < 1050m	1km	km
≥ 1050m < 2000m	100m	m
≥ 2km < 4km	0.5km	km
≥ 4km	1km	km

JUNCTION NUMBER PANEL

- 2.3.24 Where a junction number panel is to be provided on a sign, Transport Heavy font is to be used, with the dimensions and tile area (red dashed) as detailed in Figure 2.3.19. The numerals are positioned centrally within the box.
- 2.3.25 On signs with a dark background (blue or green) the junction number panel will have a 0.5s/w wide white border, as shown in Figures 2.3.17 and 2.3.20(b).
- 2.3.26 On signs with a white background the junction number panel will have no border but extend to the same dimensions, as shown in Figures 2.3.18 and 2.3.20(a).



**Figure 2.3.17:
Junction Number Panel on
Dark Background Sign**



**Figure 2.3.18:
Junction Number Panel on
Light Background Sign**

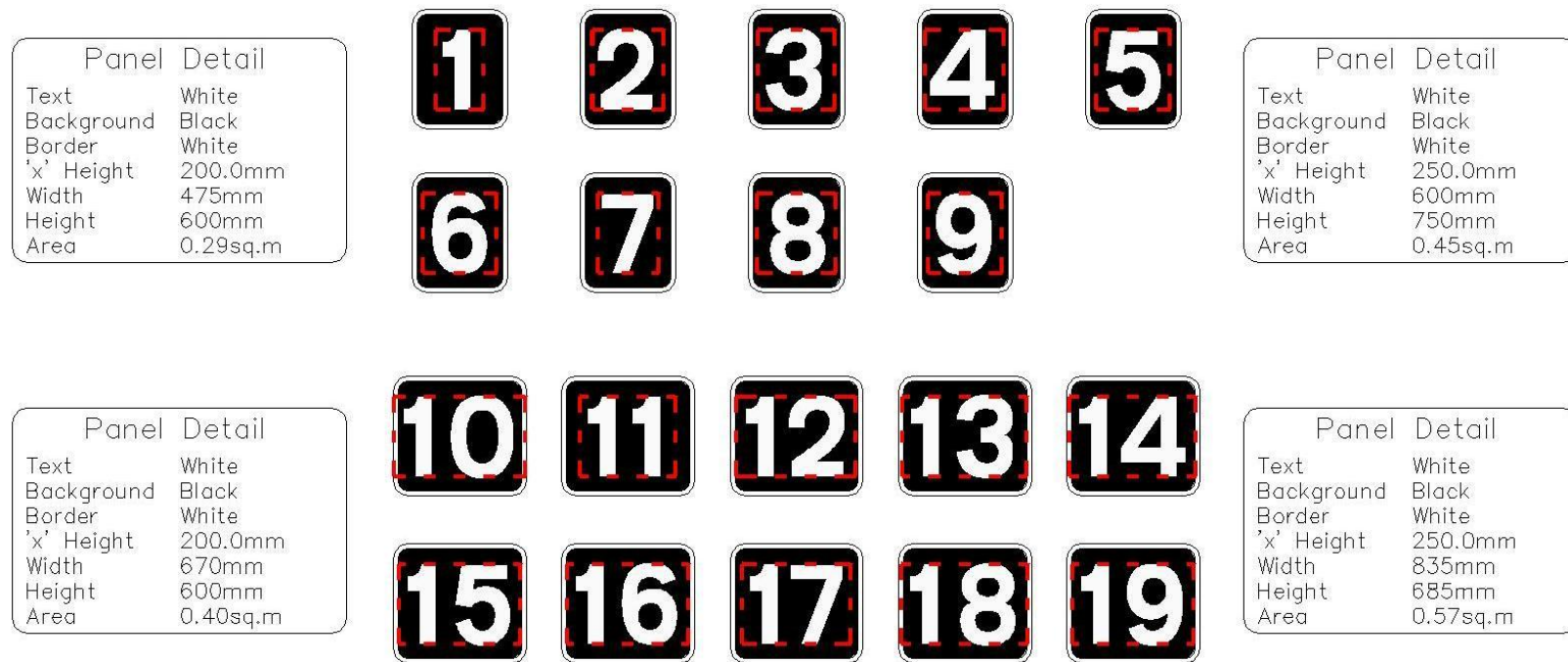


Figure 2.3.19:
Junction Number Panel Details

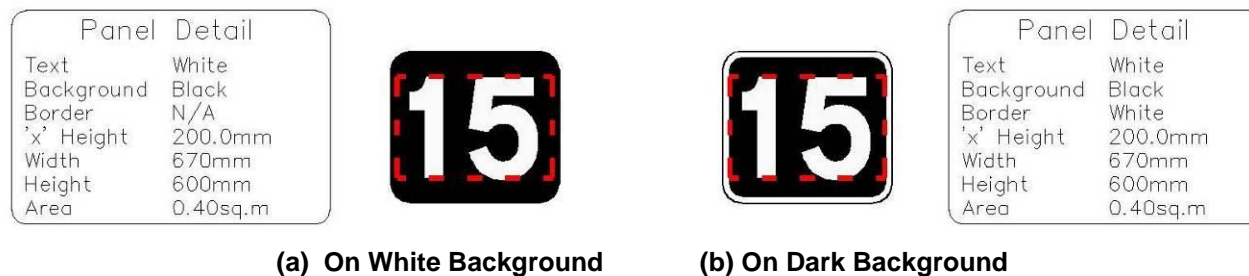


Figure 2.3.20:
Junction Number Panel for Sign with White or Dark Backgrounds

LEGEND PANELS AND PATCHES

- 2.3.27 Legend panels and patches are used on signs to indicate the classification of other routes reached directly from a junction ahead.
- 2.3.28 A legend panel should be used on a Map Type Advance Direction Sign where a route leaving the junction ahead has a different classification to the road on which the sign is placed. The legend panel should contain both place-name(s) and route number and will have a colour scheme in accordance with Table 2.2.1.
- 2.3.29 Legend panels should be designed in accordance with the dimensions illustrated in the examples on Figures 2.3.21 to 2.3.24. The notch/cut-out is only used around the arrow head: there should be a 3s/w gap between the arrow head and the edge of the panel, and the panel corners should have a radius of 1s/w. Figure 2.3.25 shows examples of signs with legend panels.
- 2.3.30 When a dark coloured legend panel is placed on a dark background a white border of 0.5s/w shall be added to the legend panel and the dimensions for positioning the legend panel are slightly different.

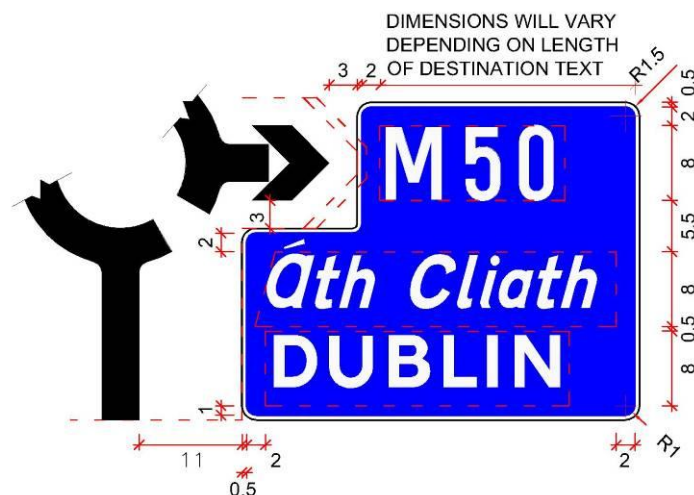


Figure 2.3.21:
Motorway Route Legend Panel Design for use on a Roundabout.



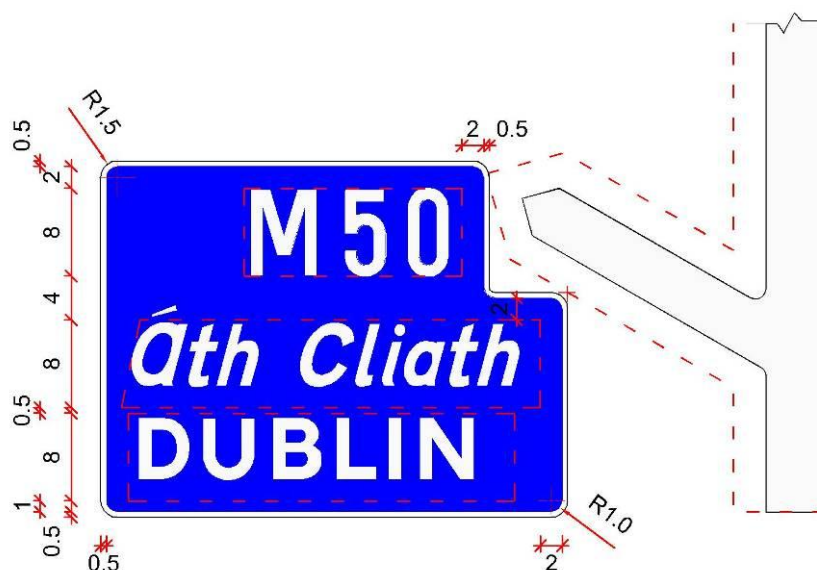


Figure 2.3.24:
Motorway Route Legend Panel Design on a Map Type Advance Direction Sign

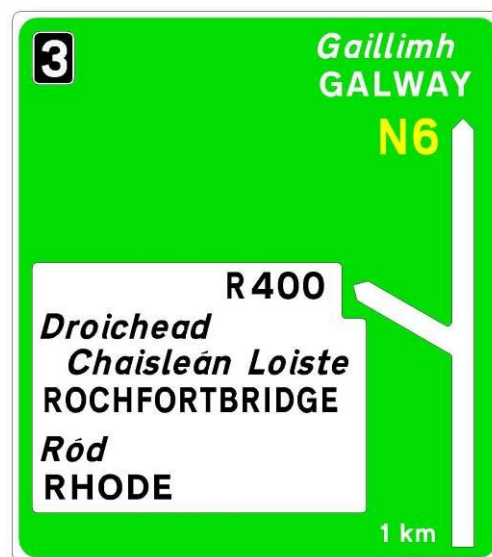
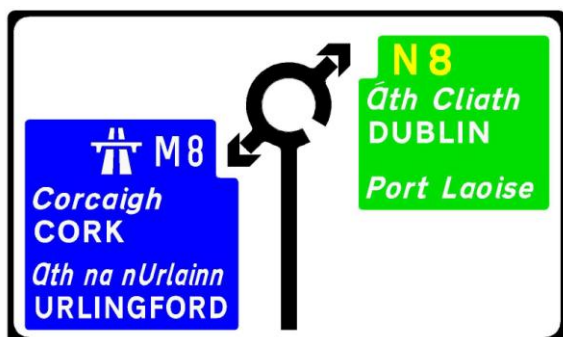


Figure 2.3.25:
Examples of Legend Panel Application

- 2.3.31 A patch is also used to indicate a road of a different classification which can be reached at a junction some distance along a route. The patch shall contain a route number only and always be enclosed by brackets. It shall be in the colour scheme appropriate to the classification of road indicated.
- 2.3.32 Motorway route numbers shown on a patch shall be 8s/w high. All other route numbers shown on a patch shall be 6s/w high. Patches should be drawn in accordance with the dimensions illustrated in Figures 2.3.26 to 2.3.28 and the panel corners should have a radius of 1 s/w.
- 2.3.33 When a dark coloured patch is placed on a dark background a white border of 0.5 s/w shall be added to the patch. A regional route patch always has a 0.5 s/w black border. Examples of patches on signs are shown in Figure 2.3.29.

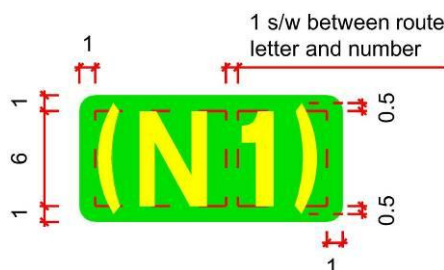


Figure 2.3.26:
National Route Patch Design without Border



Figure 2.3.27:
Motorway Patch Design with Border

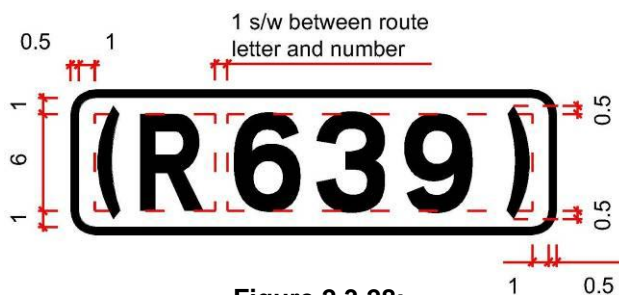


Figure 2.3.28:
Regional Patch Design with Border

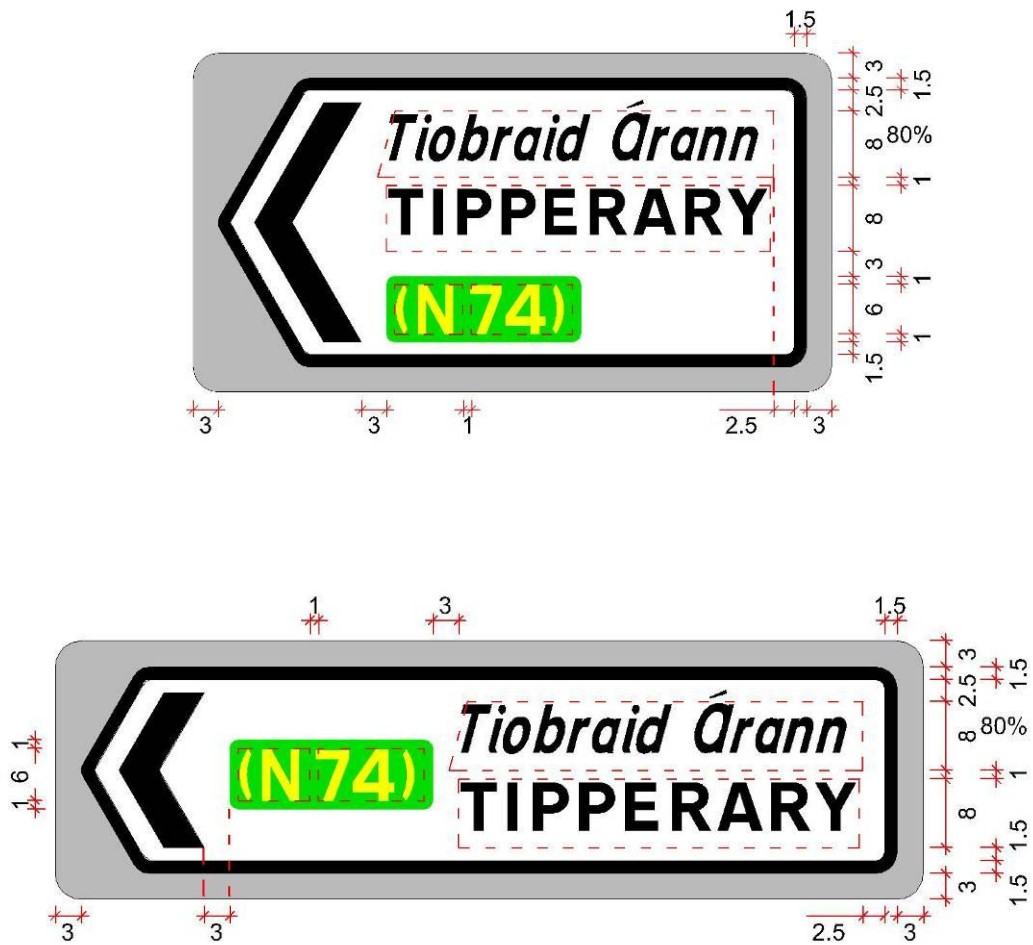


Figure 2.3.29:
Examples of Alternative Positions for a Patch within a Sign.

EURO ROUTE PANEL

- 2.3.34 Where a Euro Route marker plate is to be provided on a Route Confirmatory sign, Transport Heavy font is to be used for the letters, hyphen and numerals with the dimensions as detailed in Figure 2.3.30. The letters and numerals are positioned centrally within the box.
- 2.3.35 The background colour of the Euro Route marker plate will be green regardless of the road classification and background colour of the main sign.
- 2.3.36 Euro Route Panels are only displayed on Route Confirmatory Signs and the panel is positioned on the top right hand corner with the outside edge of the euro panel lined up with the inside border of the panel below. The route marker plate is then centred on the panel below if the width of the sign allows this otherwise it is positioned 3s/w from the euro panel (see Figures 2.3.31 and 2.3.32).



Figure 2.3.30:
Euro Route Marker Plate



Figure 2.3.31:
Route Marker Plate Centred



Figure 2.3.32:
Route Marker Plate 3s/w from Euro Panel

TOLL SYMBOL

- 2.3.41 The provision of signs for tolled roads such as advance warning and toll costs will, in general, be separate from directional information signs and only the Toll symbol will appear on relevant directional information signs.
- 2.3.42 The Toll symbol as either Figures 2.3.35 or 2.3.36 is the symbol required on directional information signs indicating a tolled route. For signs in a Gaeltacht area the symbol *Dola* should be used instead, as Figures 2.3.37 and 2.3.38. With prior approval from the Overseeing Organisation, Figure 2.3.39 and Figure 2.3.40 may be used on existing signs or where space constraints are an issue.
- 2.3.43 The symbol 'Toll' and 'Dola' is black on a white background for all examples and an additional 0.5 stroke width border is added to symbols on a light background.
- 2.3.44 Clear and concise signs giving the distance to the toll plaza and prices for the toll are described in Chapter 4.

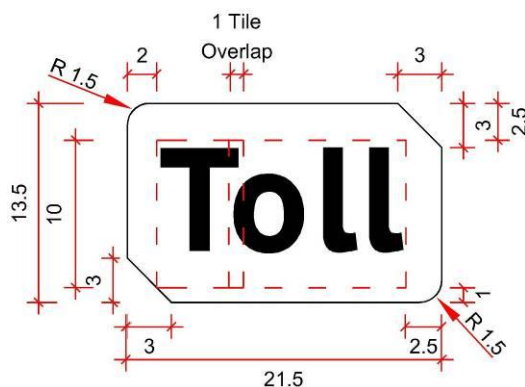


Figure 2.3.35:
Toll Symbol for use
on a Dark Background

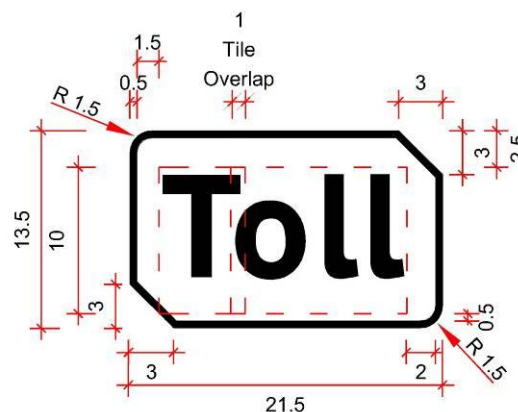


Figure 2.3.36:
Toll Symbol for use on a
Light Background

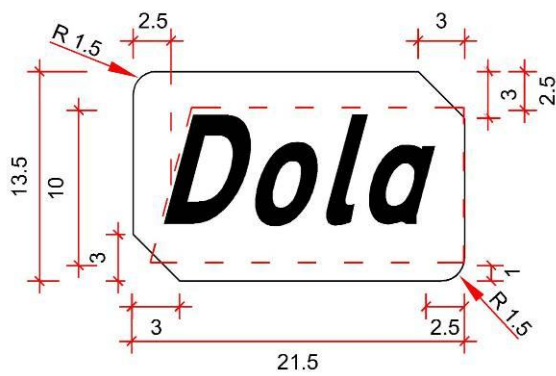


Figure 2.3.37:
Gaeltacht Toll Symbol for use on a Dark Background

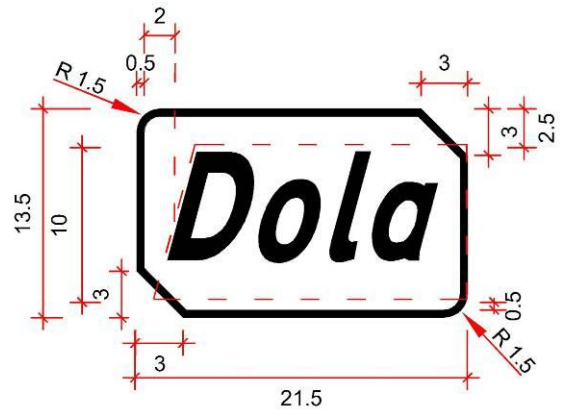


Figure 2.3.38:
Gaeltacht Toll Symbol for use on a Light Background

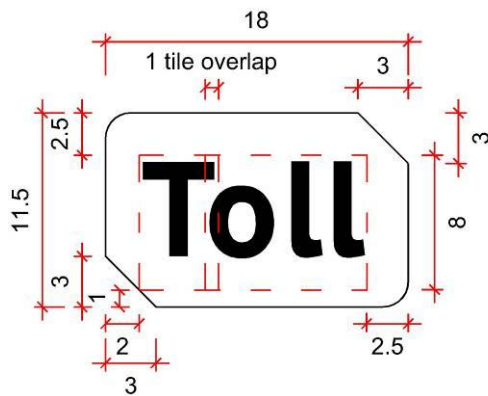
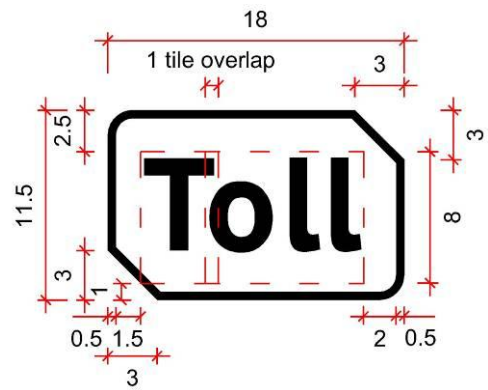


Figure 2.3.39:
Retrofit Toll Symbol for use on a Dark Background



Retrofit Toll Symbol
for use on a Light Background

MOTORWAY SYMBOL

- 2.3.45 At the entrances to and exits from motorways a number of information signs are required to alert drivers to the change in road type and the consequent change in regulations. The Motorway symbol, Symbol F 40, is used on these signs and is detailed in Figures 2.3.41 and 2.3.42.
- 2.3.46 There are two motorway symbols for use within directional signage, as shown in Figures 2.3.41 and 2.3.42. The 16s/w high symbol is normally used, while the 12s/w symbol may be used only on roundabout signs where the size of the sign would otherwise be increased unnecessarily.
- 2.3.47 The motorway symbol and accompanying motorway route number are always white on a blue background either within a sign or within a patch or legend panel.
- 2.3.48 Examples of signs incorporating the two motorway symbols are shown in Sections 2.4, 2.5 and 2.6. Other signs incorporating these symbols are described in Chapter 4.

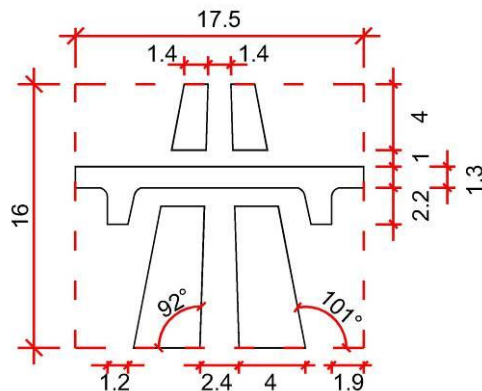


Figure 2.3.41:
Standard Motorway Symbol on a Blue
Background

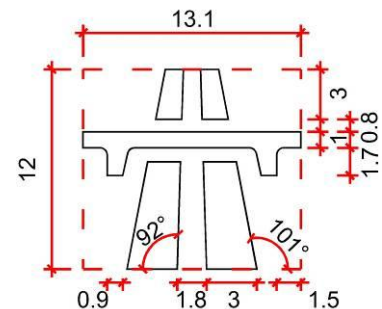


Figure 2.3.42:
Smaller Motorway Symbol
on a Blue Background

Lane Destination Arrows

2.3.51 Lane destination arrows shall be as detailed in Figure 2.3.47 for a straight ahead arrow, Figures 2.3.48 and 2.3.49 for left or right turn arrows, Figures 2.3.50 and 2.3.51 for combined movements and Figures 2.3.52 and 2.3.53 for diverge arrows.

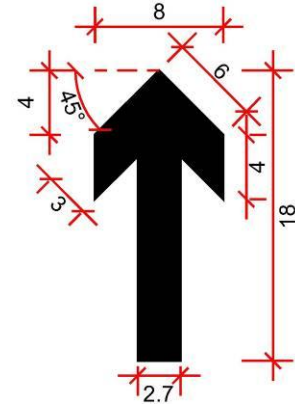


Figure 2.3.47:
Lane Destination Straight Ahead Arrow

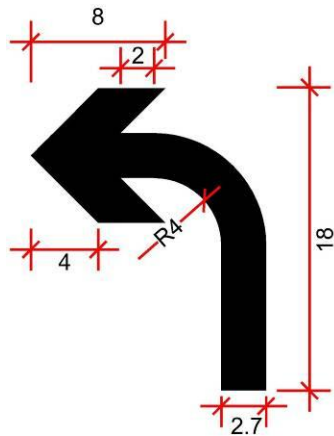


Figure 2.3.48:
Lane Destination Left Arrow

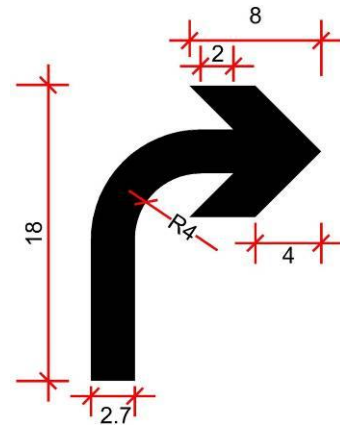


Figure 2.3.49:
Lane Destination Right Arrow

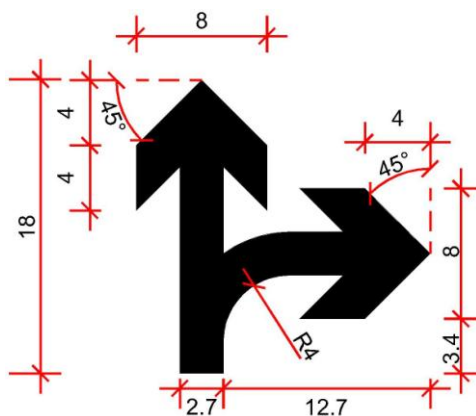


Figure 2.3.50:
Lane Destination Straight and Left Arrow

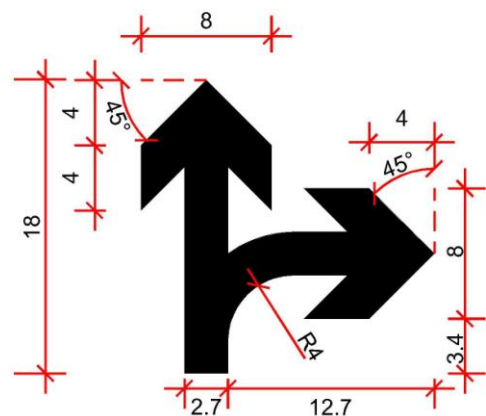


Figure 2.3.51:
Lane Destination Straight and Right Arrow

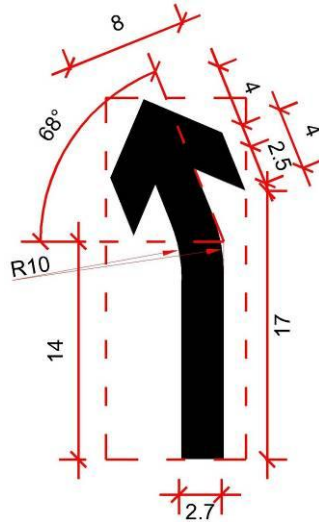


Figure 2.3.52:
Lane Destination Grade Separated Diverge Arrow

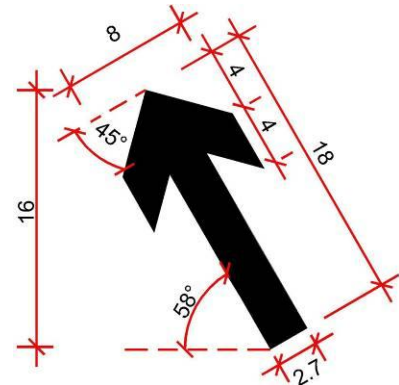


Figure 2.3.53:
Lane Destination At-Grade Diverge Arrow

DESIGN OF LANE DESTINATION CHEVRON SYMBOL

2.3.52 Figure 2.3.54 shows the layout and dimensions of the chevron symbol used on Lane Destination signs.

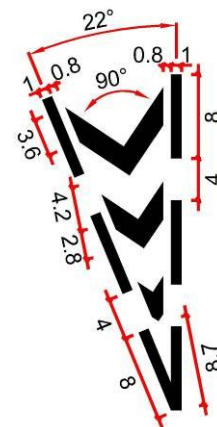


Figure 2.3.54:
Lane Destination Diverge Chevron

DESIGN AND ORIENTATION OF AEROPLANE SYMBOL

2.3.53 Figure 2.3.55 shows the design of the airport symbol and Figure 2.3.56 shows the permitted angles to be used for the orientation of the symbol when used in directional signs.

2.3.54 The airport symbol should only be used when signing public passenger airports.

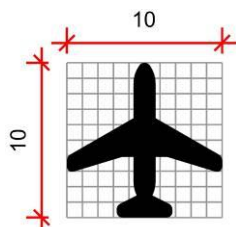


Figure 2.3.55:
Symbol F 14 – Airport

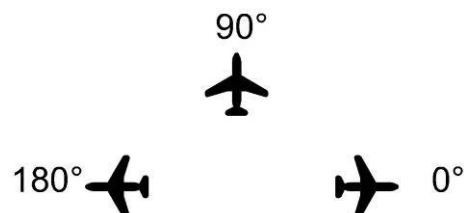


Figure 2.3.56:
Orientation of Airport Symbol

DESIGN OF FERRY SYMBOL

2.3.55 Figure 2.3.57 shows the design of the ferry symbol for a port where both trucks and cars are catered for, while Figure 2.3.58 shows the design of the ferry symbol for a port where only cars are catered for.

2.3.56 Both these symbols may have either a dark or light background. For ferry symbols on a sign on a motorway route the symbol will have a white ferry with blue vehicles within. Similarly on national route signs the vehicles will be green in a white ferry, and on a regional route the vehicles will be white in a black ferry.

2.3.57 For details of other ferry information signs refer to Chapter 4.

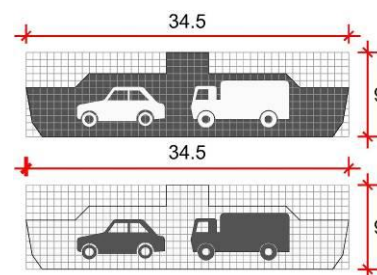


Figure 2.3.57:
Symbol F 19 – Ferry (Cars and Trucks)

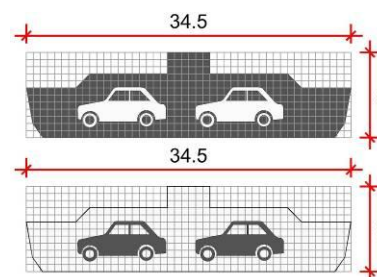


Figure 2.3.58:
Symbol F 18 – Ferry (Cars Only)

PROXIMITY RULE

2.3.58 Where National roads are close together but do not intersect, the 'Proximity Rule' shall be applied to determine the destinations to be shown and the colours of the signs. The Proximity Rule may be demonstrated by the following examples:

2.3.59 For a staggered junction of 500m or less the directional signs for traffic travelling from A to D or vice versa will have a white background and separate panels to the national route signage. See Figures 2.3.59 and 2.3.60.

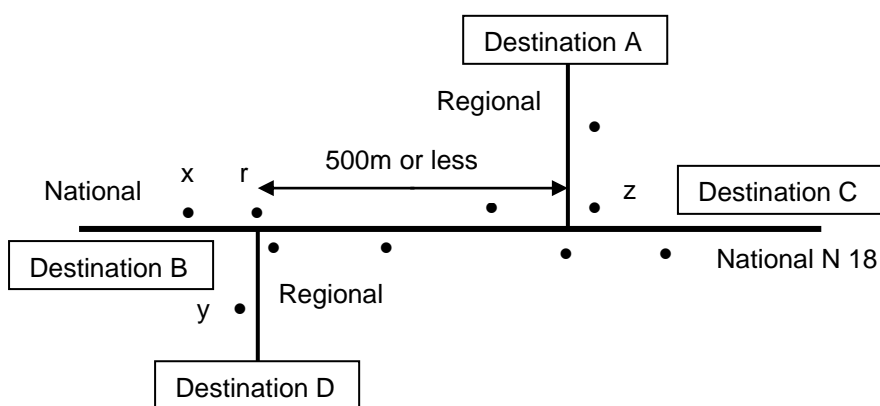
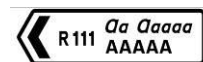
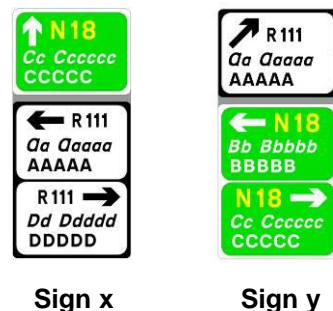


Figure 2.3.59:
Proximity Rule for Stagger of 500m or Less



Sign z



Sign r

Figure 2.3.60:
Typical Signs Used at
Stagger Junction 500m of
Less

2.3.60 Where a Local road of less than 500m length links a National road and Regional road, the National road shall be signed on a green panel at the Local / Regional junction. See Figures 2.3.61 and 2.3.62.

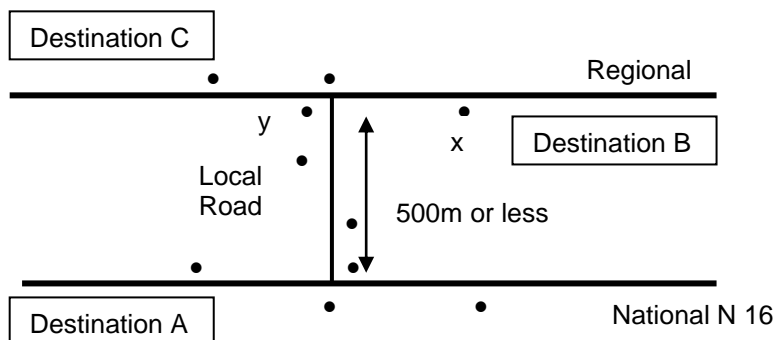


Figure 2.3.61:
Proximity Rule for Local Link



Figure 2.3.62:
Typical Signs Used at
Stagger Junction 500m of
Less

2.3.61 Where National to National routes are to be signed to each other via the link, the directional signage shall not take account of the classification of the link road. See Figures 2.3.63 and 2.3.64.

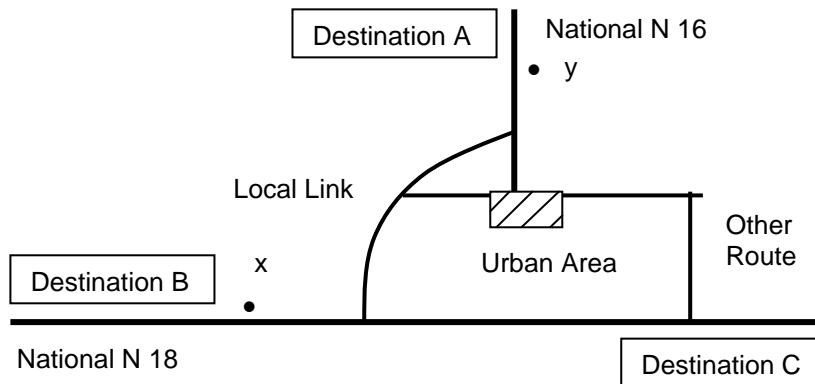


Figure 2.3.63:
Proximity Rule in Other Cases

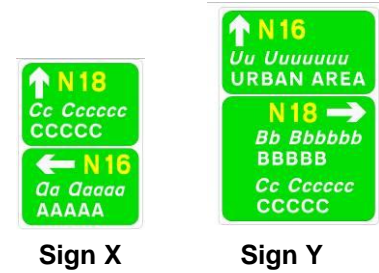


Figure 2.3.64:
**Typical Signs used where
a Local Link Connects two
National Routes**

2.4 Mainline Directional Signs for Motorways

PROVISION OF SIGNS ON MOTORWAYS

- 2.4.1 Drivers of vehicles on motorways must be given adequate early indication of junctions and of any change in classification. The high speed of traffic and infrequency of junctions make it essential to give clear and concise messages so that drivers have sufficient time to make a decision and execute any manoeuvre safely.
- 2.4.2 Traffic travelling on a national route which changes to a motorway needs advance warning of the motorway ahead, as some forms of traffic are prohibited and have to take an alternative route before the motorway begins. Also, when travelling on a motorway which changes to a national route, or vice versa, there could be a change in speed limits.
- 2.4.3 The types of directional signs required on motorways include Advance Direction Signs, Direction Signs and Route Confirmatory Signs. The Advance Direction and Direction Signs may be verge signs or overhead gantry signs or a combination of both.
- 2.4.4 Advance Direction Signs should be sited to avoid obscuring other signs, or avoid being obscured themselves by any over-bridges, trees or shrubbery, etc.
- 2.4.5 A number of other information signs are required as part of the signage of motorways (see Chapter 4). These include junction countdown markers and lane gain signs, as shown in Figures 2.4.1 and 2.4.2. Such signs shall have a blue background on motorways.
- 2.4.6 The countdown markers, which are detailed in Chapter 4, are required in advance of all grade separated junctions only. They shall be positioned at 300m, 200m and 100m from the start of the diverge taper.
- 2.4.7 The lane gain signs, which are also detailed in Chapter 4, will be required wherever there is an increase in the number of lanes on the main carriageway. Guidance on their design and positioning is given in Chapter 4.
- 2.4.8 Regulatory and warning signs shall also be provided, where required, as described in Chapters 5 and 6.
- 2.4.9 In order to encourage the use of motorways in preference to the local roads, appropriate advance information should be provided on the surrounding road network, directing traffic towards the major road. Similarly, when new road schemes are built, the directional signs on the surrounding road network should be revised to suit the new road layout and classification.



Figure 2.4.1:
Junction Countdown
Markers



Figure 2.4.2:
Typical Lane Gain Signs

DESIGN OF MOTORWAY SIGNS

2.4.10 This Section defines the general rules of design for mainline directional information signs on motorways.

2.4.11 Signs located on the main carriageway of a motorway shall be white on a blue background. They shall not contain any patches or panels of other colours except where a junction number is indicated: this should be shown as white on a black patch (see Section 2.3). The only exception to this rule is at the terminal of a motorway where signs on the mainline should retain a blue background but connecting national and regional roads should be indicated by appropriately coloured legend panels.

2.4.12 When a motorway ends at an at-grade roundabout, Advance Direction signs should be sited, in general, at 1km, 500m and 150m from the roundabout.

2.4.13 Map Type signs and Direction signs on exit slip roads leading to other routes, should have a background of green or white according to the higher classification of the joining roads. Other routes should be shown in appropriately coloured legend panels or patches.

2.4.14 Stack Type signs on exit slip roads should have full coloured directional panels appropriate to the routes indicated.

2.4.15 Where it is appropriate to indicate the direction to a motorway from a distant junction on other roads, the motorway route number (enclosed in brackets) should be placed on a blue patch on the main background of the sign (see Section 2.3).

2.4.16 Advance Direction and Direction signs leading directly to the motorway shall also include the motorway symbol (see Section 2.6).

2.4.17 Motorways require additional information signs which are used in specific situations, such as the 'Start of Motorway' and 'End Of Motorway', 'Motorway Ahead' and alternatives. Guidance on their design and positioning is given in Chapter 4.

2.4.18 The Start and End of Motorway signs indicate the point where motorway restrictions start and end.



Figure 2.4.3:
Sign F 330: Typical Start of Motorway'



Figure 2.4.4:
Sign F 333: End of Motorway'

- 2.4.19 The destinations on motorway signs will generally have an associated route number which will be 8s/w for Motorway and National Routes and 6s/w for Regional, Local and supplementary routes. Supplementary route numbers are placed in brackets either below or adjacent to the main route number.
- 2.4.20 On Advance Direction Signs all routes are 8s/w regardless and supplementary routes are 6s/w.
- 2.4.21 On Next Exit Signs the primary exit route numeral will be 8s/w for Motorway or National routes and 6s/w for Regional and Local routes. All other supplementary bracketed routes are 6s/w regardless.
- 2.4.22 When signing supplementary route numbers, only National Primary routes shall be displayed. They shall be 6 s/w and placed in brackets either below or adjacent to the main route number. For example Figure 2.4.5 shows an Advance Direction Sign indicating the M4 straight ahead to Sligo, Westport and Galway. Sligo (M4) will have an 8s/w associated route number and Westport (N5) and Galway (N6), national primary supplementary routes, will have a 6s/w bracketed route number. This rule is applied to all types of signs on all motorways, except on diverge taper gantries, where no supplementary routes are displayed.



Figure 2.4.5:
Example of 6s/w
Supplementary Route
Numbers

NEXT EXIT SIGNS

2.4.23 A Next Exit sign is normally positioned at 2km in advance of the start of the diverge taper. At an intersection of a motorway with a national primary, depending on the proximity of the junctions, a Next Exit sign may also be required at 4km.

2.4.24 Next Exit signs are in addition to the Advance Direction signs and must include the destinations listed on the subsequent Advance Direction signs. They may also accommodate additional destinations that cannot be accommodated on the subsequent Advance Direction signs. For clarity the total number of destinations should not exceed four.

2.4.25 The sign is designed in two panels similar to a stack type sign. The top panel includes the Junction Number Panel (see Section 2.3), which is left justified, and the distance 2km (or 4km), which is right justified. The Irish and English text for "Next Exit" is then centred between the Junction Number Panel and the distance. The distance number is 8s/w high and the km is 6s/w. The Junction Number Panel and the distance are centred vertically about the 'Next Exit' text.

2.4.26 In general the widest destination sets the width of the sign. Hence the Junction Number Panel and distance are left and right justified with the 'Next Exit' text centred between the two giving a gap of more than 3s/w. If this gap is less than 3s/w then the gap will be increased to 3s/w and the top panel will set the overall sign width.

2.4.27 The bottom panel is designed by stacking route numbers and associated destinations above each other and these are left justified.

2.4.28 The 'x'-height required for Next Exit signs (which are a form of Advance Direction sign) is defined in Table 2.3.1, while the dimensions for Next Exit signs are shown in Table 2.4.1. Typical dimensioned examples are illustrated in Figures 2.4.8 to 2.4.10.



Figure 2.4.6:
Typical 2km Next Exit Sign



Figure 2.4.7:
**Typical 4km Next Exit Sign
with Supplementary
Route.**

Table 2.4.1: Dimensions for Next Exit Signs

Description	s/w
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Vertical Gap Between Top Panel and Bottom Panel	1
Vertical Gap Between Text and Top Border	2.5
Vertical Gap Between Text and Bottom Border	1.5
Vertical Gap Between Irish and English Text	0.5
Vertical Gap Between Destinations	3
Horizontal Gap Between Route Number/Junction Number Panel and Side Border	3
Horizontal Gap Between Destination/Distance and Side Border	3
Horizontal Gap Between Route Number and Destination	3
Minimum Horizontal Gap Between Junction Number Panel and Next Exit Text	3
Minimum Horizontal Gap Between Next Exit Text and Distance	3
N and M Route Letters and Numerals	8
R Route Letters and Numerals	6
L Route Letters and Numerals	6
All supplementary bracketed Route Numbers	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Table 2.3.4



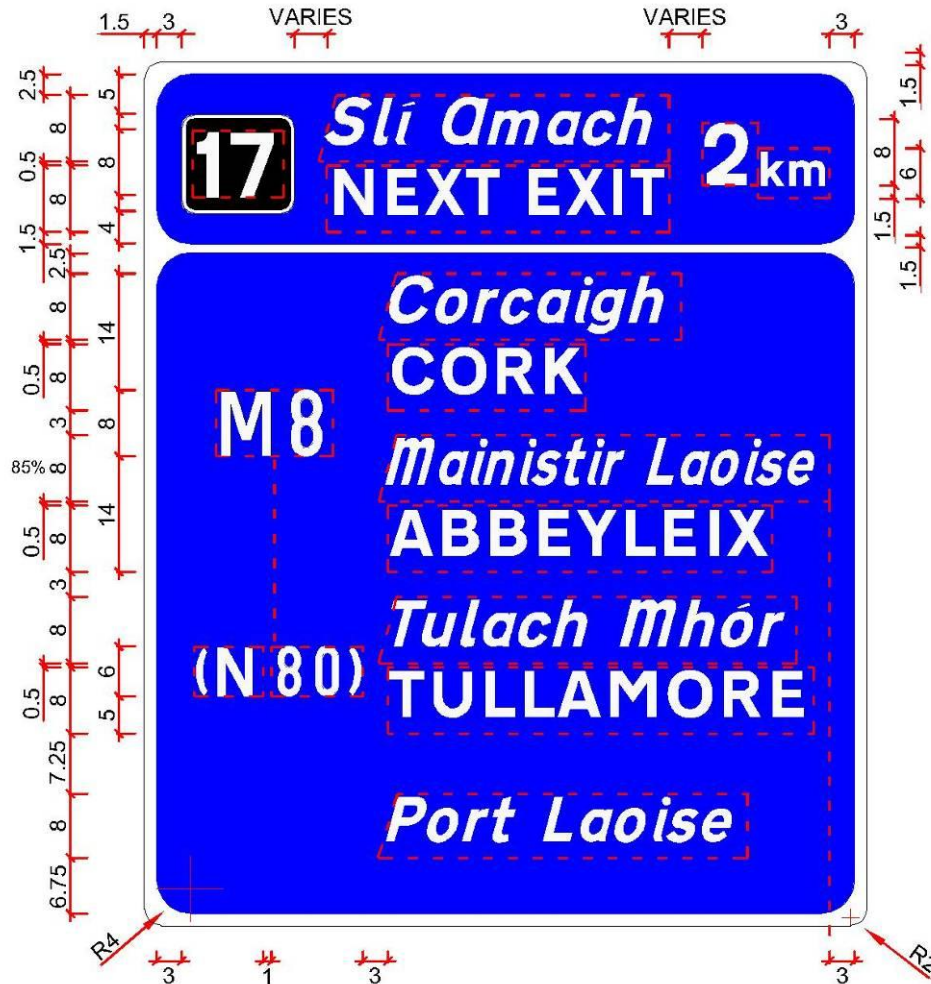


Figure 2.4.10:
Dimensioned Next Exit Sign with a Combination of Bilingual and Irish Only Destinations

Note: Lower panel sets overall width of sign and the 'NEXT EXIT' text is centred between the junction number and 2km text.

OVERHEAD GANTRY SIGNS – GENERAL

2.4.29 Gantry signs should be provided in the following situations:

- (i) Where there are three or more traffic lanes in either direction; or
- (ii) Where the design year Annual Average Daily Traffic (AADT) exceeds 50,000 vehicles; or
- (iii) At motorway / National Primary intersections; and
- (iv) At any other locations on motorways or dual carriageways as directed or approved by the National Roads Authority.

2.4.30 The general layout and positioning of gantry signs shall be agreed in advance with the National Roads Authority, in accordance with the NRA Traffic Signs Approvals Procedure.

2.4.31 There are four types of overhead gantry signs:

- A **Non Lane Drop Gantry** is provided in advance of a standard diverge slip; and
- A **Lane Drop Gantry** is used when a dedicated lane is provided for diverging traffic;
- An **Exit Taper Gantry** is provided at the start of the diverge taper; and
- A **Butterfly Taper Gantry** is provided in the diverge between significant carriageways.

2.4.32 For a standard diverge situation, Non Lane Drop Gantries are generally located at 1km and 500m from the start of the diverge taper and a Exit Taper Gantry is located at the start of the diverge taper.

2.4.33 For a dedicated lane drop situation, Lane Drop Gantries are generally located at 1km and 500m from the start of the diverge taper and at the start of the diverge nosing.

2.4.34 Junction numbers, where applicable, are available from the National Roads Authority for the motorway network and shall be placed on all mainline signs associated with that exit.

2.4.35 Where three destinations are provided on the diverge panel of gantries, as per Figure 2.4.11, then the supplementary destinations should be 6s/w in height and the gap between the destinations increased.

2.4.36 National Primary supplementary route numbers are the only supplementary routes displayed on overhead gantry signs. Alternatively, if two non-national routes are signed, only the higher classification number will be displayed. On Exit Taper Gantry signs supplementary routes are not signed.



Figure 2.4.11:
Typical Non Lane Drop Gantry



Figure 2.4.12:
Typical Lane Drop Gantry



Figure 2.4.13:
Typical Exit Taper Gantry

-
- 2.4.37 The 'x'-height for Non Lane Drop, Lane Drop and Exit Taper Gantry signs shall be in accordance with Table 2.3.1. The 'x'-height for Butterfly Taper Gantry signs shall be in accordance with Table 2.4.5.
- 2.4.38 Gantries provide vertical sign supports for the sign face and additional supports may be provided for future amendments. These additional sign face vertical supports must not be visible once the sign face is erected: if necessary grey backing board shall be provided to cover these supports.

NON LANE DROP GANTRY SIGNS

2.4.39 The mainline panel for a Non Lane Drop Gantry sign is designed by stacking the destination information with route numbers and arrows placed below. The maximum width of the mainline panel is determined by the width of the carriageway and in accordance with the design rules. The diverge panel contains the destinations available at the junction. It is designed by stacking the destination information with the route numbers and arrow placed above the text and the panel is positioned above the hard shoulder.



Figure 2.4.14:
Non Lane Drop Gantry at 1km

2.4.40 The destination information in the diverge panel is left justified. The arrow is positioned above and at the left hand side and in line with the edge of text. The route number(s) is positioned to the right of the arrow. The junction number panel is positioned in the bottom right hand corner in line with the edge of text.

2.4.41 The overall width of the diverge panel may be wider than the hard shoulder but no wider than 5m.

2.4.42 The overall width of the mainline panel is set by the number of lanes and is measured from the centre of the left hand lane to the centre of the right hand lane plus 15s/w to the inner edge on both sides.



Figure 2.4.15:
Non Lane Drop Gantry at 500m

2.4.43 Where two or more lanes on the mainline have the same destinations, the information should only appear once, with the lane arrows positioned directly over the centre of each lane and pointing downwards.

2.4.44 Junction numbers, where available from the National Roads Authority, shall be placed on all Non Lane Drop Gantries associated with the junction. In general the junction number panel is placed in the bottom right hand corner of the diverge panel. See Section 2.3 for details of junction number panels. Where junction numbers are not available, space should be provided to accommodate the inclusion at a future date.



Figure 2.4.16:
Non Lane Drop Gantry with Toll Symbol.

2.4.45 The background for the mainline and diverge panels is all blue irrespective of the classification of route indicated, except at motorway start and terminal interchanges.

2.4.46 The height of the mainline panel and diverge panel should be equal (see Figures 2.4.15 and 2.4.16). In exceptional circumstances and when approved by the National Roads Authority, the height of the diverge panel may be less.

- 2.4.47 The optimum dimensions for Non Lane Drop Gantries are shown in Table 2.4.2.
- 2.4.48 Normally two destinations should be provided. If an additional destination is required the dimensions between grouped text and symbols may be reduced with the approval of the National Roads Authority.
- 2.4.49 Dimensioned examples are shown in Figures 2.4.17 to 2.4.22.

Table 2.4.2: Dimensions for Non Lane Drop Gantry Signs

Description	Non Lane Drop	
	Mainline Panel	Diverge Panel
	s/w	s/w
Vertical Space Between English and Irish Versions of Place-Name	0.5	0.5
Minimum Vertical Space between Destinations	1.5*	1.5*
Maximum Vertical Space between Destinations	6^	6^
Minimum Vertical Space Between Route Number and Place-Name	3	3
Minimum Vertical Space to Top Border	2.5	2.5
Minimum Vertical Space to Bottom Border	2	2
Minimum Horizontal Space from Arrow to Side Borders	6	3
Horizontal Space to Side Borders	-	3
Size of Gantry Diverge Arrow	-	13 @ 45°
Size of Mainline Gantry Lane Arrow	17	-
Junction Number Panel	See Section 2.3	See Section 2.3
N and M Route Letters and Numerals	8	8
R and L Route Letters and Numerals	6	6
All supplementary bracketed Route Numerals and Numbers	6	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Section 2.3	See Section 2.3
Inner Radius of Border	4	4
Outer Radius of Border	2	2

Notes:

1. *Absolute minimum space on a panel between destinations is 1.5 and may only be used with the approval of the National Roads Authority.
2. ^The maximum space is 6s/w and may be used when excess space remains on a panel due to the higher number of destinations being displayed on an adjoining panel.

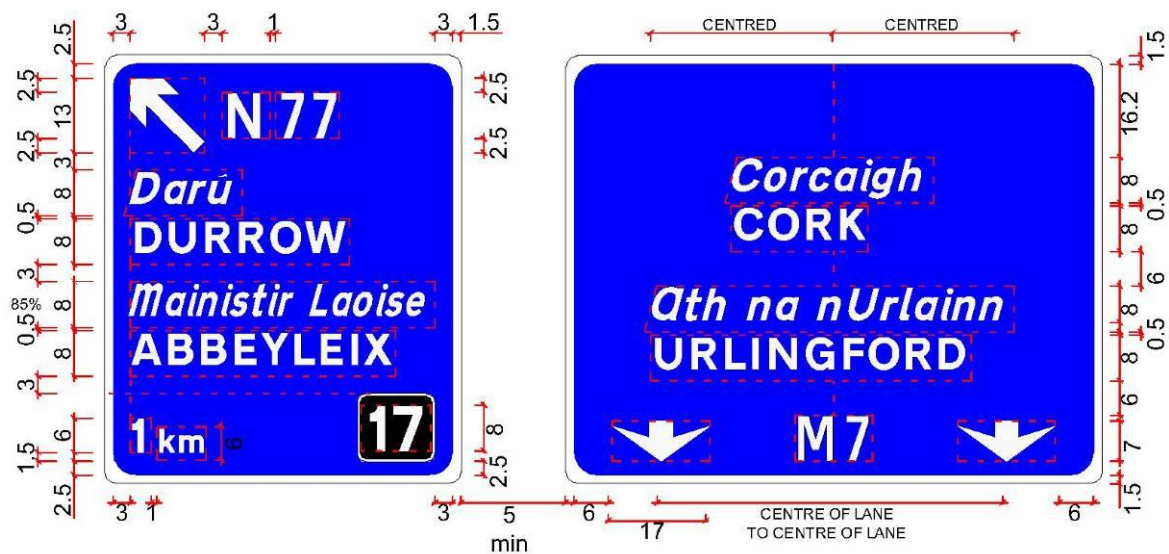


Figure 2.4.17:
1km Non Lane Drop Gantry Sign

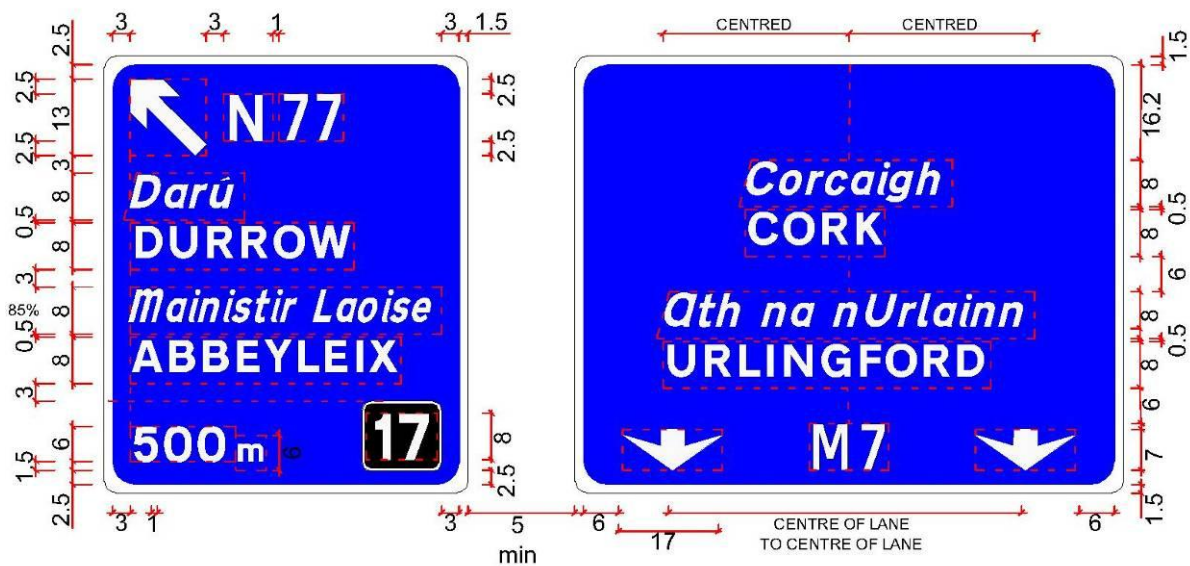


Figure 2.4.18:
500m Non Lane Drop Gantry Sign

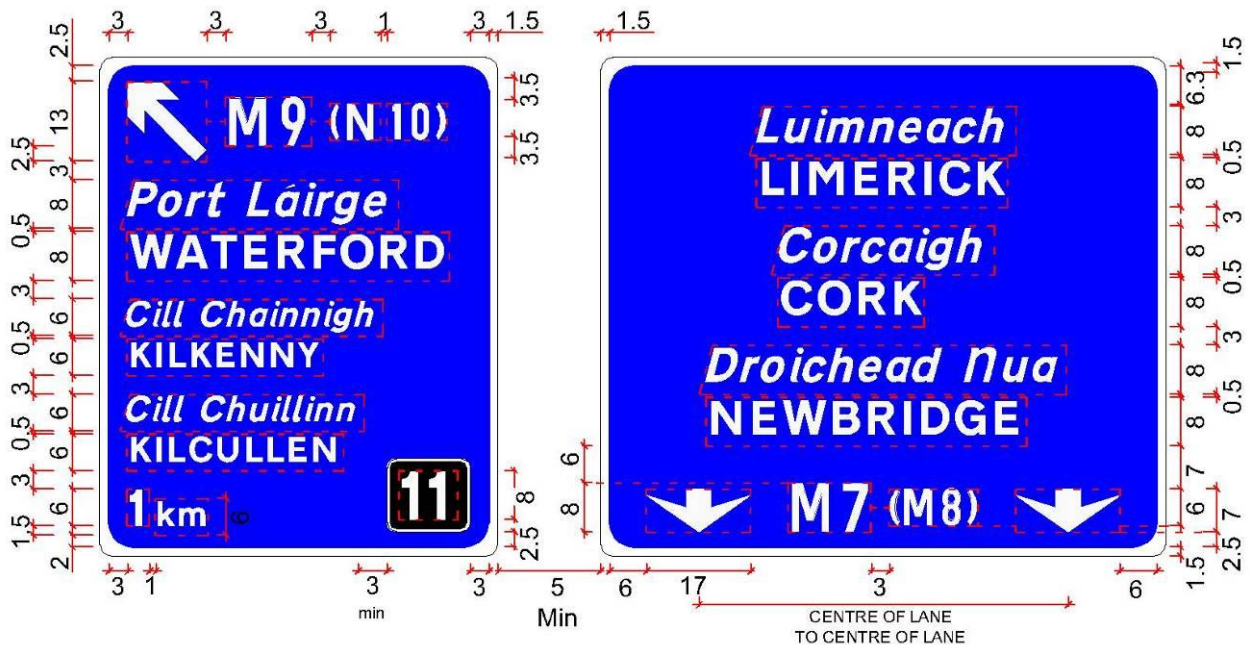


Figure 2.4.19:
1km Non Lane Drop Gantry Sign with Reduced Height Supplementary
Route Destinations

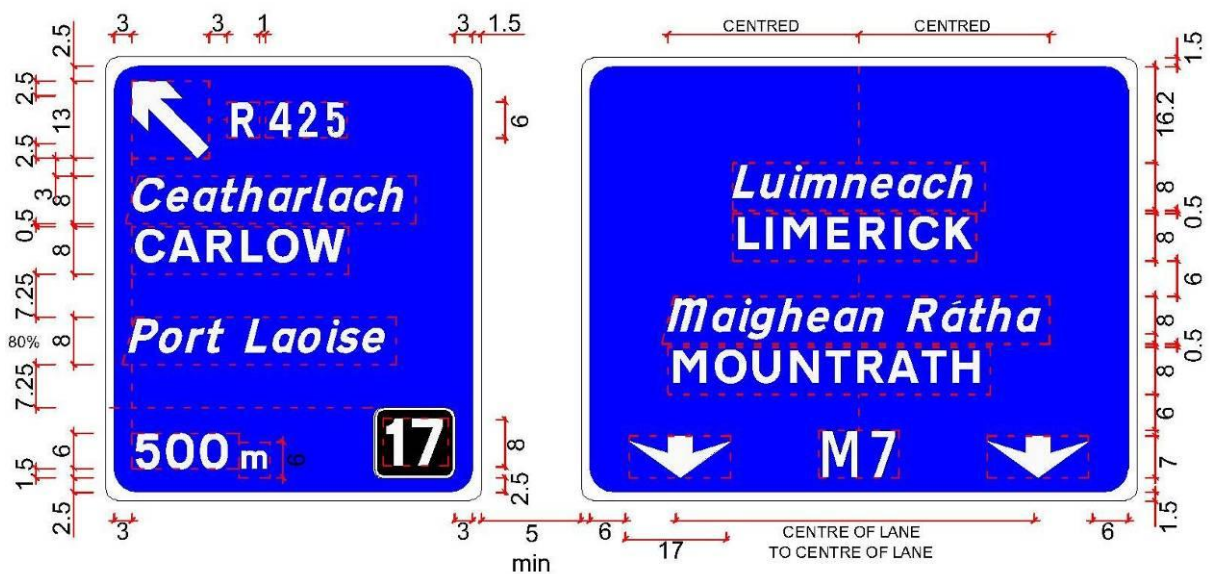


Figure 2.4.20:
Non Lane Drop Gantry Sign at 500m with a Combination of
Bilingual and Irish Only Destinations

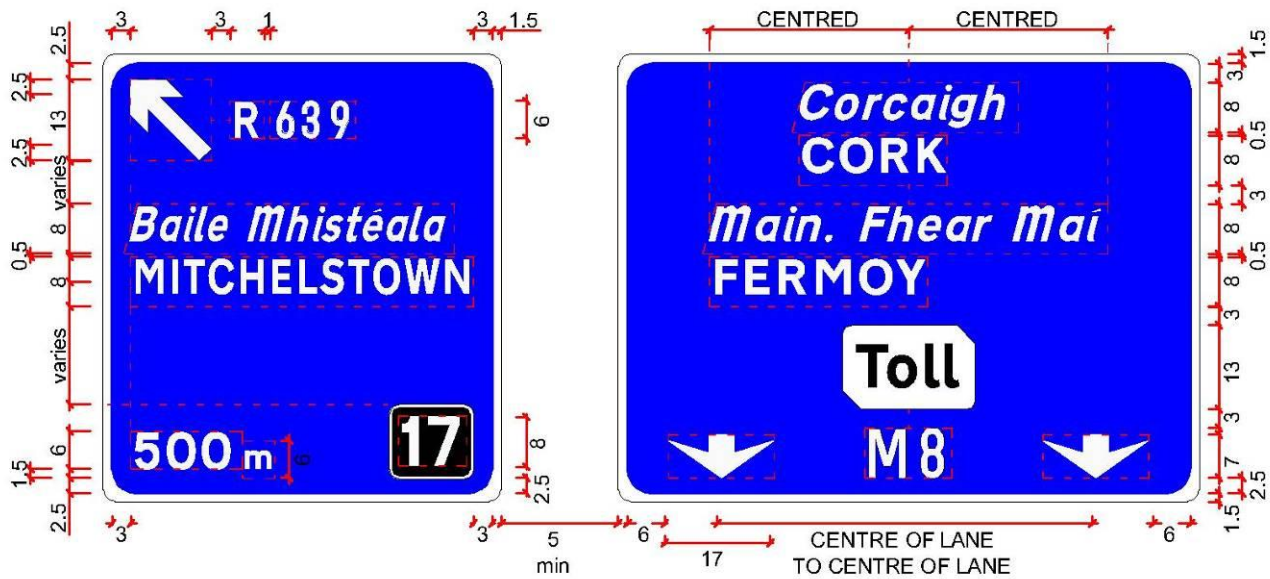


Figure 2.4.21:
Typical 500m Non Lane Drop Gantry Sign with Toll Symbol.

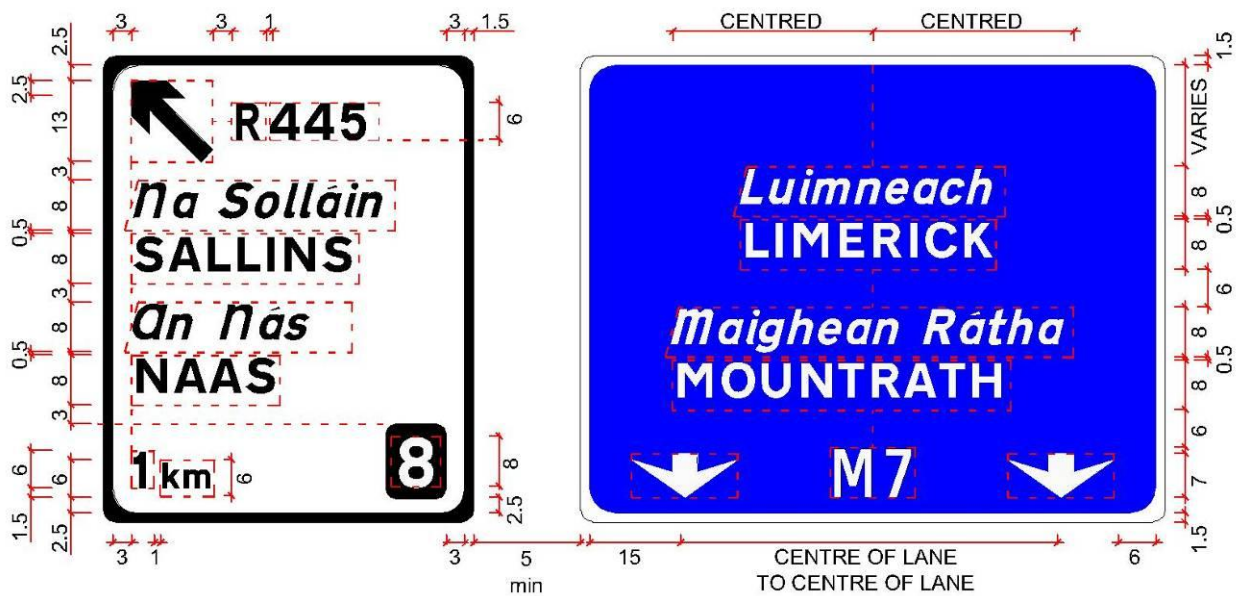


Figure 2.4.22:
1km Non Lane Drop Gantry Sign at Start of Motorway

LANE DROP GANTRY SIGNS

- 2.4.50 Lane Drop Gantry signs are designed by stacking the destinations above the route number(s) and arrow(s) for both mainline and diverge panels.
- 2.4.51 Where two or more lanes on the mainline have the same destination the information should only appear once, with the lane arrows positioned directly over the centre of each lane and pointing downwards.



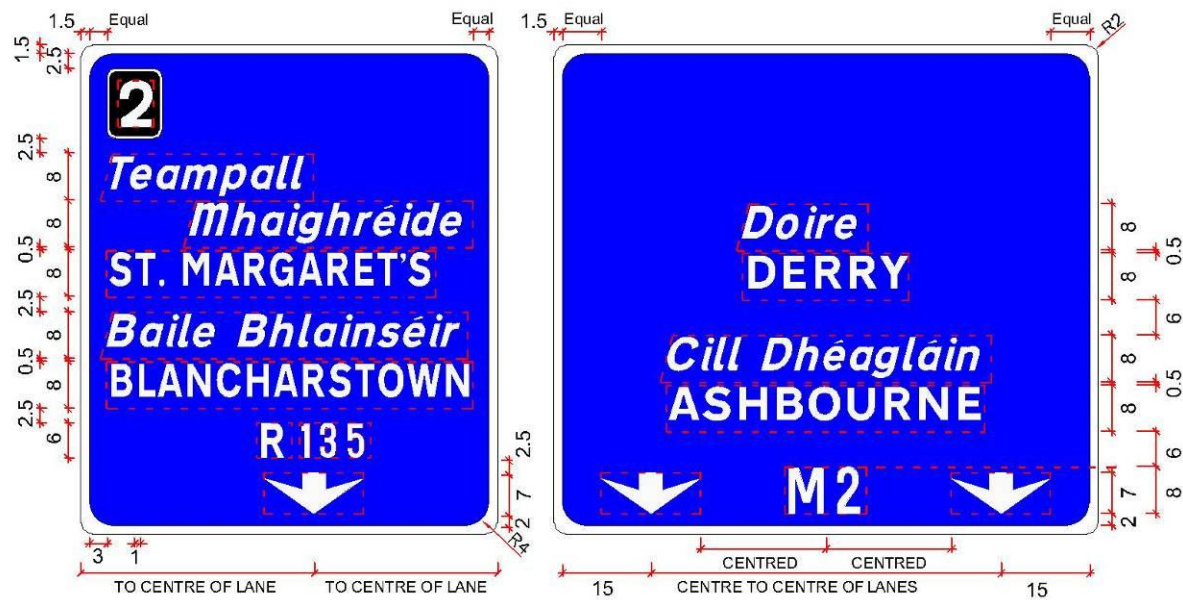
Figure 2.4.23:
Typical Lane Drop Gantry Sign

- 2.4.52 For the lane drop panel the arrow is positioned over the centre of the lane pointing downwards.
- 2.4.53 Route numbers are positioned centrally between lane arrows, or centred above a single arrow. See Table 2.3.4 for the space between route letters and numerals.
- 2.4.54 Junction numbers, where available from the National Roads Authority shall be placed on all Lane Drop Gantries associated with the junction. In general the junction number panel is placed in the top left hand corner of the diverge panel. Where junction numbers are not available, space should be provided to accommodate their inclusion at a future date.
- 2.4.55 The background colour for the mainline panel and lane drop panel are all blue irrespective of the classification of the routes indicated, except in the case of the termination of a motorway. However, when a Lane Drop Gantry is provided at the physical split in the traffic flow at the nosing, the lane drop panel will take the background colour of the route indicated.
- 2.4.56 At the start and end of the motorway the Advance Direction Sign Gantries will show the background of the route ahead with the diverge panel taking the colour of the route it is indicating.

-
- 2.4.57 The route number shall be 8s/w for motorway and National routes and 6s/w for Regional, Local and all supplementary routes.
- 2.4.58 The height of the mainline panel should be equal to the height of the diverge panel. In exceptional circumstances and when approved by the National Roads Authority, the height of the diverge panel may be less.
- 2.4.59 The optimum dimensions for Lane Drop Gantries are shown in Table 2.4.3. The dimensions between grouped text and symbols may be reduced with the approval of the National Roads Authority.
- 2.4.60 In general, for lane drop situations, gantries are positioned 1km and 500m from the diverge and at the diverge but the actual distance is not displayed on the sign face.
- 2.4.61 Dimensioned examples are shown in Figures 2.4.24 to 2.4.26.

Table 2.4.3: Dimensions for Lane Drop Gantry Signs

Description	Lane Drop	
	Mainline Panels	Diverge Panel
	s/w	s/w
Vertical Space Between English and Irish Versions of Place-Name	0.5	0.5
Minimum Vertical Space between Destinations	1.5	1.5
Vertical Space Between Route Number and Place-Name	3	3
Minimum Vertical Space to Top Border	2.5	2.5
Minimum Vertical Space to Bottom Border	2	2
Minimum Horizontal Space from Arrow to Side Borders	6	-
Minimum Horizontal Space from Destinations to Side Borders	3	3
Size of Gantry Diverge Lane Arrow	-	17
Size of Mainline Gantry Lane Arrow	17	-
Junction Number Panel	See Section 2.3	See Section 2.3
N and M Route Letters and Numerals	8	8
R and L Route Letters and Numerals	6	6
All supplementary bracketed Route Numbers	6	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Section 2.3	See Section 2.3
Inner Radius of Border	4	4
Outer Radius of Border	2	2



**Figure 2.4.24:
Lane Drop Gantry Sign at Diverge**

Notes:

1. Lane Arrows are positioned centrally over the lanes.
2. All destinations are centred within the panels.
3. Lane drop panel (R135) is wider than the lane width and overhangs the hard shoulder, but the arrow is positioned over the centre of lane. This is permitted with the approval of the National Roads Authority.



Figure 2.4.25:
Lane Drop Gantry Sign at a 2-Lane Diverge

Note:

1. Lane Arrows are positioned centrally over the lanes
2. All destinations are centred within the panels.
3. The left hand lane drop panel (N4 (N5-N6)) is wider than the lane width and overhangs the hard shoulder, but the arrow is positioned over the centre of lane. This is permitted with the approval of the National Roads Authority.

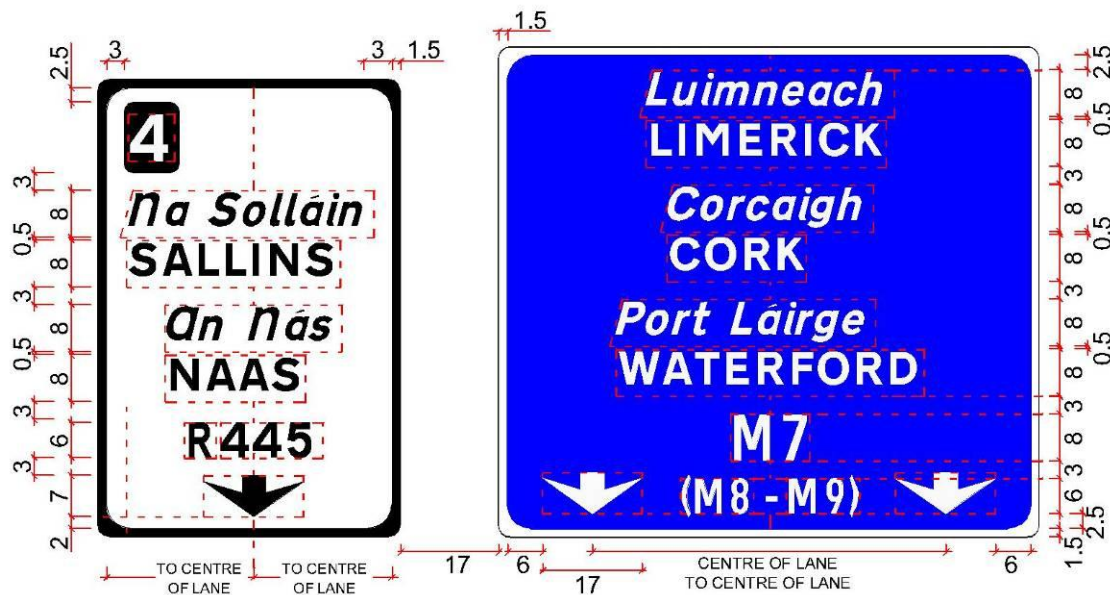


Figure 2.4.26:
Lane Drop Gantry Sign at the Start of a Motorway and Reduced Height Diverge Panel

Note:

1. Lane Arrows are positioned centrally over the lanes.
2. All destinations are centred within the panels.

EXIT TAPER GANTRY SIGNS

- 2.4.62 Exit Taper Gantry Signs are positioned at the start of the diverge taper, directly over the near side lane. They are designed by stacking destinations above the lane arrow and route number. The lane arrow used is rotated 45° and located at the bottom left hand corner pointing to the start of the diverge taper.
- 2.4.63 Junction numbers, where available from the National Roads Authority for the motorway network, shall be placed on all Exit Taper Gantries associated with the junction. The junction number panel is positioned in the bottom right hand corner of the diverge panel. Where junction numbers are not available, space should be provided to accommodate the inclusion of a junction number panel at a future date.
- 2.4.64 The background colour for the diverge panel is blue irrespective of the classification of the routes indicated except in the case of a terminal interchange.
- 2.4.65 In general a maximum of two destinations are provided on an Exit Taper Gantry sign as Figure 2.4.27. In exceptional circumstances a third destination may be added, but only with the written approval of the National Roads Authority.
- 2.4.66 Where three destinations are provided the supplementary destinations should be 6s/w in height and the gap between the destinations increased.
- 2.4.67 The route number shall be 8s/w for motorway and National routes and 6s/w for Regional and Local routes.
- 2.4.68 On Exit Taper Gantry signs supplementary routes are, in general, not signed.
- 2.4.69 The optimum dimensions for Exit Taper Gantries are shown in Table 2.4.4. The dimensions between grouped text and symbols may be reduced with the approval of the National Roads Authority.
- 2.4.70 Dimensioned examples are shown in Figures 2.4.28 to 2.4.30.



Figure 2.4.27:
Typical Exit Taper Gantry

Table 2.4.4: Dimensions for Exit Taper Gantry Signs

Description	Exit Taper
	s/w
Vertical Space Between English and Irish Versions of Place-Name	0.5
Minimum Vertical Space between Destinations	3
Vertical Space Between Route Number and Place-Name	3
Minimum Vertical Space to Top Border	2.5
Minimum Vertical Space to Bottom Border	2.5
Minimum Horizontal Space from Arrow to Side Borders	3
Horizontal Space to Side Borders	3
Size of Diverge Taper Arrow	18
Junction Number Panel	See Section 2.3
N and M Route Letters and Numerals	8
R and L Letters and Numerals	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Section 2.3
Inner Radius of Border	4
Outer Radius of Border	2



Figure 2.4.28:
Exit Taper Gantry Sign for a Regional Route



Figure 2.4.29:
Exit Taper Gantry Sign for a National Route



Figure 2.4.30:
Exit Taper Gantry Sign with a Combination of
Bilingual and Irish Only Destinations

BUTTERFLY TAPER GANTRY SIGNS

- 2.4.71 Butterfly Gantry Signs are positioned in the diverge taper between two carriageways where the significance and complexity of the junction so warrant. The signs are positioned so that the arrows are pointing to the off-side and near side lane of the two carriageways.
- 2.4.72 They are designed using motorway route numerals and numbers at 12s/w. The arrow used is an Exit Taper Gantry Arrow (see Figure 2.3.45) and is located at the bottom left and right hand corners pointing to the relevant carriageways.
- 2.4.73 The optimum dimensions for Butterfly Taper Gantries are shown in Table 2.4.5.
- 2.4.74 Dimensioned examples are shown in Figure 2.4.32.



Figure 2.4.31:
Typical Butterfly Taper
Gantry Sign

Table 2.4.5: Dimensions for Butterfly Taper Gantry Signs

Description	Butterfly Taper
	s/w
Minimum Vertical Space between Route Number and Arrow	6
Minimum Horizontal Space between Route Number and Arrow	6
Minimum Vertical Space to Top Border	2.5
Minimum Vertical Space to Bottom Border	2.5
Minimum Horizontal Space from Arrow to Side Borders	3
Horizontal Space to Side Borders	3
Size of Exit Gantry Diverge Arrow	18
M Route Letters and Numerals	12
Inner Radius of Border	4
Outer Radius of Border	2
'x'-height on a Motorway	300mm
'x'-height on Other Grade Separated Junction	250mm



ADVANCE DIRECTION SIGNS

- 2.4.75 Map type Advance Direction signs (ADS) are used to give advance notification of the destinations available at the next junction. This sign type displays the terminal of the route travelled and may also include the next significant destination.
- 2.4.76 The Advance Direction signs are generally positioned at 1km and 500m from the start of the diverge taper. The distance displayed on the sign is positioned below the last diverge destination.
- 2.4.77 If the Advance Direction sign cannot be placed at the above recommended distances, then the distance shall be rounded in accordance with Table 2.3.5 and displayed accordingly: e.g. 750m. Note that if the distance is approximately 1km then it shall be displayed as '1km', whereas other distances shall be displayed in metres: e.g. 1200m.
- 2.4.78 Where a diverge leads to both National and Regional routes, only the National route number shall be displayed on the Advance Direction signs along with the destinations for both routes.
- 2.4.79 Where a diverge or mainline leads to a number of National routes, only national primary routes are shown with the main National route shown using 8s/w and the national primary supplementary routes shown using 6s/w
- 2.4.80 The exit arm is orientated at an angle of 60 degrees from the vertical. The route number for the exit will be centred with the tip of the exit arm and offset by 3s/w.
- 2.4.81 The straight ahead route number should be positioned adjacent to the ahead route arrow with the top of the route number in line with the tip of the ahead arrow.
- 2.4.82 Destination text should be located above the ahead route number and below the exit route number.
- 2.4.83 On motorway Map Advance Direction signs all route numbers are 8 s/w high regardless and all supplementary bracketed route numbers are 6 s/w.
- 2.4.84 Junction numbers, where available from the National Roads Authority for the motorway network, shall be placed on all mainline Advance Direction signs associated with the junction. The junction number panel is positioned within the sign in the top left hand corner. Where junction numbers are not available, space should be provided to accommodate the inclusion of a junction number panel at a future date.



Figure 2.4.33:
Typical Advance Direction
Sign at 1km

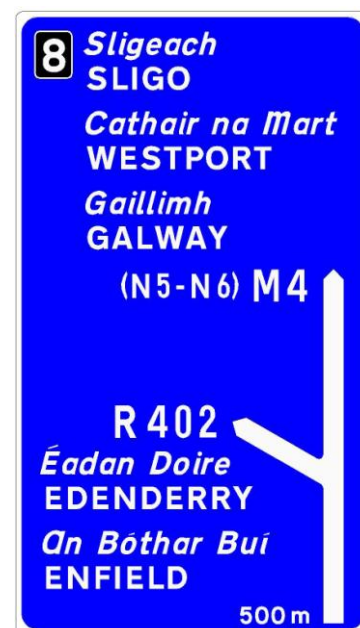


Figure 2.4.34:
Typical Advance Direction
Sign at 500m with National
Primary Supplementary
Routes

- 2.4.85 The background colour for Advance Direction signs is blue irrespective of the classification of the routes indicated, except in the case of a terminal interchange. At a motorway terminal, different coloured legend panels shall be introduced to indicate the change in classification of the routes ahead.
- 2.4.86 The 'x'-height required for Advance Direction Map Type Signs is stated in Table 2.3.1.
- 2.4.87 The dimensions for Advance Direction Map Type Signs are shown in Table 2.4.6 and typical signs are illustrated in Figures 2.4.33 and 2.4.34, with dimensioned examples in Figures 2.4.35 to 2.4.41.

Table 2.4.6: Dimensions for Advance Direction Signs

Description	s/w
Width of Map Symbol	5
Standard length of ahead Map Symbol	46
Minimum length of exit Map Symbol	24
Horizontal Space to Left Border	3
Horizontal Space to Right Border	5
Vertical Space from Map Symbol to Bottom Border	1.5
Vertical Space from Distance Numeral to Bottom Border	1.5
Vertical Space to Top Border	3
Vertical Space Between English and Irish Versions of Place-Name	0.5
Vertical Space Between Different Place-Names	3
Vertical Space Between Route Number and Place-Name	3
Vertical Space Between Junction Number Panel and Route Number	3
Junction Number Panel	See Section 2.3.
Horizontal Space to Junction Number Panel from Border	3
Horizontal Space around Route Symbol	3
L, R, N and M Route Letters and Numerals	8
Supplementary Letters and Numerals	6
Horizontal Space Between L, R, and N Route Letters and Route Numerals	See Table 2.3.4
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2

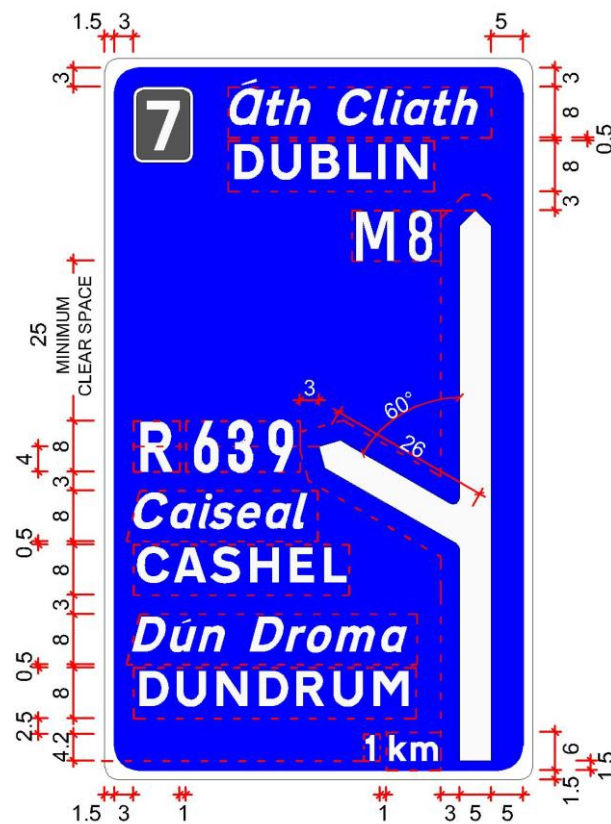


Figure 2.4.35:
Advance Direction Sign at 1km with Exit to a Regional Route at the Diverge

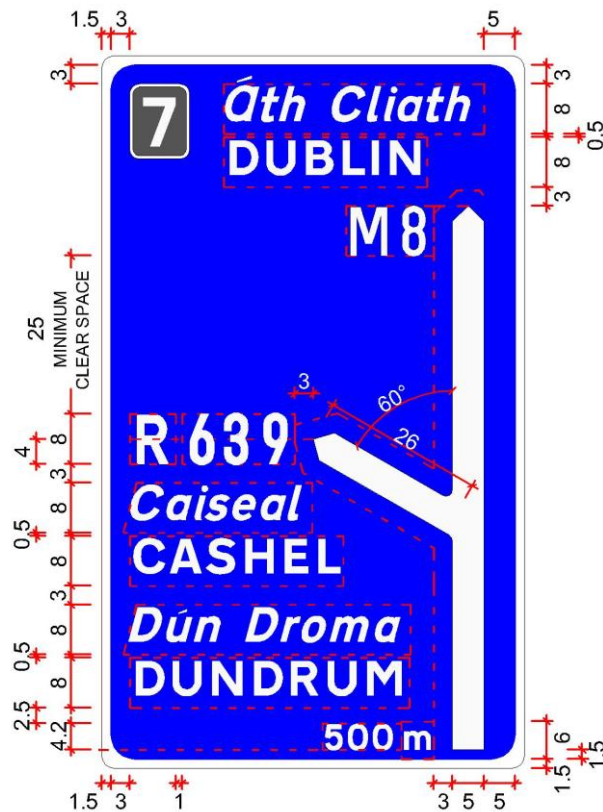


Figure 2.4.36:
Advance Direction Sign at 500m with Exit to a Regional Route at the Diverge

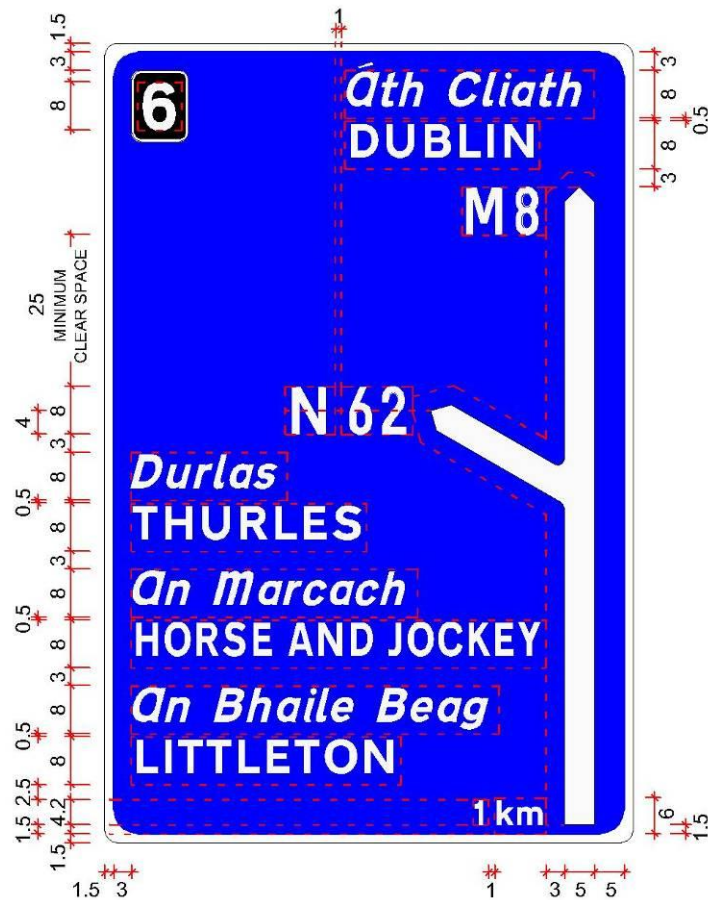


Figure 2.4.37:
Advance Direction Sign at 1km with Exit to a National Route at the Diverge

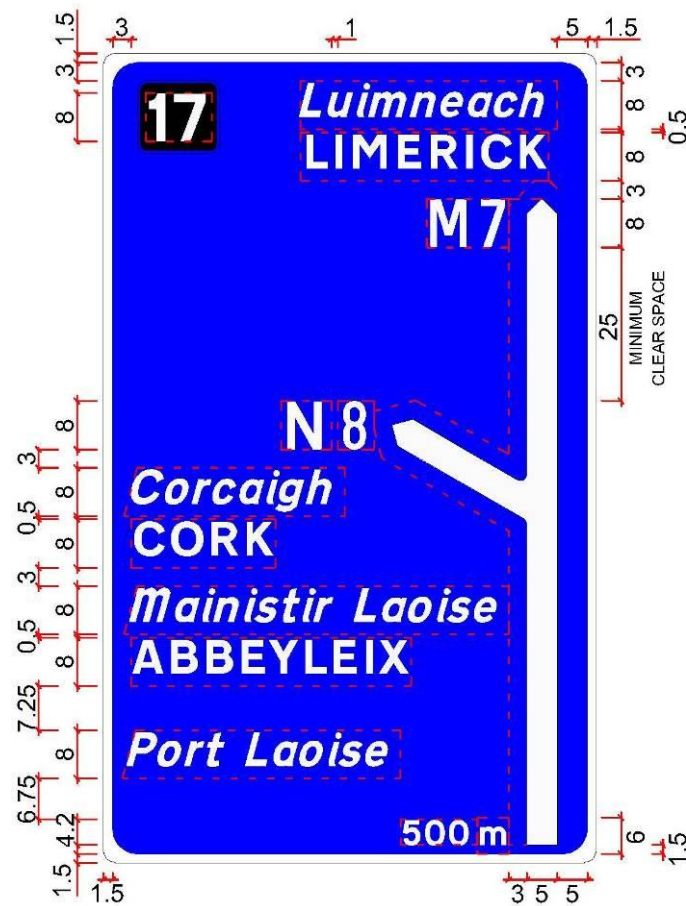


Figure 2.4.38:
Advance Direction Sign at 500m with a Combination of Irish Only
and Bilingual Destinations

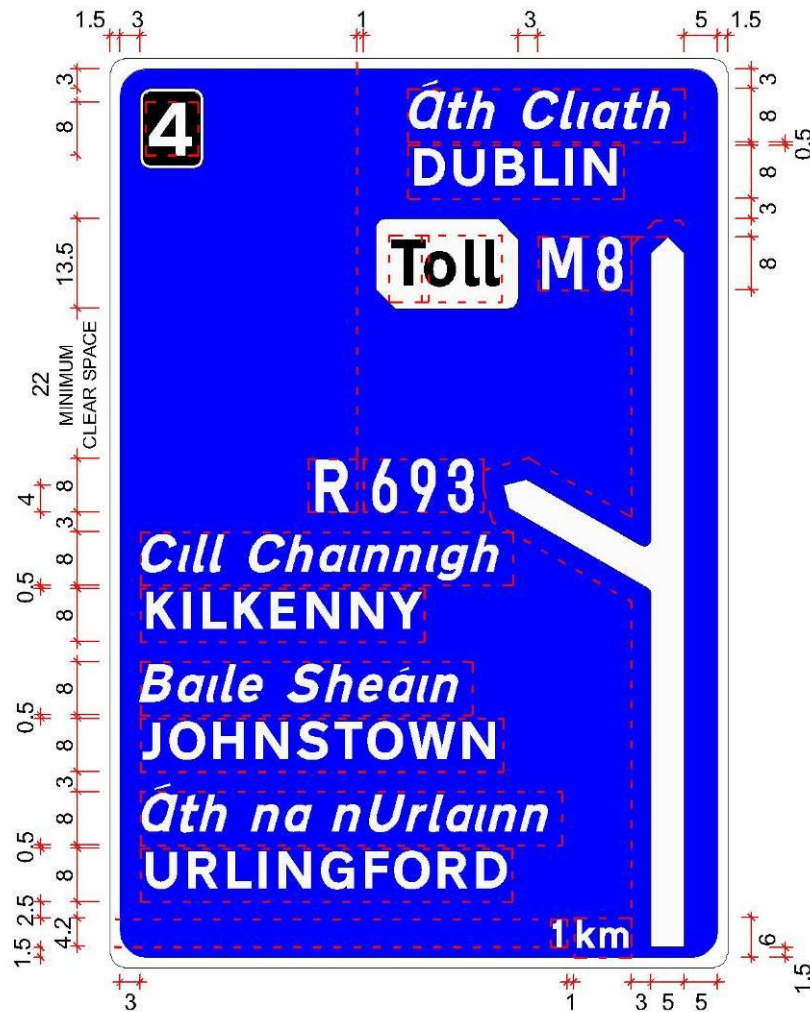
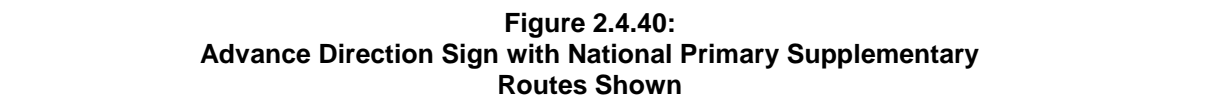


Figure 2.4.39:
Advance Direction Sign at the Last Junction in Advance of a Toll Road



ROUNABOUT MAP TYPE SIGNS ON EXIT SLIP ROADS

2.4.88 Roundabout map type signs will only be required on exit slip roads and will take the background colour appropriate to the higher classified route at the junction. For example, when exiting a motorway and travelling on to a Regional route the background for the roundabout sign will be white with black border and text. For design details for map roundabout signs see Section 2.6.

EXIT SIGNS

2.4.89 Exit Signs are to be positioned in the solid nosing on motorways, beyond the diverge. These signs are required where the junction has been allocated a junction number. This sign is intended to serve as a confirmation to the exiting traffic and will, therefore, only contain the text 'EXIT – *Amach*' with the junction number. The layout drawings in Chapter 10 show the positioning of these signs.

2.4.90 The junction number panel is positioned within the sign and right justified.

2.4.91 The background colour for Exit Signs is blue, and the 'x'-height shall be in accordance with Table 2.3.1.

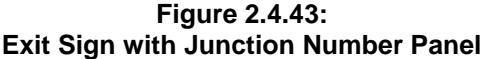
2.4.92 The dimensions for Exit Signs are shown in Table 2.4.7 and a typical sign is illustrated in Figure 2.4.42 with dimensioned examples shown in Figures 2.4.43 and 2.4.44.



Figure 2.4.42:
Typical Exit Sign

Table 2.4.7: Dimensions for Exit Signs

Description	s/w
Border Width	1.5
Inner Radius of Border at Straight End	1
Outer Radius of Border at Straight End	2.5
Outer Border Radius of Top and Bottom Corners at Pointed End	2
Outer Border Radius of Point	1.5
Vertical Space Between Irish and English Text	1
Horizontal Space Between Text and Junction Number	3
Horizontal Space Between Junction Number and side border	2.5
Horizontal Space Between Text and Chevron	3
Chevron Width	4
Chevron Angle 120°	
Vertical Space Between Chevron and Top Border	1.5
Horizontal Space Between Chevron and Side Border	2.5
Vertical Space Between Chevron and Bottom Border	1.5
Vertical Space Between Junction Number Panel and top Border	4
Junction Number Panel	See Section 2.3



LANE DESTINATION SIGNS

- 2.4.93 Lane Destination signs should only be used before junctions where destinations can only be reached by using specific lanes. With dedicated lanes on motorway carriageways, Lane Destination signs assist in guiding vehicles into the most appropriate lane at junction approaches.
- 2.4.94 The background colour for Lane Destination signs on a motorway route is blue, except in the case of the start or terminal of a motorway.
- 2.4.95 Lane Destination signs use a combination of route numbers, destinations, arrows and lane lines to direct motorists to the correct lane for their destination on the approaches to a junction. See Section 2.3 for details of the types of arrows permitted.
- 2.4.96 A 'link line' is a horizontal line separating route numbers or destinations from the lane lines and arrows below. A link line should only be used if two or more lanes relate to the same route or destination(s).
- 2.4.97 Single arrows referring to a destination ahead should be centred on the legend to which they refer. However, when two arrows relate to the same destination, each arrow should be centred between the adjacent lane lines or border.
- 2.4.98 Lanes leading to the same destination should be depicted as having equal width. No single lane width should be more than twice the width of the narrowest lane. Where the lengths of legend are so different that they exceed the above ratio, the width of the narrowest lane must be increased. When this is done the horizontal spacing rules do not change, except that the gaps to the side border are increased (the legend being centred horizontally on the sign). Alternatively, the largest destination in the widest lane may be condensed, indented or abbreviated.
- 2.4.99 Where a lane line is truncated at the top or bottom of a sign, the minimum length of the top dash should be 3s/w. Where this cannot be achieved, the dash should be omitted.
- 2.4.100 Route numbers should normally appear underneath destinations and be justified left. However, when two destinations are shown in the same direction, the route number may appear alongside the destinations.
- 2.4.101 Junction numbers, where available from the National Roads Authority, shall be placed on all Lane Destination signs associated with the junction. The junction number panel is positioned within the sign in the top left hand corner.



Figure 2.4.45:
Lane Destination Sign on a Motorway



Figure 2.4.46:
Lane Destination Sign at the Start of a Motorway.

2.4.102 The dimensions for Lane Destination signs are given in Table 2.4.8. Dimensioned examples are illustrated in Figure 2.4.47 and Figure 2.4.48.

Table 2.4.8: Dimensions for Lane Destination Signs

Description	s/w
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Vertical Space to Top Border	3
Vertical Space to Bottom Border	2.5
Horizontal Space to Side Border	3
Lane Line Width	1
Length of Lane Line Segments	8
Length of Space Between Lane Line Segments	4
Vertical Space Above or Below Lane Lines	1.5
Link Line Width	1
Vertical Space Above Link Line	1.5
Vertical Space Below Link Line	2.5
Horizontal Space Between L, R, N and M Route Letters and Route Numerals	See Table 2.3.4
Junction Number Panel	See Section 2.3
Mainline M Route Letters and Numerals	12 – route only 8 – with destination
Diverge M or N Letters and Numerals	8
L or R Letters and Numerals	6

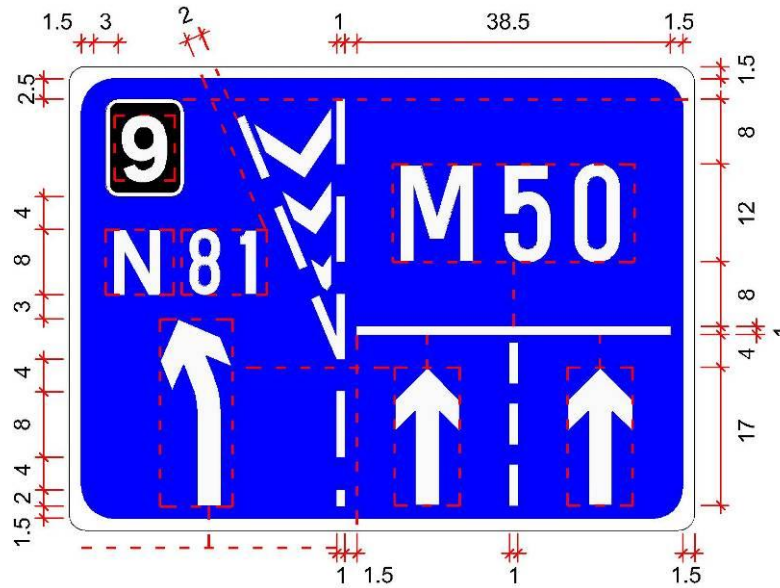


Figure 2.4.47:
Motorway Lane Destination Sign

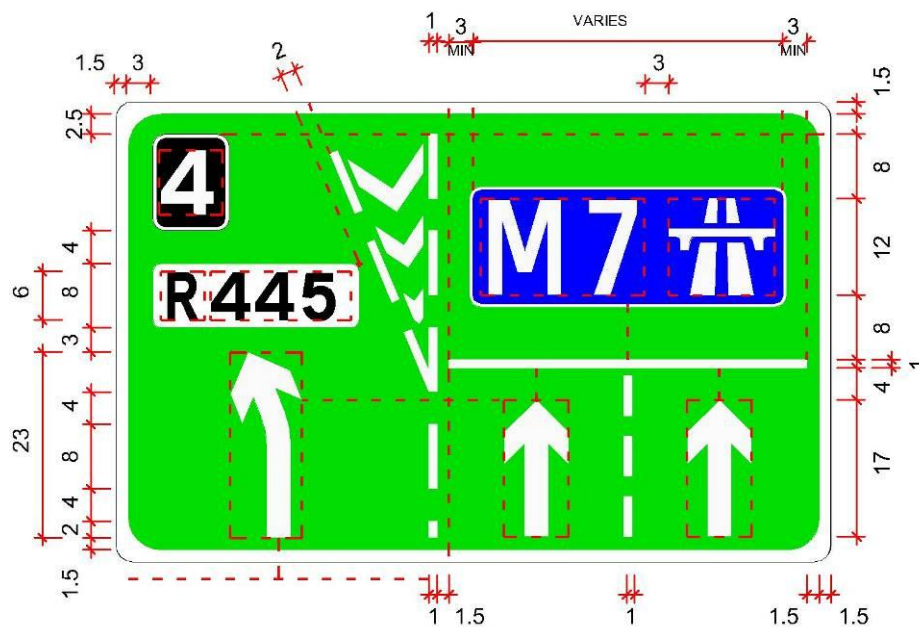


Figure 2.4.48:
Lane Destination Sign at Start of Motorway

ROUTE CONFIRMATORY SIGNS

2.4.103 Route Confirmatory signs should be provided on the mainline verge after each junction. They serve two purposes:

- to confirm to road users that they have taken their intended route; and
- to give additional information about the road ahead.

2.4.104 In addition to the requirement for Route Confirmatory signs after each junction (see Tables 2.2.2), an additional Route Confirmatory sign should be placed at a suitable intermediate location where the interval between signs would otherwise be greater than 12km.

2.4.105 A Route Confirmatory sign has the route number placed centrally at the top of the sign similar to a Route Marker sign and followed by a list of destinations, as defined in Table 2.2.4, and arranged in distance order with the furthest appearing at the top, as described in Section 2.2 (See Figure 2.4.49).

2.4.106 When multiple destinations are shown, the sign is essentially a combination of a Route Marker sign and a Route Confirmatory sign, with the 'x'-height for Route Confirmatory signs applied in accordance with Table 2.3.1.

2.4.107 Where only one destination is shown, the route number appears within the sign and the gap between the Irish and English version of the destination is increased from 1s/w to 3s/w (see Figure 2.4.50).

2.4.108 Where the motorway is also a Euro Route, a Euro Route Marker Plate should be added to each Route Confirmatory sign. These plates form a separate panel positioned above the top right-hand corner of the Route Confirmatory sign (see Figure 2.4.51). The dimensions and setting out of the Euro Route Marker Plate are described in Section 2.3.

2.4.109 Distances in kilometres are 6s/w in the Route font (see Figure 2.3.13) and should be shown adjacent to each destination and aligned with the top of the English tile. For Irish only destinations the distances appear in line with the base of the place-name.

2.4.110 Distances are always accompanied by the abbreviation "km" in tiles. The "km" tile is 6s/w using the Transport Heavy font and is aligned with the top of the Irish tile of the first place-name indicated or if Irish only destination 3s/w above and centred over the first distance. Subsequent distances or brackets are right justified below.

2.4.111 For signs with a combination of bilingual and Irish only destinations, the Irish shall be afforded the same vertical space and centred within this.



Figure 2.4.49:
Typical Route
Confirmatory Sign.



Figure 2.4.50:
Typical Route
Confirmatory Sign with a
Single Destination.



Figure 2.4.51:
Route Confirmatory Sign
with Euro Route Marker
Plate.

-
- 2.4.112 Any significant destinations located off the main route, such as terminal destinations on spur routes, should be shown in brackets (see Figure 2.4.51).
- 2.4.113 The order of bracketed destinations on Route Confirmatory signs is governed by the distance to the junction at which the road user must turn off the main route to reach that destination, irrespective of the overall distance to the destination itself (see also Section 2.2).
- 2.4.114 Route Confirmatory signs should generally show a maximum of four destinations ahead but must contain the destinations indicated previously on Advance Direction signs. Refer to Table 2.3.1 for Route Confirmatory 'x'-heights.
- 2.4.115 Route Confirmatory signs shall be positioned approximately 200m downstream from the end of the merge taper. Additional signs shall be erected where necessary, to ensure that the intervals between successive Route Confirmatory signs shall not be more than 12km.
- 2.4.116 Route Confirmatory signs on a motorway will always have a blue background. The dimensions for such signs are shown in Table 2.4.9. Typical dimensioned examples are shown in Figures 2.4.52 to 2.4.55, while the use of Euro Route Marker Plates is illustrated in Figures 2.4.53 and 2.4.55.

Table 2.4.9: Dimensions for Route Confirmatory and Route Marker Signs

Description	s/w	
	Route Confirmatory Sign (Main Panel)	Route Marker Sign
Border Width	1.5	1
Inner Radius of Border	4	3
Outer Radius of Border	2	2
Gap Between Route Number and Side Borders	-	2
Gap Between Route Number and Top or Bottom Borders	-	2
Gap Between Route Letter and Number	-	1
Gap to Top Border	3	-
Gap to Side Border	3	-
Gap to Bottom Border	2	-
Horizontal Clear space Between Place-Names and Distances	4	-
Horizontal Gap Between Irish and English version with multiple destinations	1	-
Horizontal Gap Between Irish only version with multiple destinations	3	-
M Route Letter and Numeral	8	
km Symbol	6	-
Distance Numeral	6	-
Additional Dimensions for Single Destination Route Confirmatory Sign		
Horizontal Gap Between Irish and English version with single destination	3	-
Horizontal Gap Between Irish Text and Route Number with single destination	3	-

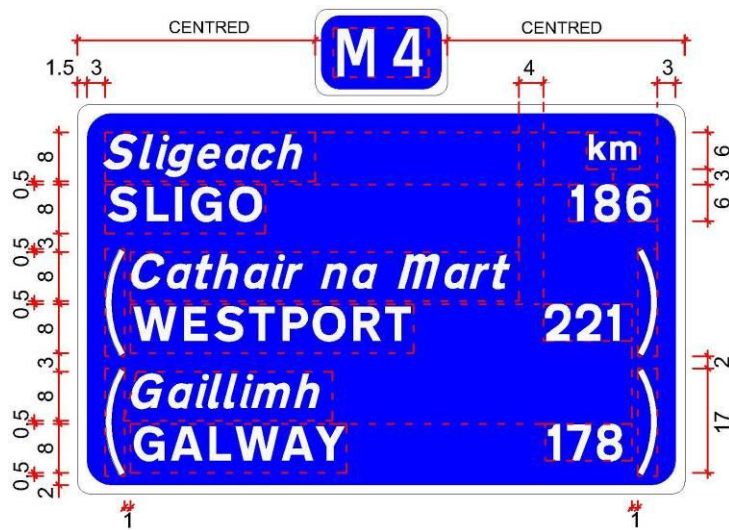


Figure 2.4.52:
Route Confirmatory Sign with Multiple Destinations

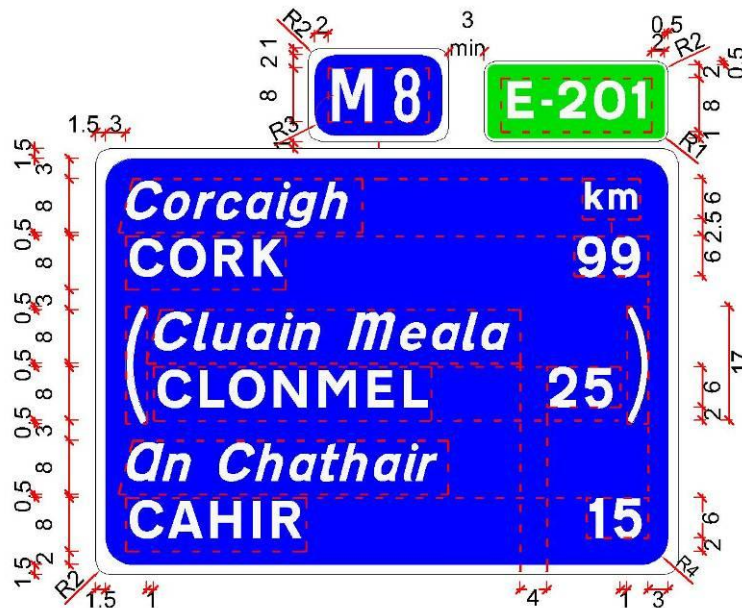
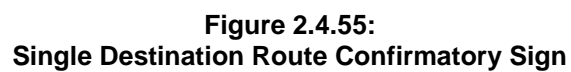
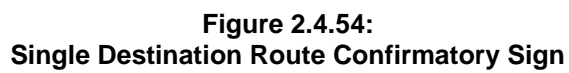


Figure 2.4.53:
Route Confirmatory Sign with Multiple Destinations and Euro Route Marker Plate

Note:

When the width of the lower panel is not wide enough to cater for the route marker plate to be centred and 3s/w maintained to the Euro Route Marker Plate, then the Route Marker Plate is positioned off centre to maintain the 3s/w gap.



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ROUTE MARKER SIGNS

2.4.117 The Route Marker sign consists of just the route number. It is used on long stretches of roads and also as a top plate on Route Confirmatory signs.

2.4.118 Route Marker signs should be erected on motorways so that the interval between successive Route Confirmatory and/or Route Marker signs is not more than 6km.

2.4.119 Route Marker signs located on a motorway will always have a blue background. The dimensions to be used in the design of such signs are shown in Table 2.4.9 and a typical sign is illustrated in Figure 2.4.56.

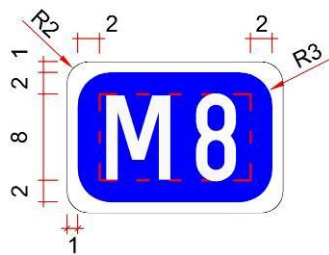


Figure 2.5.56:
Typical Route Marker Sign for Motorway

DIRECTION SIGNS

2.4.120 Direction signs are located at the road junction itself and point along exits from the junction. They perform two main functions:

- They indicate the location of the junction; and
- They show destinations on the routes indicated.

2.4.121 Direction Signs are not required on the mainline of motorways, except in the form of Exit Signs at diverges.

2.4.122 Direction signs are required at the side road approaches to grade separated junctions or leading onto the motorway. Their design is covered in Section 2.6.

2.5 Directional Signs for Grade-Separated Dual Carriageways

PROVISION OF SIGNS FOR GRADE-SEPARATED DUAL CARRIAGEWAYS

- 2.5.1 Drivers of vehicles on grade-separated dual carriageways must be given adequate early indication of junctions and any change in classification. The high speed of traffic and infrequency of junctions make it essential to give clear and concise messages so that drivers have sufficient time to make a decision and execute any manoeuvre safely.
- 2.5.2 Similarly, traffic travelling on a national route which changes to a motorway, needs advance warning of the motorway ahead as some forms of traffic are restricted and have to take an alternative route before the motorway begins.
- 2.5.3 The types of directional signs required on roads with grade-separated junctions include Advance Direction signs, Direction signs and Route Confirmatory signs. The Advance Direction and Direction signs may be verge signs or overhead gantry signs or a combination of both. Details of the directional signs for grade-separated carriageways (other than motorways) are described in this section.
- 2.5.4 Advance Direction signs should be sited to avoid obscuring other signs, or avoid being obscured themselves by any over-bridges, trees or shrubbery, etc.
- 2.5.5 A number of other information signs are required as part of the signage of grade-separated roads (see Chapter 4). These include junction countdown markers and lane gain signs, as shown in Figures 2.5.1 and 2.5.2. Such signs shall have a green background on National routes, and a white background on Regional and Local routes.
- 2.5.6 The countdown markers, which are detailed in Chapter 4, are required in advance of all grade-separated junctions only with the exception of compact junctions. They shall be positioned at 300m, 200m and 100m from the start of the diverge taper.
- 2.5.7 The lane gain signs, which are also detailed in Chapter 4, will be required wherever there is an increase in the number of lanes on the main carriageway. Guidance on their design and positioning is given in Chapter 4.
- 2.5.8 Regulatory and Warning signs shall also be provided, where required, on grade-separated roads as described in Chapters 5 and 6.

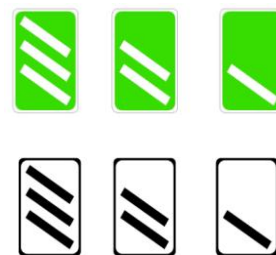


Figure 2.5.1: Junction Countdown Markers



Figure 2.5.2: Typical Lane Gain Sign

- 2.5.9 In order to encourage the use of dual carriageway roads in preference to the local roads, appropriate advance information should be provided on the surrounding road network, directing traffic towards the major road. Similarly, when new road schemes are built, the directional signs on the surrounding road network should be revised to suit the new road layout and classification.

DESIGN OF SIGNS FOR GRADE-SEPARATED DUAL CARRIAGEWAYS

- 2.5.10 This Section provides the general rules of design for directional information signs on grade-separated dual carriageways other than motorways, including where they cross Regional, Local or other National routes at grade-separated junctions.
- 2.5.11 The rules are similar to those for motorway routes, except that signs located on the main carriageway have white text on a green background and other classifications of routes indicated off a dual carriageway are shown using patches and panels with black text on a white background for Regional or Local routes or white text on a blue background for motorway routes.
- 2.5.12 Junction numbers, where available from the National Roads Authority for the National Primary road network, shall be placed on all mainline directional signage associated with the junction. Where junction numbers are not available, space should be provided to accommodate the inclusion of a junction number panel at a future date.
- 2.5.13 Where a junction number is indicated, this is shown as white numeral on a black background (see Section 2.3).
- 2.5.14 Where it is appropriate to indicate a National route from a Regional or Local route, the national route number (enclosed in brackets) should be displayed in yellow on a green patch or, if a motorway, in white on a blue patch (see Section 2.3).
- 2.5.15 Map type Roundabout signs on exit slip roads should have a background colour (green or white) appropriate to the classification of the route crossing/joining the road. If two road classifications apply at this junction (i.e. a split between a national and regional route), then the higher classification will dictate the background colour. Other routes should then be shown in appropriate coloured legend panels.
- 2.5.16 Stack type signs on exit slip roads should have full coloured directional panels appropriate to the route indicated.

- 2.5.17 A Route Confirmation sign should be provided at a distance of approximately 200m beyond the acceleration or auxiliary lane of an entry slip road. Where interchanges are less than 3km apart, these signs may be omitted.
- 2.5.18 When a route changes from a non-motorway to a motorway on the same alignment, 'Motorway Regulations Ahead' signs (F332) shall be provided in advance of the last junction to warn the driver that motorway restrictions apply. In addition to this sign, the 'Start of Motorway' sign (Sign F 330) shall be provided. These signs are detailed in Chapter 4.
- 2.5.19 The destinations on grade-separated dual carriageway signs will generally have an associated route number which will be 8s/w for Motorway and National Routes and 6s/w for Regional and Local routes and supplementary routes.



**Figure 2.5.3: Sign F 332:
Motorway Regulations
Ahead**



**Figure 2.5.4: Sign F 330:
Start of Motorway**

NEXT EXIT SIGNS

- 2.5.20 Next Exit signs, which are considered Advance Direction signs, can be used to indicate the junction number and the exit destinations of the next junction. This sign is normally positioned at 2km in advance of the start of the diverge taper on dual carriageways. At national primary/national primary intersections, depending on the proximity of the junctions, a Next Exit sign may also be required at 4km.
- 2.5.21 Next Exit signs are in addition to the Advance Direction signs and must include the destinations listed on the subsequent Advance Direction signs. They may also accommodate additional destinations that cannot be accommodated on the subsequent Advance Direction signs. However, for clarity the total number of destinations, in general, should not exceed four.
- 2.5.22 The sign is designed in two panels similar to a stack type sign. The top panel includes the Junction Number Panel (see Section 2.3), which is left justified and the distance 2km (or 4km), which is right justified. The Irish and English text for "Next Exit" is then centred between the Junction Number Panel and the distance. The distance number is 8s/w and the km is 6s/w. The Junction Number Panel and the distance are centred vertically about the 'Next Exit' text.
- 2.5.23 In general the widest destination sets the width of the sign. Hence the Junction Number Panel and distance are left and right justified with the 'Next Exit' text centred between the two giving a gap of more than 3s/w. If this gap is less than 3s/w then the gap will be increased to 3s/w and the top panel will set the overall sign width.
- 2.5.24 The bottom panel is designed by stacking route numbers and associated destinations above each other and these are left justified.
- 2.5.25 The 'x'-height required for Next Exit signs (which are a form of Advance Direction sign) is defined in Table 2.3.1, while the dimensions for Next Exit signs are shown in Table 2.5.1. A typical 2km Next Exit sign is illustrated in Figure 2.5.5 and dimensioned examples are shown in Figures 2.5.6 and 2.5.7.



Figure 2.5.5: Typical 2km Next Exit Sign.

Table 2.5.1: Dimensions for Next Exit Signs

Description	s/w
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Vertical Gap Between Top and Bottom Panel	1
Vertical Space Between Text and Top Border	2.5
Vertical Space Between Text and Bottom Border	1.5
Vertical Space Between Irish and English Text	0.5
Vertical Space Between Destinations	3
Horizontal Space Between Route Number/Junction Number Panel and Side Border	3
Horizontal Space Between Destination/Distance and Side Border	3
N and M Route Letters and Numerals	8
R and L Route Letters and Numerals	6
All Supplementary Bracketed Route Numbers	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Table 2.3.4
Horizontal Space Between Junction Number Panel and Border	3
Minimum Horizontal Space Between Junction Number Panel and Next Exit Text	3
Minimum Horizontal Space Between Next Exit Text and Distance	3
Junction Number Panel	See Section 2.3.

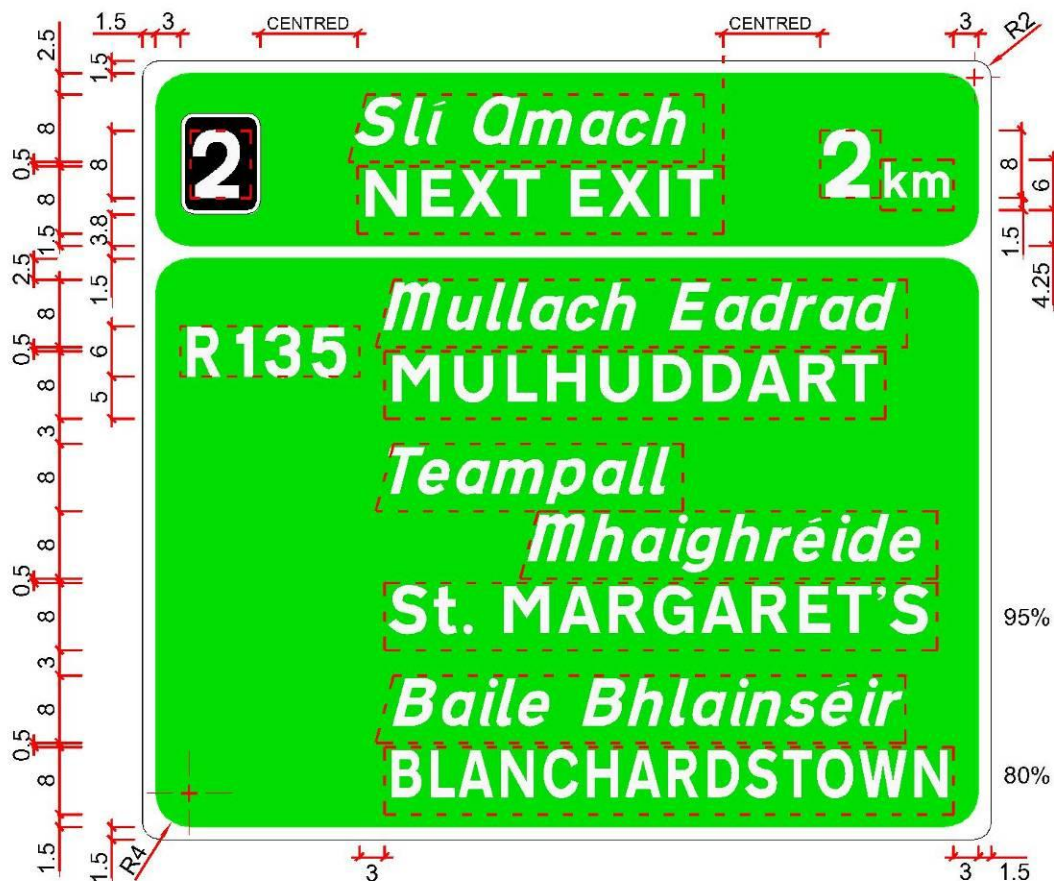


Figure 2.5.6:
Typical Next Exit Sign to a Regional Route from a Dual Carriageway



Typical Next Exit Sign to a National Route from a Dual Carriageway

OVERHEAD GANTRY SIGNS – GENERAL

- 2.5.26 Gantry signs should be provided in the following situations:
- (i) Where there are three or more traffic lanes in either direction; or
 - (ii) Where the design year AADT exceeds 50,000 vehicles; or
 - (iii) At National Primary / National Primary intersections; and
 - (iv) At any other locations on National roads as directed or approved by the National Roads Authority.
- 2.5.27 The use of Gantry signs at compact grade-separated junctions requires special consideration and this should be agreed with the National Roads Authority.
- 2.5.28 The general layout and positioning of Gantry signs shall be agreed in advance with the National Roads Authority, in accordance with the NRA Traffic Signs Approvals Procedure.
- 2.5.29 There are three types of overhead gantry signs for use on grade-separated dual carriageways:
- A **Lane Drop Gantry** is used when a dedicated lane is provided for diverging traffic;
 - A **Non Lane Drop Gantry** is provided in advance of a standard diverge slip; and
 - An **Exit Taper Gantry** is provided at the start of the diverge taper.
- 2.5.30 In general, Lane Drop gantries are located at 1km and 500m from the start of the diverge taper and at the start of the diverge nosing.
- 2.5.31 In general, a Non Lane Drop gantry is located at 1km from the start of the diverge taper, with an Advance Direction sign at 500m from the start of the diverge taper. An Exit Taper Gantry sign is then located at the start of the diverge taper.
- 2.5.32 The mainline background colour will be green and the background for the diverge panel will be as defined by the classification of the road listed in that panel: i.e. National routes will be green, motorway routes will be blue and Regional or Local routes white.
- 2.5.33 The 'x'-height for gantry signs shall be in accordance with Table 2.3.1.

NON LANE DROP GANTRY SIGNS

- 2.5.34 The mainline panel for a Non Lane Drop Gantry sign is designed by stacking the destination information with route numbers and arrows placed below. The maximum width of the mainline panel is determined by the width of the carriageway and in accordance with the design rules. This panel is positioned centrally above the traffic lanes.
- 2.5.35 The diverge panel contains the destinations available at the next exit. It is designed by stacking the destination information with the route numbers and arrow placed above and positioned above the hard shoulder.
- 2.5.36 Where two or more lanes on the mainline, have the same destination, the information should only appear once, with the lane arrows positioned directly over the centre of each lane and pointing downwards.
- 2.5.37 In general, a junction number panel is positioned in the bottom right hand corner of the diverge panel.
- 2.5.38 The background colour for the mainline panel on a national route is green and the background for the diverge panel will be the appropriate colour for the classification of route indicated.
- 2.5.39 The height of the mainline panel should be equal to the height of the diverge panel. In exceptional circumstances and approved by the Overseeing Organisation the height of the diverge panel may be less.
- 2.5.40 Table 2.5.2 shows the dimensions to be used for Non Lane Drop Gantries, while dimensioned examples are shown in Figures 2.5.11, 2.5.12 and 2.5.13.



Figure 2.5.8:
Typical Non Lane Drop Gantry at 500m.



Figure 2.5.9:
Typical Non Lane Drop Gantry at 1km.



Figure 2.5.10:
Typical Non Lane Drop Gantry with Diverge to a Regional Route.

Table 2.5.2: Dimensions for Non Lane Drop Gantry Signs

Description	Non Lane Drop	
	Mainline Panel	Diverge Panel
	s/w	s/w
Vertical Space Between English and Irish Versions of Place-Name	0.5	0.5
Minimum Vertical Space between Destinations	3	3
Vertical Space Between Route Number and Place-Name	3	3
Minimum Vertical Space to Top Border	2.5	2.5
Minimum Vertical Space to Bottom Border	2.5	2.5
Minimum Horizontal Space from Arrow to Side Borders	10	3
Horizontal Space to Side Borders	-	-
Size of Diverge Arrow	-	-
Size of Arrow	17	17 @ 45°
Junction Number Panel	See Section 2.3	See Section 2.3
N and M Route Letters and Numerals	8	8
R and L Route Letters and Numerals	6	6
All supplementary bracketed Route Numbers	6	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Section 2.3	See Section 2.3
Inner Radius of Border	4	4
Outer Radius of Border	2	2

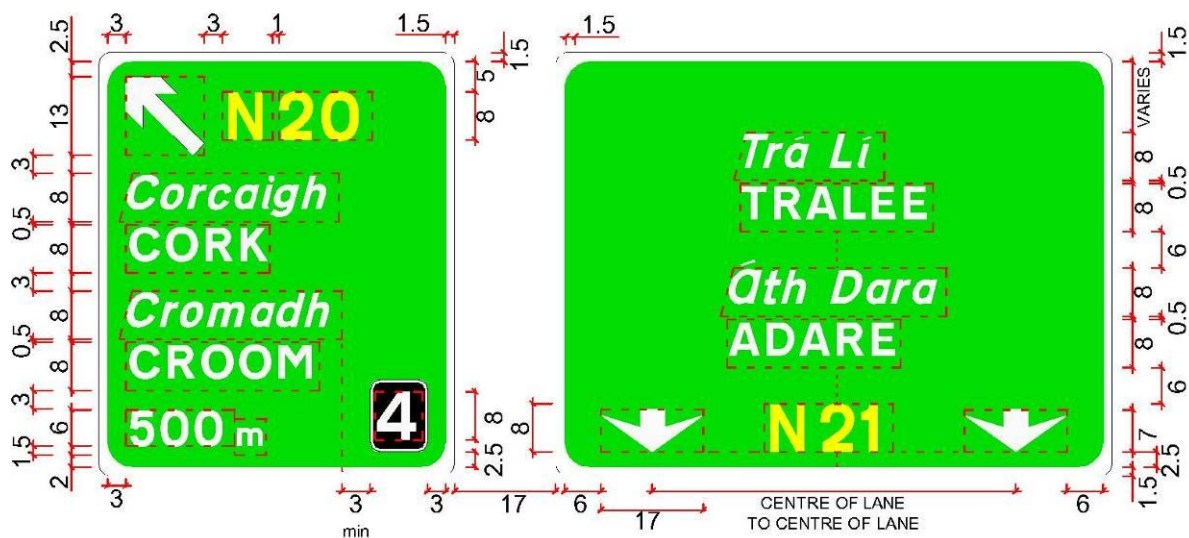


Figure 2.5.11:
500m Non Lane Drop Gantry Sign with Diverge to a National Route



Figure 2.5.12:
1km Non Lane Drop Gantry Sign with Diverge to a National Route

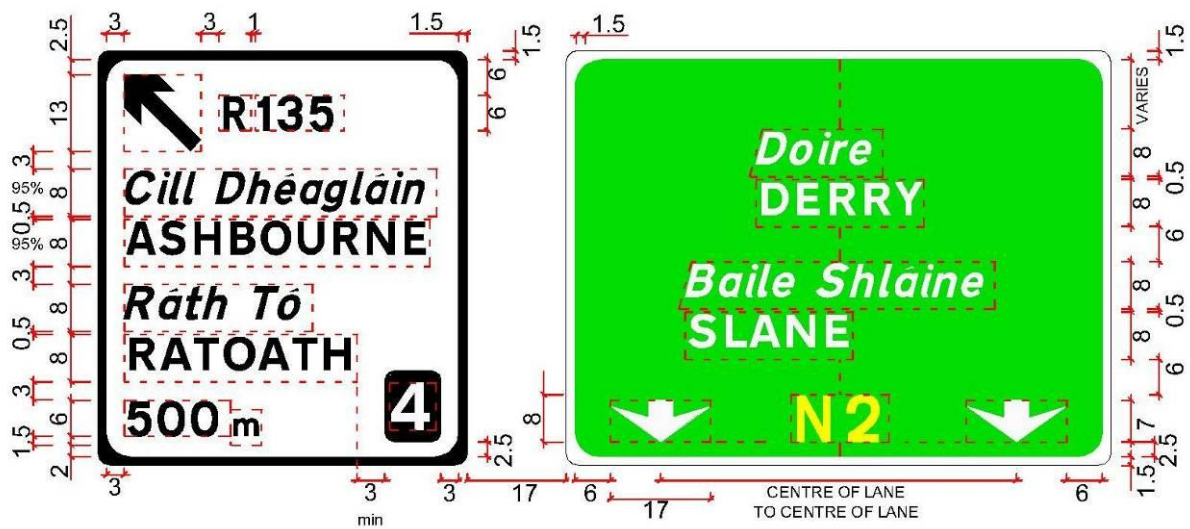


Figure 2.5.13:
Non Lane Drop Gantry Sign with Diverge to a Regional Route

LANE DROP GANTRY SIGNS

- 2.5.41 Lane Drop Gantry signs are designed by stacking the destinations above the route numbers and arrows for both mainline and diverge panels.
- 2.5.42 Where two or more lanes on the mainline, have the same destination the information should only appear once, with the lane arrows positioned directly over the centre of each lane and pointing downwards.
- 2.5.43 For the lane drop panel the arrow is positioned centrally over the lanes pointing downwards.
- 2.5.44 Route numbers are positioned centrally between arrows or centred above a single arrow, as applicable. See Table 2.3.4 for the space between route letters and numerals.
- 2.5.45 In general the junction panel is placed in the top left hand corner of the diverge panel.
- 2.5.46 The background colour for the mainline panel is green on national routes and the background colour of the lane drop panel will reflect the classification of the route indicated.
- 2.5.47 The height of the mainline panel should be equal to the height of the diverge panel. In exceptional circumstances and approved by the Overseeing Organisation the height of the diverge panel may be less.
- 2.5.48 In general, for lane drop situations, gantries are positioned 1km and 500m from the diverge and at the diverge, but the actual distance **is not** displayed on the sign face.
- 2.5.49 The dimensions for Lane Drop Gantries are shown in Table 2.5.3, a typical example of a Lane Drop Gantry is shown in Figure 2.5.14 and dimensioned examples are shown in Figures 2.5.15 and 2.5.16.



**Figure 2.5.14:
Typical Lane Drop Gantry
Sign at a Diverge**

Table 2.5.3: Dimensions for Lane Drop Gantry Signs

Description	Lane Drop
	Mainline and Diverge Panels
	s/w
Vertical Space Between English and Irish Versions of Place-Name	0.5
Minimum Vertical Space between Destinations	3
Vertical Space Between Route Number and Place-Name	3
Minimum Vertical Space to Top Border	2.5
Minimum Vertical Space to Bottom Border	2.5
Minimum Horizontal Space from Arrow to Side Borders	10
Horizontal Space to Side Borders	3
Size of Diverge Arrow	-
Size of Arrow	17
Junction Number Panel	See Section 2.3
N and M Route Letters and Numerals	8
R and L Route Letters and Numerals	6
All supplementary bracketed Route Numbers	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Section 2.3
Inner Radius of Border	4
Outer Radius of Border	2

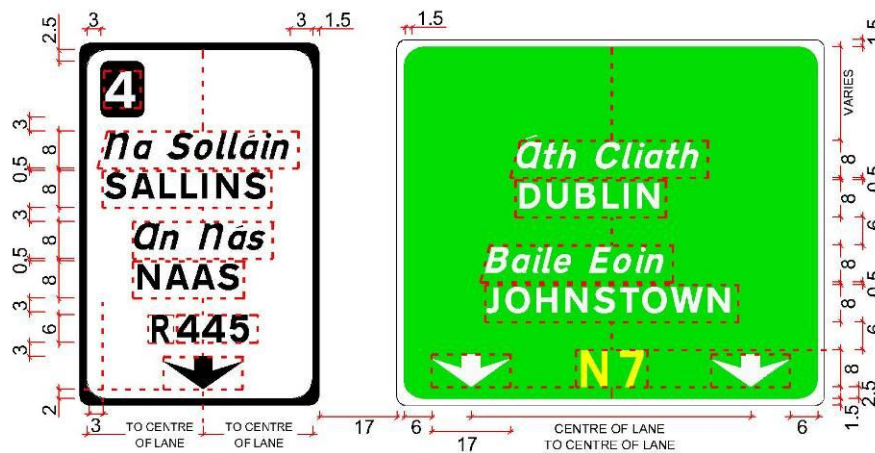


Figure 2.5.15:
Lane Drop Gantry Sign with a Regional Diverge Panel

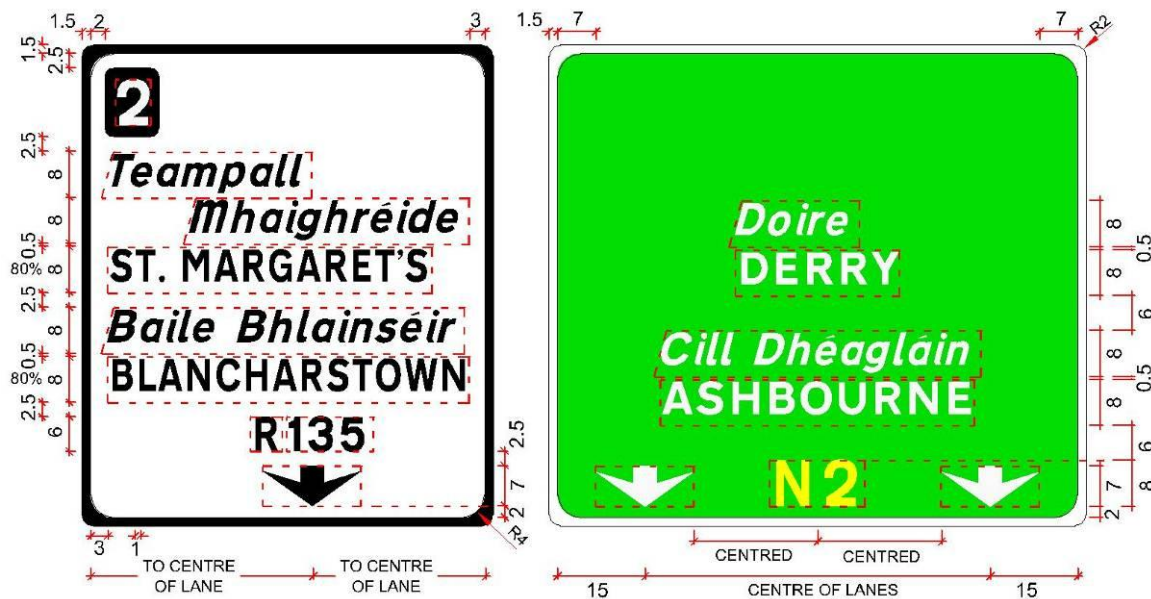


Figure 2.5.16:
Lane Drop Gantry Sign with a Regional Diverge Panel which Overhangs
the Hard Shoulder

Note:

1. The arrow in the lane drop panels in Figures 2.5.15 and 2.5.16 is over the centre of the lane but this is not the centre of the sign as the panel slightly overhangs the hard shoulder due to the length of the destinations. This layout is permitted with the approval of the Overseeing Organisation.

EXIT TAPER GANTRY SIGNS

- 2.5.50 Exit Taper Gantry Signs are positioned at the start of the diverge taper, directly over the near side lane. They are designed by stacking destinations above the lane arrow and route number. The lane arrow used is rotated 45° and located at the bottom left hand corner pointing to the diverge.
- 2.5.51 In general the junction number panel is placed in the bottom right hand corner of the diverge panel.
- 2.5.52 The background colour for the diverge panel will be that of the classification of the route indicated. For example on a National route with a diverge slip to a Regional route the background colour of the panel will be white. In instances where the Exit Taper Gantry sign indicates destinations on a National and a Regional or Local route the background colour shall be green and contain the National route number only but show the destinations on both routes.
- 2.5.53 In general a maximum of two destinations are provided on an Exit Taper Gantry sign. In exceptional circumstances a third destination may be added, but only with the written approval of the National Roads Authority. The longest destination is centred and all other destinations are left justified to this.
- 2.5.54 The dimensions for Exit Taper Gantries are shown in Table 2.5.4. Typical examples are shown in Figures 2.5.17 and Figure 2.5.18, while dimensioned examples are shown in Figures 2.5.19 and 2.5.20.



Figure 2.5.17:
Typical Regional Route
Exit Taper Gantry Sign



Figure 2.5.18:
Typical National Route
Exit Taper Gantry Sign

Table 2.5.4: Dimensions for Exit Taper Gantry Signs

Description	Exit Taper
	s/w
Vertical Space Between English and Irish Versions of Place-Name	0.5
Minimum Vertical Space between Destinations	3
Vertical Space Between Route Number and Place-Name	3
Minimum Vertical Space to Top Border	2.5
Minimum Vertical Space to Bottom Border	2.5
Minimum Horizontal Space from Arrow to Side Borders	-
Horizontal Space to Side Borders	3
Size of Diverge Arrow	18
Size of Arrow	-
Junction Number Panel	See Section 2.3
N and M Route Letters and Numerals	8
R and L Route Letters and Numerals	6
All supplementary bracketed Route Numbers	6
Horizontal Space Between M, N, R and L Route Letters and Route Numerals	See Section 2.3
Inner Radius of Border	4
Outer Radius of Border	2

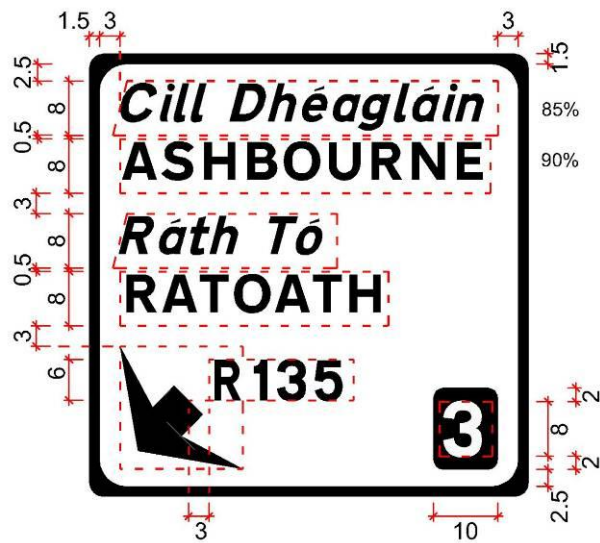


Figure 2.5.19:
Regional Route Exit Taper Gantry Sign



Figure 2.5.20:
National Route Exit Taper Gantry Sign

ADVANCE DIRECTION SIGNS

- 2.5.55 Map type Advance Direction signs (ADS) are used to give advance notification of the destinations available at the next junction. This sign type displays the terminal of the route travelled and may also include the next significant destination.
- 2.5.56 The Advance Direction signs are generally positioned at 1km and 500m from the start of the diverge taper. The distance is displayed on the sign, positioned to the right and below the last diverge destination.
- 2.5.57 If the advance direction sign cannot be placed at the above recommended distances then the distance shall be rounded in accordance with Table 2.3.5 and displayed accordingly: e.g. 750m. Note that if the distance is approximately 1km then the distance shall be displayed as '1km', whereas other distances shall be displayed in metres: e.g. 1200m.
- 2.5.58 Where a diverge leads to both National and Regional routes, only the National route number shall be displayed on the Advance Direction signs along with the destinations for both routes.
- 2.5.59 For standard grade-separated junctions the exit arm is orientated at an angle of 60 degrees from the vertical and for compact junctions the exit arm is orientated at an angle of 90 degrees from the vertical (see Figures 2.5.22 and 2.5.23). The route number for the exit will be centred with the tip of the exit arrow and offset by 3s/w.
- 2.5.60 The straight ahead route number should be positioned adjacent to the ahead route arrow with the top of the route number in line with the tip of the ahead arrow.
- 2.5.61 Destination text should be located above the through route number and below the exit route number.
- 2.5.62 The junction number is positioned within the sign in the top left hand corner.
- 2.5.63 The background colour for Advance Direction signs shall be the appropriate colour for the travelled route with the exit destination coloured appropriately to reflect the exit road classification.
- 2.5.64 The 'x'-height required for Advance Direction Map Type Signs is stated in Table 2.3.1.
- 2.5.65 The dimensions for Advance Direction Signs are shown in Table 2.5.5. Typical dimensioned examples are shown in Figures 2.5.24 to 2.5.28.



Figure 2.5.21: Typical 1km Advance Direction Sign with Regional Route Legend Panel



Figure 2.5.22: Typical 500m Advance Direction Sign with Regional Route Legend Panel

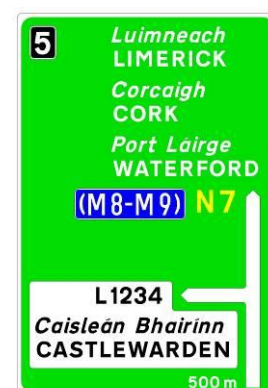


Figure 2.5.23: Typical 500m Advance Direction Sign at a Compact Junction

Table 2.5.5: Dimensions for Advance Direction Signs

Description	s/w
Width of Map Symbol	5
Standard length of ahead Map Symbol	46
Minimum length of exit Map Symbol	24
Horizontal Space to Left Border	3
Horizontal Space to Right Border	5
Vertical Space from Map Symbol to Bottom Border	1.5
Vertical Space from Distance Numeral to Bottom Border	1.5
Vertical Space to Top Border	3
Vertical Space Between English and Irish Versions of Place-Name	0.5
Vertical Space Between Different Place-Names	3
Vertical Space Between Route Number and Place-Name	3
Vertical Space Between Junction panel and Route Number	3
Horizontal Space to Junction Number Panel from border	3
Horizontal Space around Route Symbol	3
N and M Route Letters and Numerals	8
R and L Route Letters and Numerals	6
All Supplementary Bracketed Route Numbers	6
Horizontal Space Between Route Letter and Number for 8s/w text	1
Horizontal Space Between Route Letter and Number for 6s/w text	0.75
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Junction Number Panel	See Section 2.3

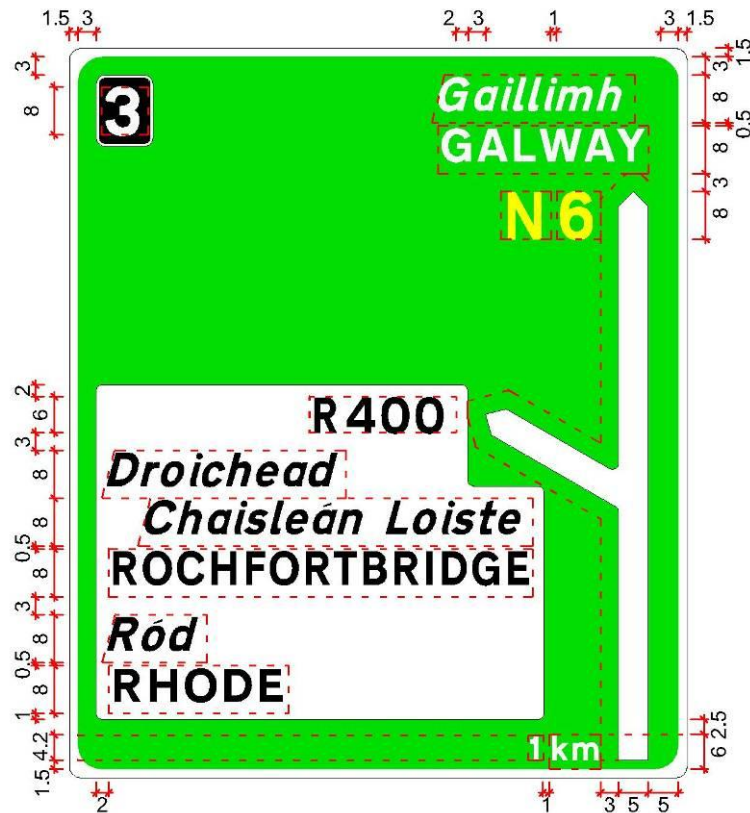


Figure 2.5.24:
1km Advance Direction Sign with Regional Route Legend Panel

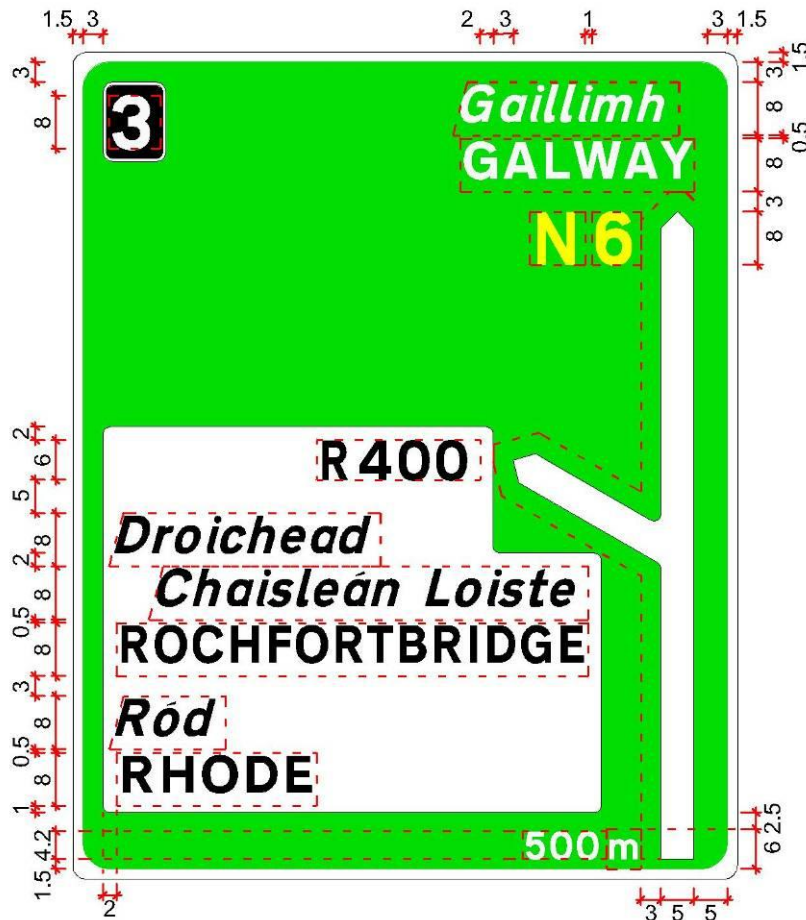


Figure 2.5.25:
500m Advance Direction Sign with Regional Route Legend Panel

Note: The gap between the route number and Droichead has been increased to a maximum of 5s/w, and the English of Rochfortbridge has been condensed to 80% allowing the last four lines of text to move to the right. This increase is used as a means of reducing the overall width of the sign.

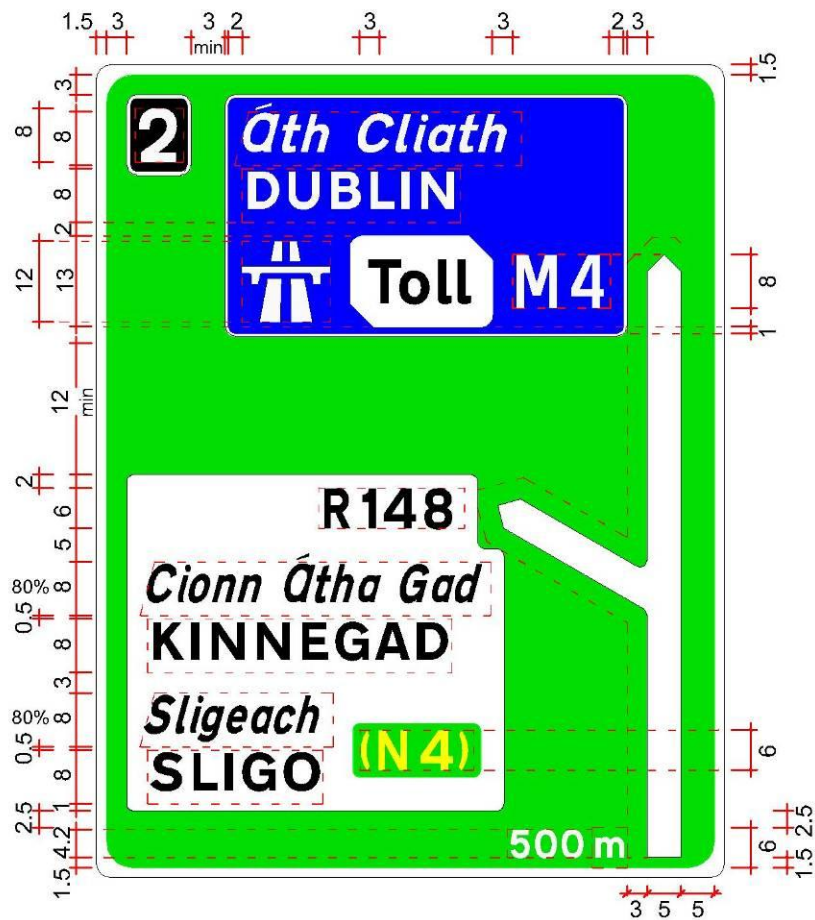


Figure 2.5.26:
500m Advance Direction Sign to Start of Motorway

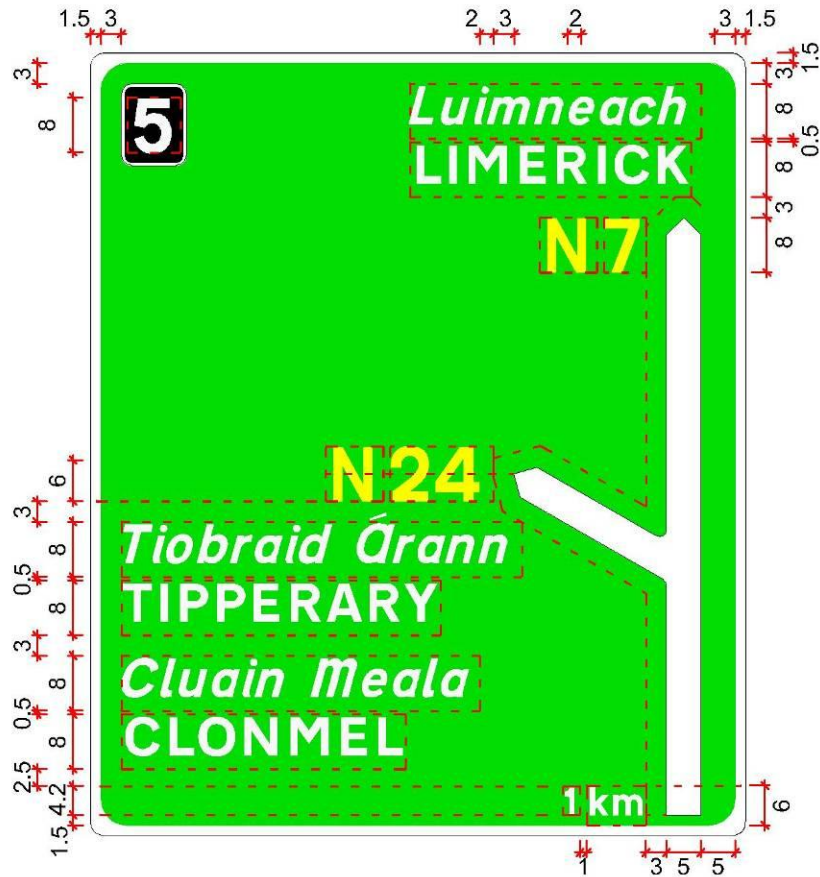


Figure 2.5.27:
1km Advance Direction Sign at the Junction with another National Route

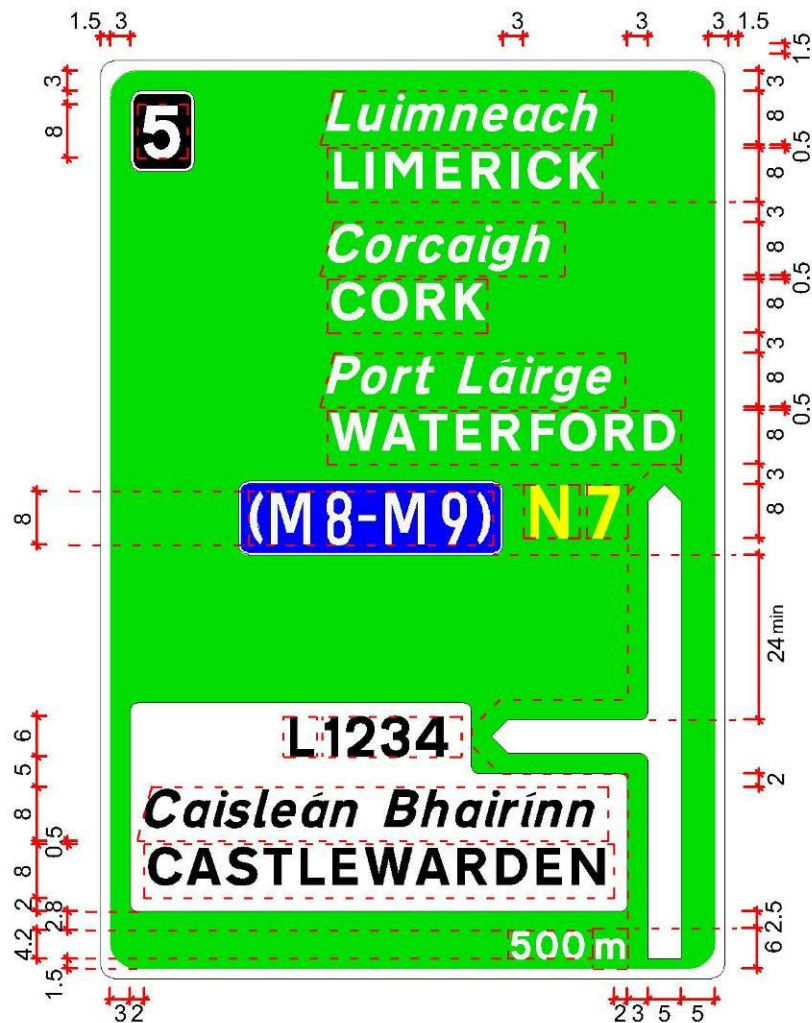


Figure 2.5.28:
500m Advance Direction Sign at a Compact Junction

ROUNABOUT MAP TYPE SIGNS ON EXIT SLIP ROADS

- 2.5.66 Roundabout map type signs will only be required on exit slip roads. They will take the background colour appropriate to the higher classified route at the junction. For example, when exiting a National route and travelling on to a Regional route, the background for the roundabout sign will be white with black border and text.
- 2.5.67 For design details for map type Roundabout signs see Section 2.6.

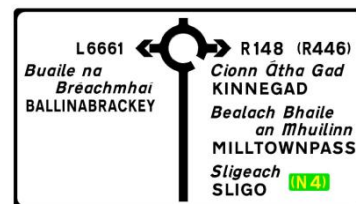


Figure 2.5.29:
First Roundabout Map
Sign on Slip Road

EXIT SIGNS

- 2.5.68 Exit Signs are to be positioned in the solid nosing, beyond the diverge on dual carriageways, where the junction has been allocated a junction number. This sign is intended to serve as a confirmation to the exiting traffic and will, therefore, only contain the text 'EXIT – Amach' with the junction number. The layout drawings in Chapter 10 show the positioning of these signs.
- 2.5.69 The junction number is right justified or centred below the text, depending on the layout chosen due to space constraints and optimum positioning.
- 2.5.70 The background colour for Exit Signs on grade separated dual carriageways will be in accordance with the classification of the route indicated. The 'x'-height shall be in accordance with Table 2.3.1.
- 2.5.71 The dimensions for Exit Signs are shown in Table 2.5.6. Typical examples of these signs are shown in Figures 2.5.30 and 2.5.31. Dimensioned examples are shown in Figures 2.5.32 and 2.5.33.



Figure 2.5.30:
Alternative Exit Signs
Indicating a National
Route.



Figure 2.5.31:
Alternative Exit Signs
Indicating a Regional or
Local Route

Table 2.5.6: Dimensions for Exit Signs

Description	s/w
Border Width	1.5
Inner Radius of Border at Straight End	1
Outer Radius of Border at Straight End	2.5
Outer Border Radius of Top and Bottom Corners at Pointed End	2
Outer Border Radius of Point	1.5
Vertical Space Between Irish and English Text	1
Horizontal Space Between Text and Junction Number	3
Horizontal Space Between Junction Number and side border	2.5
Horizontal Space Between Text and Chevron	3
Chevron Width	4
Chevron Angle 120°	
Vertical Space Between Chevron and Top Border	1.5
Horizontal Space Between Chevron and Side Border	2.5
Vertical Space Between Chevron and Bottom Border	1.5
Vertical Space Between Junction Number Panel and top Border	4
Junction Number Panel	See Section 2.3

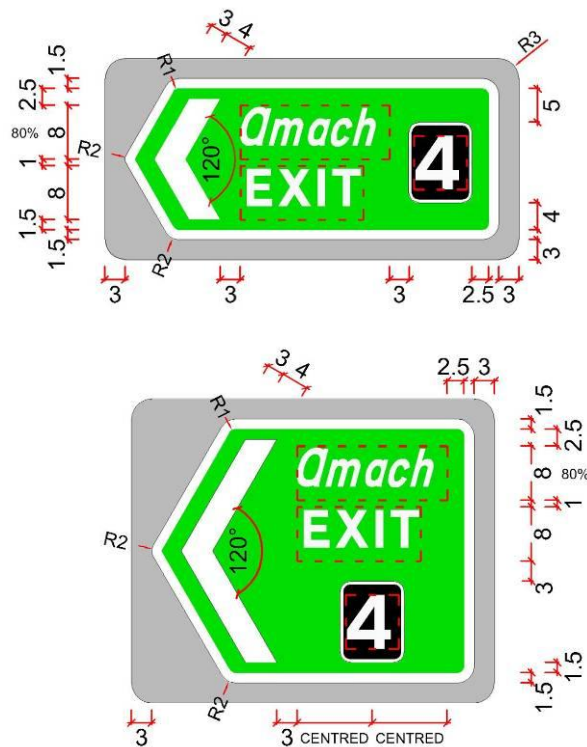


Figure 2.5.32:
Alternative Layouts for Exit Signs
(National Route to National Route)

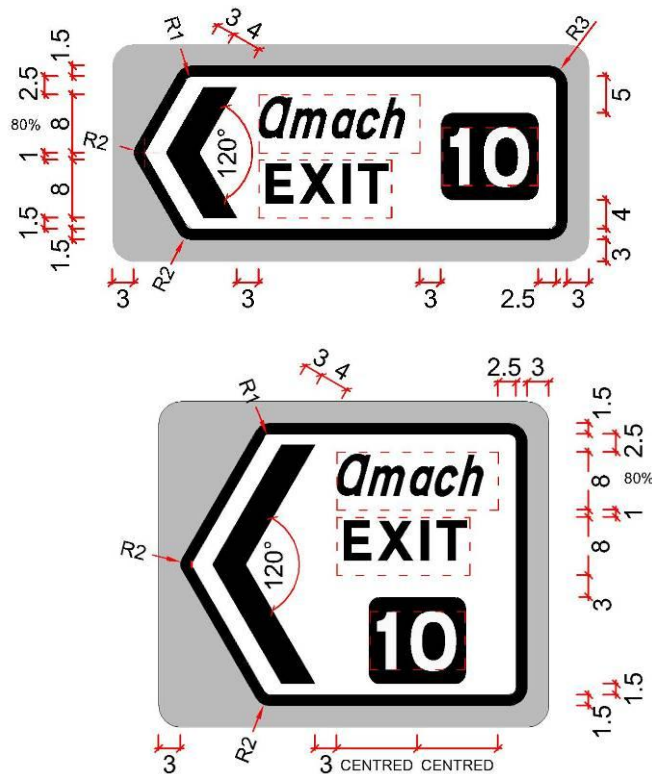


Figure 2.5.33:
Alternative Layouts for Exit Signs
(National Route to Regional Route)

LANE DESTINATION SIGNS

- 2.5.72 Lane Destination signs should only be used before junctions where destinations can only be reached by using specific lanes. With dedicated lanes on dual carriageways, Lane Destination signs will assist in guiding vehicles into the most appropriate lane at junction approaches.
- 2.5.73 The background colour for the Lane Destination signs on a National route is green, and white on Regional or Local routes.
- 2.5.74 Lane destination signs use arrows, destinations and lane lines to direct motorists into the correct lane for their destination on the approaches to a junction. See Section 2.3 for details of the types of arrows permitted.
- 2.5.75 A 'link line' is a horizontal line separating destinations from the lane lines or arrows below. A link line should be used only if two or more lanes relate to the same route or destination(s).
- 2.5.76 Single arrows referring to a route or destination ahead should be centred on the legend to which they refer (In the case of curved arrows their full width should be centred). However, when two arrows relate to the same route or destination, each arrow should be centred between the adjacent lane lines or border.
- 2.5.77 Lanes leading to the same destination should be depicted as having equal width. No single lane width should be more than twice the width of the narrowest lane. Where the lengths of legend are so different that they exceed the above ratio, the width of the narrowest lane must be increased. When this is done the horizontal spacing rules do not change, except that the gaps to the side border are increased (the legend being centred horizontally on the sign). Alternatively, the largest destination in the widest lane may be condensed, indented or abbreviated.
- 2.5.78 Where a lane line is truncated at the top of the sign, the minimum length of the top dash should be $3s/w$. Where this cannot be achieved, the dash should be omitted.
- 2.5.79 Route numbers should normally appear underneath destinations and be justified left. However, when two destinations are shown in the same direction, the route number may appear alongside the destinations.
- 2.5.80 The junction number panel is positioned within the sign in the top left hand corner.
- 2.5.81 The dimensions for Lane Destination signs are given in Table 2.5.7 and typical dimensioned examples are shown in Figures 2.5.35 and 2.5.36.



Figure 2.5.34:
Typical Lane Destination
Sign on a Grade
Separated National Route.

Table 2.5.7: Dimensions for Lane Destination Signs

Description	s/w
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Vertical Space to Top Border	3
Vertical Space to Bottom Border	2.5
Horizontal Space to Side Border	3
Lane Line Width	1
Length of Lane Line Segments	8
Length of Space Between Lane Line Segments	4
Vertical Space Above or Below Lane Lines	1.5
Link Line Width	1
Vertical Space Above Link Line	1.5
Vertical Space Below Link Line	2.5
Horizontal Space Between L, R, N and M Route Letters and Route Numerals	See Table 2.3.4
Junction Number Panel	See Section 2.3
Mainline N or M Route Letters and Numerals	12 – route only 8 – with destination
Diverge M or N Letters and Numerals	8
R and L Letters and Numerals	6

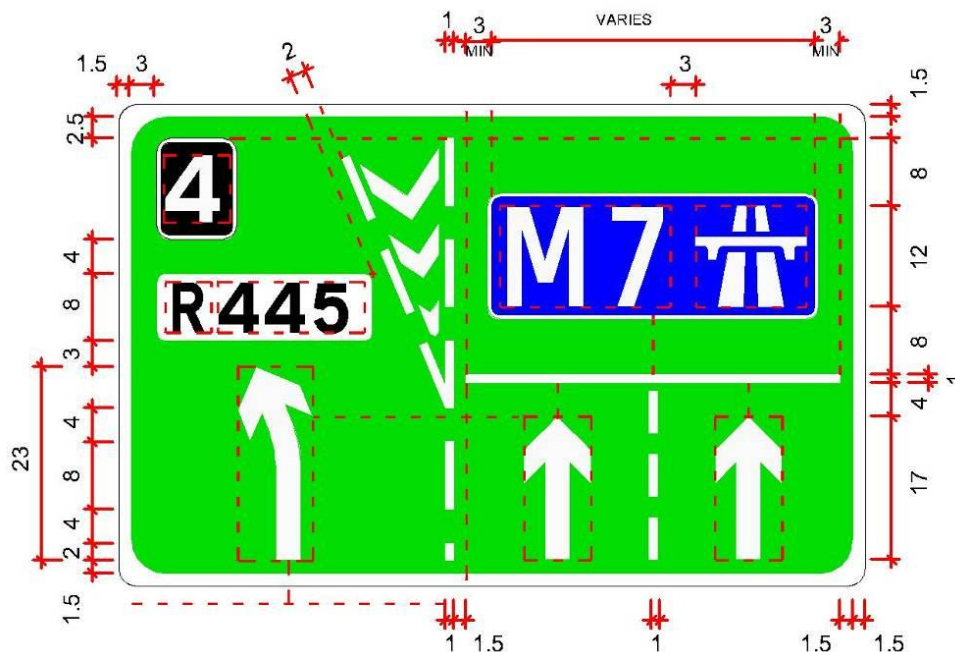


Figure 2.5.35:
Lane Destination Sign on a National Route

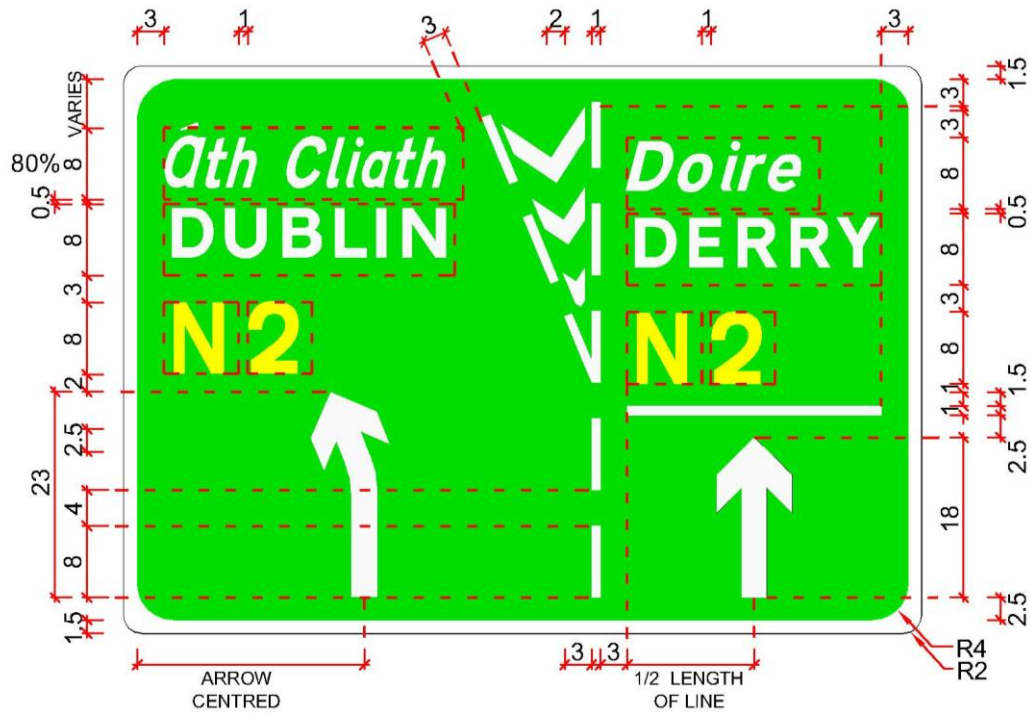


Figure 2.5.36:
Lane Destination Sign on a National Route

ROUTE CONFIRMATORY SIGNS

2.5.82 Route Confirmatory signs should be provided at junctions in accordance with Tables 2.2.2 and 2.2.3. They serve two purposes:

- (i) to confirm to road users that they have taken their intended route; and
- (ii) to give additional information about the road ahead.

2.5.83 In addition to the requirement for Route Confirmatory signs after each junction (see Tables 2.2.2 and 2.2.3), an additional Route Confirmatory sign should be placed at a suitable intermediate location where the interval between signs would otherwise be greater than 12km.

2.5.84 A Route Confirmatory sign has the route number placed centrally at the top of the sign similar to a route marker sign and followed by a list of destinations, as defined in Table 2.2.4 and arranged in distance order with the furthest appearing at the top, as described in Section 2.2 and shown in Figure 2.5.37.

2.5.85 When multiple destinations are shown, the sign is essentially a combination of a Route Marker sign and a Route Confirmatory sign, with the 'x'-height for Route Confirmatory signs applied in accordance with Table 2.3.1.

2.5.86 Where only one destination is shown, the route number appears within the sign and the gap between the Irish and English version of the destination is increased from 1s/w to 3s/w (see Figure 2.5.38).

2.5.87 Where the road is also a Euro Route, a Euro Route Marker Plate should be added to each Route Confirmatory sign. These plates form a separate panel positioned above the top right-hand corner of the Route Confirmatory sign (see Figure 2.5.39). The dimensions and setting out of the Euro Route Marker Plate are described in Section 2.3.

2.5.88 On bilingual signs distances in kilometres are 6s/w in the Route font (see Figure 2.3.14) and should be shown adjacent to each destination and aligned with the top of the English tile. For Irish only destinations the distances appear in line with the base of the place-name.

2.5.89 Distances are always accompanied by the abbreviation "km" in tiles. The "km" tile is 6s/w using the Transport Heavy font and is aligned with the top of the Irish tile of the first place-name indicated or if Irish only destination 3s/w above and centred over the first distance. Subsequent distances or brackets are right justified below.

2.5.90 For signs with a combination of bilingual and Irish only destinations, the Irish shall be afforded the same vertical space and centred within this (see Figure 2.5.39).



Figure 2.5.37:
Typical Route
Confirmatory Sign.



Figure 2.5.38:
Typical Route
Confirmatory Sign with a
Single Destination.



Figure 2.5.39:
Typical Route
Confirmatory Sign with
Euro Route Number Plate
and Irish Only Destination.

- 2.5.91 Any significant destinations located off the main route, such as terminal destinations on spur routes, should be shown in brackets (see Figure 2.5.40).
- 2.5.92 The order of bracketed destinations on Route Confirmatory signs is governed by the distance to the junction at which the road user must turn off the main route to reach that destination, irrespective of the overall distance to the destination itself (see also Section 2.2).
- 2.5.93 Route Confirmatory signs should generally show a maximum of four destinations but must contain the destinations indicated previously on Advance Direction signs. Refer to Table 2.3.1 for Route Confirmatory 'x'-heights.
- 2.5.94 Route Confirmatory signs shall be positioned approximately 200m downstream from the end of the merge taper. Additional signs shall be erected where necessary, to ensure that the intervals between successive Route Confirmatory signs shall not be more than 12km.
- 2.5.95 Route Confirmatory signs shall have a background of the appropriate colour for the classification of road being travelled. The dimensions to be used in the design of such signs are shown in Table 2.5.8 and typical examples are illustrated in Figures 2.5.37 to 2.5.40. Dimensioned examples are shown in Figures 2.5.41 to 2.5.46.



Figure 2.5.40: Typical Route Confirmatory Sign with a Spur Destination

Table 2.5.8: Dimensions for Route Confirmatory and Route Marker Signs

Description	s/w	
	Route Confirmatory Sign (Main Panel)	Route Marker Sign
Border Width	1.5	1
Inner Radius of Border	4	3
Outer Radius of Border	2	2
Gap Between Route Number and Side Borders	-	2
Gap Between Route Number and Top or Bottom Borders	-	2
Gap Between Route Letter and Number	-	1
Gap to Top Border	3	-
Gap to Side Borders	3	-
Gap to Bottom Border	2	-
Horizontal Clear space Between Place-Names and Distances	4	-
Horizontal Gap Between Irish and English version with multiple destinations	1	-
Horizontal Gap Between Irish only version with multiple destinations	3	-
Route Letter and Numeral	8	
km Symbol and Distance	See Figure 2.3.14	-
Additional Dimensions for Single Destination Route Confirmatory Sign		
Horizontal Gap Between Irish and English version with single destination	3	-
Horizontal Gap Between Irish Text and Route Number with single destination	3	-

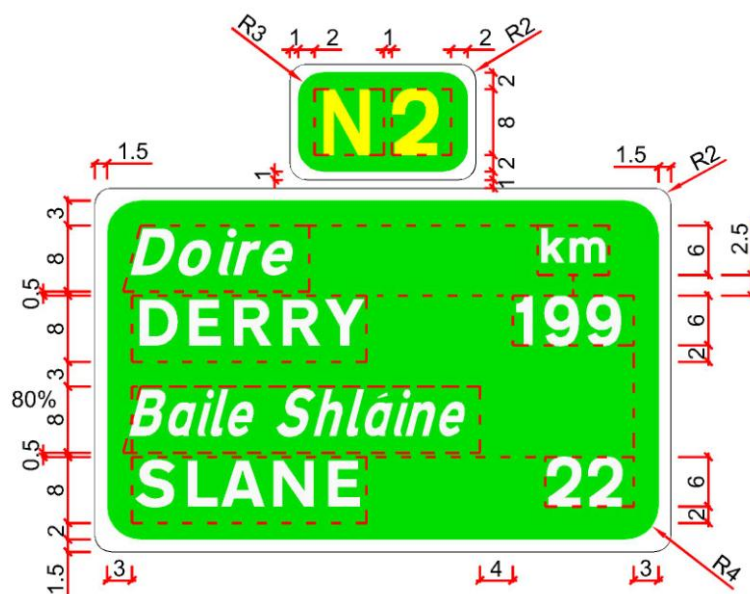


Figure 2.5.41:
Route Confirmatory Sign for Multiple Destinations

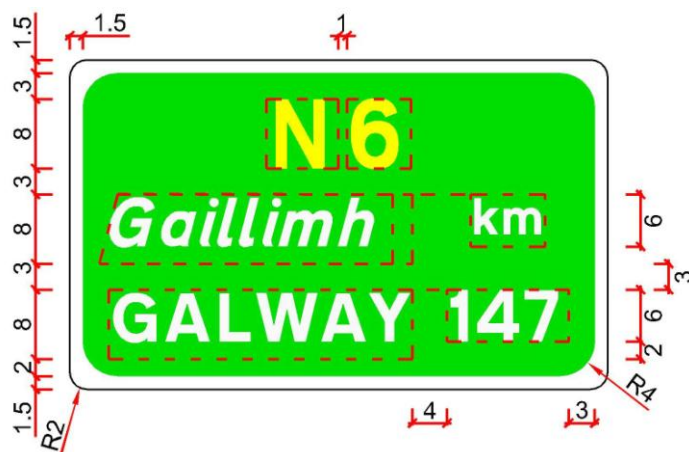
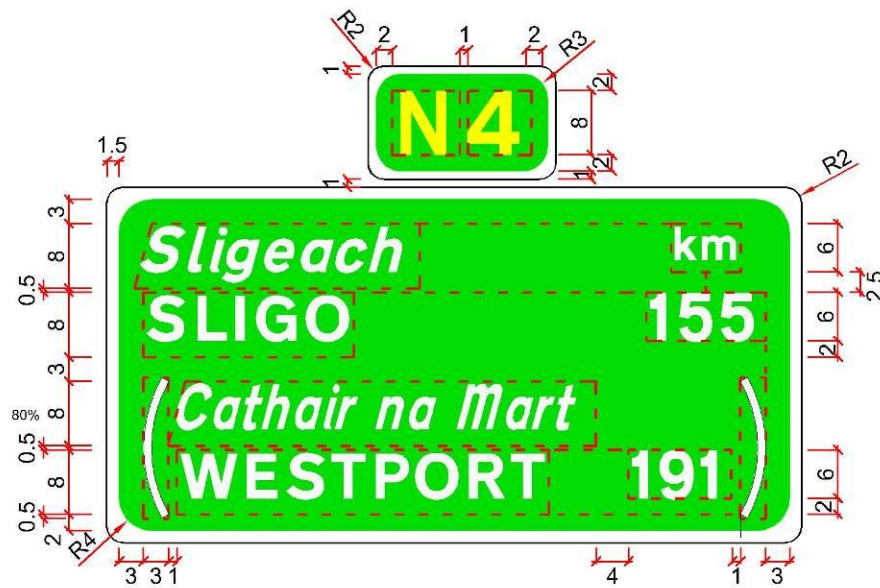
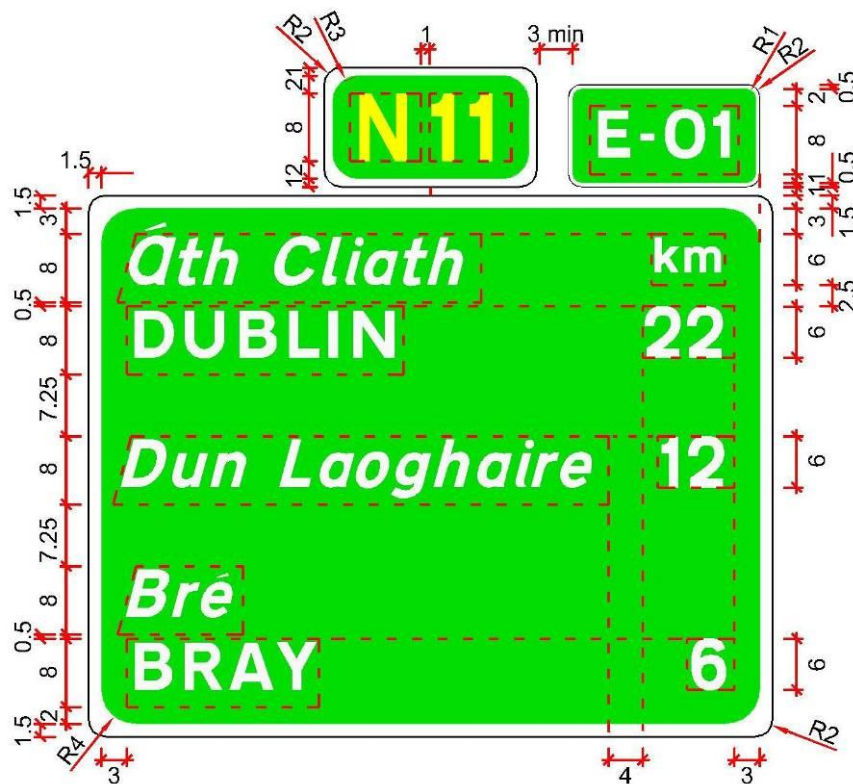


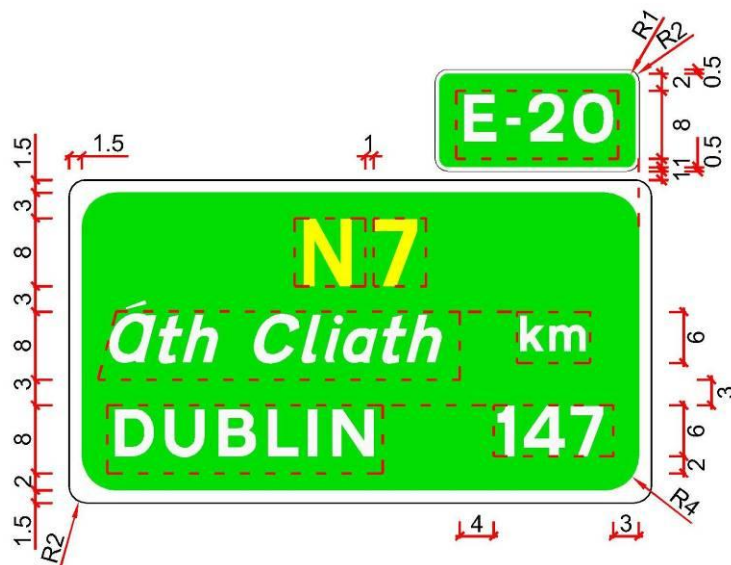
Figure 2.5.42:
Route Confirmatory Sign for a Single Destination



**Figure 2.5.43:
Route Confirmatory Sign with a Spur Route**



**Figure 2.5.44:
Route Confirmatory Sign with Irish Only Destination
and Euro Route Marker Plate**



**Figure 2.5.45:
Route Confirmatory Sign with Single Destination
and Euro Route Marker Plate**

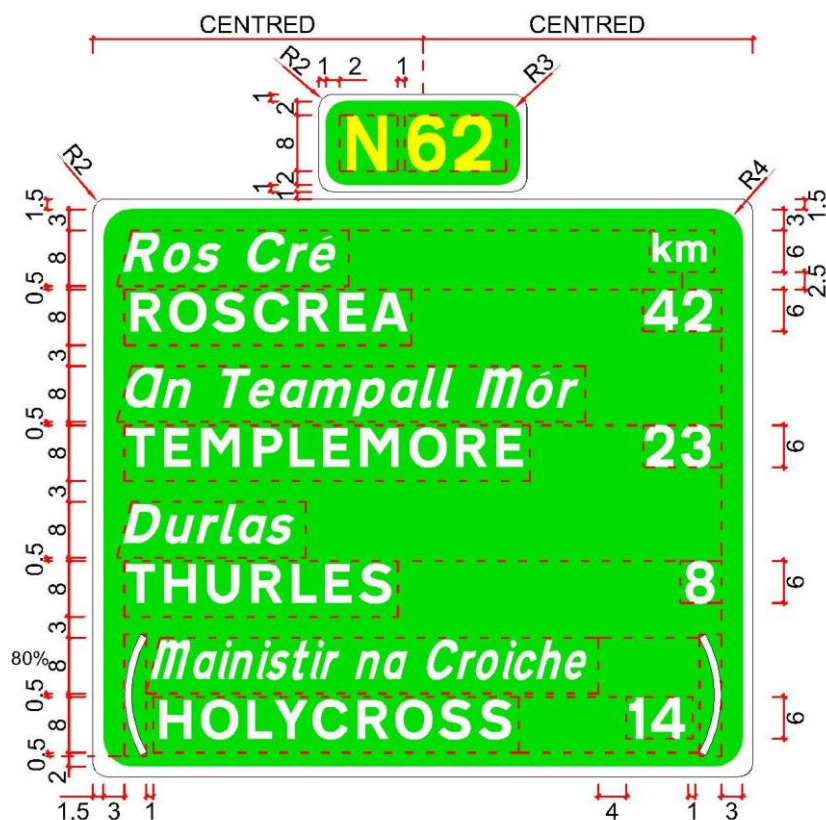


Figure 2.5.46:
Route Confirmatory Sign for Multiple Destinations Including a Spur Route

ROUTE MARKER SIGNS

- 2.5.96 The Route Marker sign consists of just the route number and is used on long stretches of road as well as a top plate on Route Confirmatory signs.
- 2.5.97 Route Marker Signs should be erected on National routes such that the interval between successive Route Confirmatory and/or Route Marker signs is not more than 6km.
- 2.5.98 Route marker signs located on a National route will always have a green background and on a Regional route will have a white background. The dimensions to be used in the design of such signs are shown in Table 2.5.8. A typical route marker sign is shown in Figure 2.5.47 and dimensioned examples are shown in Figure 2.5.48.



Figure 2.5.47:
Typical Route Marker Sign
for National Route

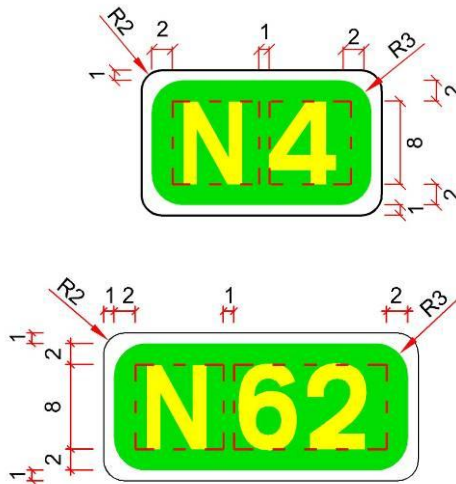


Figure 2.5.48: Design of Route Marker Sign for National Route

DIRECTION SIGNS

2.5.99 Direction signs, also known as flag signs, are located at the road junction itself and point along exits from the junction. They perform two main functions:

- They indicate the location of the junction; and
- They show destinations on the routes indicated.

2.5.100 Direction Signs are not required on the mainline of grade-separated dual carriageways, except in the form of Exit Signs at diverges of numbered junctions.

2.5.101 Direction signs are required at the side road approaches to grade-separated junctions or leading onto the dual carriageway. Their design is covered in Section 2.6.

2.6 Directional Signs for At-Grade Roads

PROVISION OF DIRECTIONAL SIGNS FOR AT-GRADE ROADS

2.6.1 This Section describes the directional information signs required for all at-grade roads on both single and dual carriageways, for National, Regional and Local roads. Due to the nature of at-grade roads the provision of signs must be considered carefully because of:

- The close proximity of at-grade junctions;
- Non-standard road layouts along some routes and at certain junctions;
- Unrestricted classes of traffic;
- The presence of street furniture, entrances and building frontage, which may diminish the impact of the signs; and
- Limitations of available space on roundabout splitter islands or in existing verges.

2.6.2 Drivers must be given adequate indication of the junction layout ahead. It is, therefore, essential to give clear and concise messages so that drivers have sufficient time to make a decision and carry out any necessary manoeuvres safely.

2.6.3 The types of directional information sign required on an at-grade road, and when to provide them, are set out in Tables 2.2.2 and 2.2.3 and the destinations to be signed are set out in Tables 2.2.4 to 2.2.6 (see Section 2.2).

2.6.4 It is difficult for a driver to absorb a long list of destinations on Advance Direction signs. Designers should, therefore, aim to limit the number of destinations while complying with the requirements of these tables.

2.6.5 A destination, once shown on a sign should be continued along the route until either the destination itself is reached or a turning for it is passed. The only exception to this is where a destination is an additional one on a Route Confirmatory sign or a supplementary destination on a directional sign.

2.6.6 When indicating the direction to a motorway, blue patches containing the bracketed motorway number in the Motorway alphabet shall be placed on Advance Direction or Direction signs. When indicating the direction to a National route via a Regional route, a green patch containing the bracketed route number in the Transport Heavy alphabet shall be placed on Advance Direction or Direction signs.

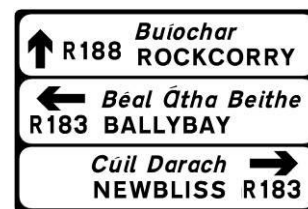


Figure 2.6.1:
Regional Junction Stack Sign

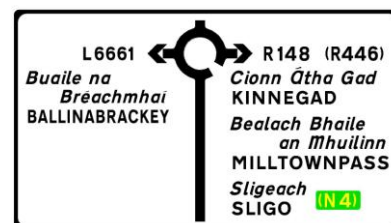
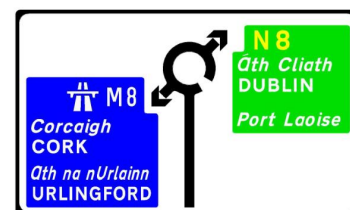


Figure 2.6.2:
Regional Map Type Roundabout Sign with National Route Patch



Figure 2.6.3:
Direction/Flag Sign to a Local Road.

- 2.6.7 The background colour for a directional sign shall be that of the route travelled. Patches and panels shall reflect the appropriate colour of the route they are indicating, as described in Section 2.2. However, reference should be made to the proximity rule defined in Section 2.3 for any exceptions.
- 2.6.8 The destinations will generally have an associated route number which can be 5.6s/w high for Local routes, 6s/w for Regional and 8s/w for National and Motorway routes. Any supplementary route numbers shall be 6s/w regardless of the class of road and placed in brackets either below or adjacent to the main route number. This rule for the size of the supplementary route numbers is applied to all types of signs in this section.
- 2.6.9 The relative positioning of the route numbers and destinations may be varied, within reason, to optimise the sign design. Examples are shown on the following pages.
- 2.6.10 A dedicated Route Direction sign showing just a number of major route numbers ahead can be useful to direct traffic, especially in congested urban areas.
- 2.6.11 Direction signs on roundabout splitter islands shall be constructed with retention sockets in the foundations so that the signposts can be replaced easily.
- 2.6.12 The use of map type Advance Direction signs for junctions other than grade-separated junctions, staggered junctions and roundabouts is not permitted without the prior consent of the Overseeing Organisation.



**Figure 2.6.4:
Regional Map Type
Roundabout Sign with
National and Motorway
Legend Panels**

STACK TYPE (ADVANCE DIRECTION) SIGNS

- 2.6.13 Stack Type Advance Direction signs (ADS) have a separate panel for each direction indicated. The panels show the route number(s) and destination(s) for each direction, together with a direction arrow. It should be noted that these panels are not the same as the legend panels described in Section 2.3.
- 2.6.14 Each panel is coloured in accordance with the classification of the route indicated and the direction is illustrated using an appropriately orientated arrow. The permitted angles for orientation of the arrows are described in Section 2.3, which also describes the 'Proximity Rule' governing signs indicating a National route or motorway within 500m or on short lengths of road connecting two National routes.
- 2.6.15 The straight ahead directional panel is always on the top, irrespective of route classification, followed by the left panel and then the right. The exception to this is when there are more than two directional panels on a sign of the same colour, these should be grouped together but always maintaining the straight ahead on top. Where there are directional panels of different colours, a 3 s/w grey strip should be provided between them.
- 2.6.16 When stacking destinations within a panel, the terminal will always appear on top, followed by subsequent destinations in order of distance. The order of subsequent destinations is governed by the distance to the junction at which the road user must turn off the main route to reach that destination, irrespective of the overall distance to the destination itself (see also Section 2.2).
- 2.6.17 Where any of the destinations are reached via another route after the junction, the route number should be shown in brackets, and in a patch where appropriate.
- 2.6.18 Best practice is to keep the number of destinations in any one panel of a Stack Type sign to a minimum: a maximum of four is recommended.
- 2.6.19 When indicating the entry to a motorway the motorway symbol shall be shown.
- 2.6.20 All text is left justified and the destinations in the right hand panel shall be positioned from the right.
- 2.6.21 The dimensions for Stack Type signs are given in Table 2.6.1, while dimensioned examples of such signs are illustrated in Figures 2.6.8 to 2.6.15.



Figure 2.6.5:
Typical Stack Sign with
Grouped Panels



Figure 2.6.6:
Typical Stack Sign with
Grouped Panels.

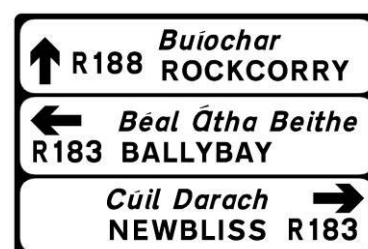


Figure 2.6.7:
Typical Stack Sign with
Left and Right Panels
Only.

Table 2.6.1 – Dimensions for Stack Type Signs

Description	s/w
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Internal Border	1
Outer Border	1.5
Horizontal Space to Side Border	3
Vertical Space to Bottom Border	1.5
Vertical Space to Top Border (from text tiles)	2.5
Vertical Space to Top Border (from Arrow)	1.5
Vertical Space between English and Irish versions of Place-Name	0.5
N or M Route Number	8
R Route Number	6
L Route Number	5.6
Supplementary Routes in brackets	6
Vertical Space between Separate Destinations	3
Horizontal Space between Arrow and Route Number	3
Vertical Space between Arrow and Route Number *	1.5
Horizontal Space between Panels of Different Colours	3
Left/Right Arrow Above Route No.	14
Left/Right Arrow to the Side of the Route No.	16
Straight Ahead Arrow	13

* Note: The vertical distance between the arrow and the route number may be increased from 1.5s/w to 3s/w for clarity.

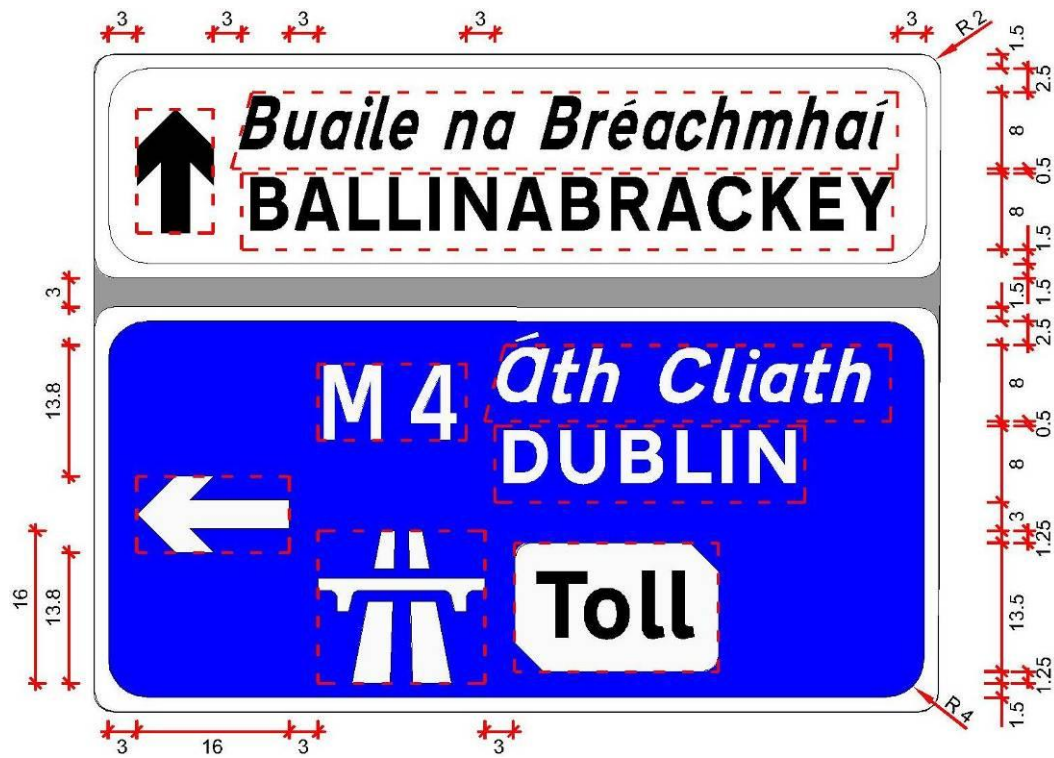


Figure 2.6.10:
Stack Sign Showing Motorway and Toll Symbols

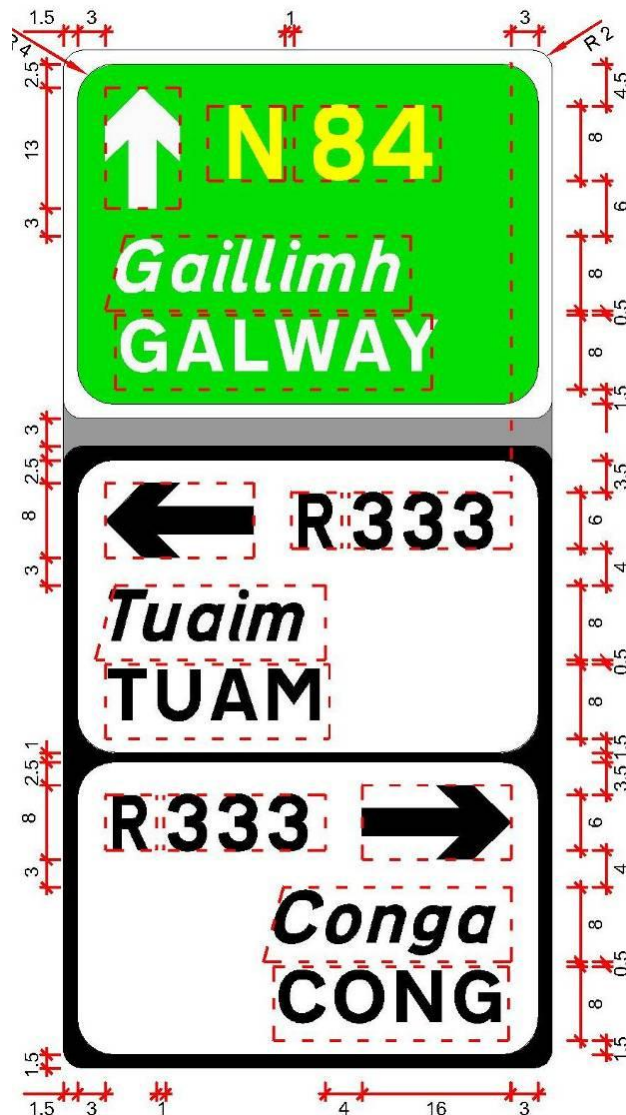


Figure 2.6.11:
Stack Sign with Grouped Single Direction Panels

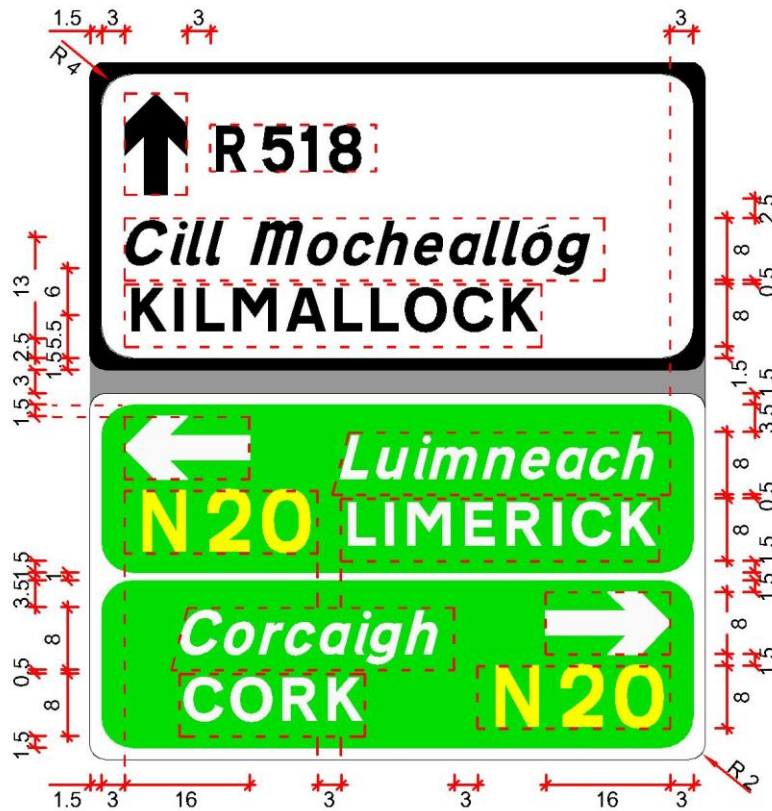


Figure 2.6.12:
Stack Sign with Regional and National Panels

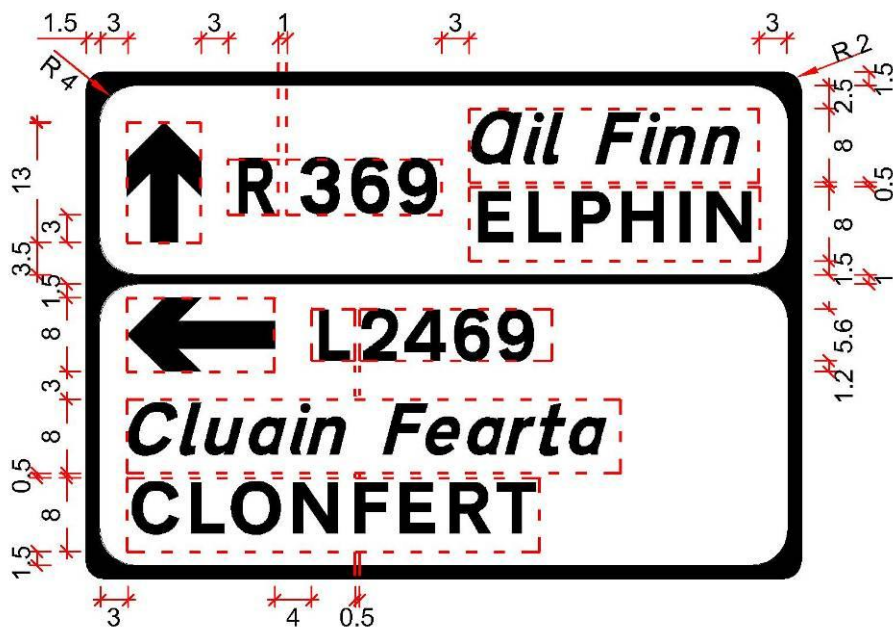
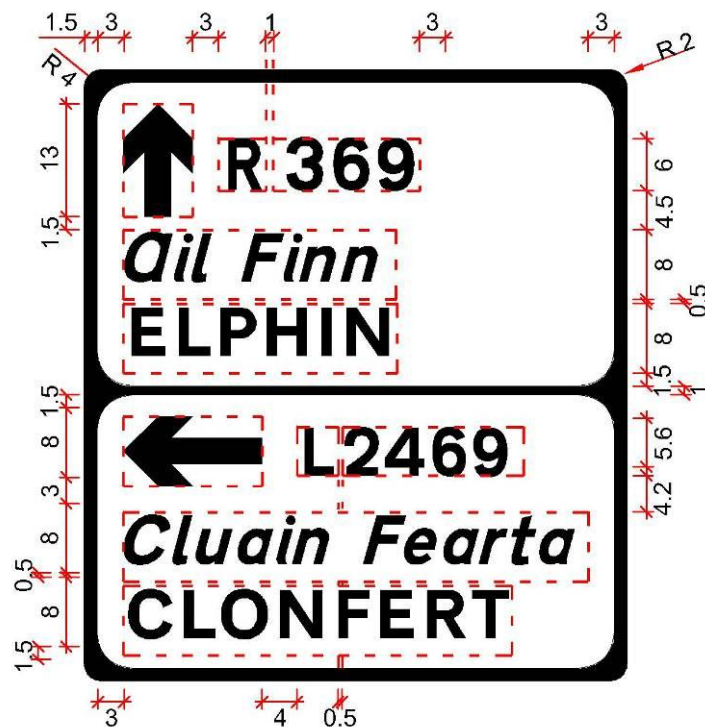


Figure 2.6.15:
Stack Sign with Local Road
(Two Alternative Layouts Shown)

ROUTE DIRECTION SIGNS

- 2.6.22 Route Direction signs do not show any destinations but display route numbers only, which may be reached directly or indirectly from the junction ahead. All the route numbers are un-bracketed.
- 2.6.23 Route Direction signs are similar to Stack Type signs, in that they have directional panels, but without destinations. They are coloured according to the route indicated and have arrows angled to roughly represent the road layout.
- 2.6.24 Route Direction signs should be used extensively in urban and rural situations to sign directions to National routes, in particular where it is not feasible to accommodate Stack Type signs.
- 2.6.25 Where more than one route is available by travelling in any one direction, the route numbers are enclosed by boxes and are 6s/w in height. Where a single route number is shown for a direction the spaces to the borders increase from 3 s/w to 4 s/w and the numbers are 8 s/w in height.
- 2.6.26 Where there are panels of different colours, a 3 s/w grey strip should be provided between them.
- 2.6.27 The dimensions for Route Direction signs are given in Table 2.6.2 and represent distances between tiles. Typical examples of such signs are illustrated in Figure 2.6.16 and dimensioned examples are shown in Figures 2.6.17 to 2.6.19.



Figure 2.6.16:
Typical Examples of Route
Direction Signs

Table 2.6.2: Dimensions for Route Direction Signs

Description	s/w
Border Width	1
Inner Radius of Border	4
Outer Radius of Border	2
Internal Border Width	0.25
Horizontal Space to Side Border	*4 or 3
Horizontal Space to Internal Border	*4 or 3
Vertical Space to Bottom Border	*4 or 3
Vertical Space to Top Border	*4 or 3
Vertical Space to Internal Border	*4 or 3
Horizontal / Vertical Space between Arrow and Route Number	*4 or 3
Single N or M Route Number in a Panel	8
Single R Route Number in a Panel	6
All Multiple Route Numbers in a Panel	6

Note: * Spaces to the borders are 3s/w where more than one route number is indicated for a direction. If only one route number is being signed, 4s/w is to be used.

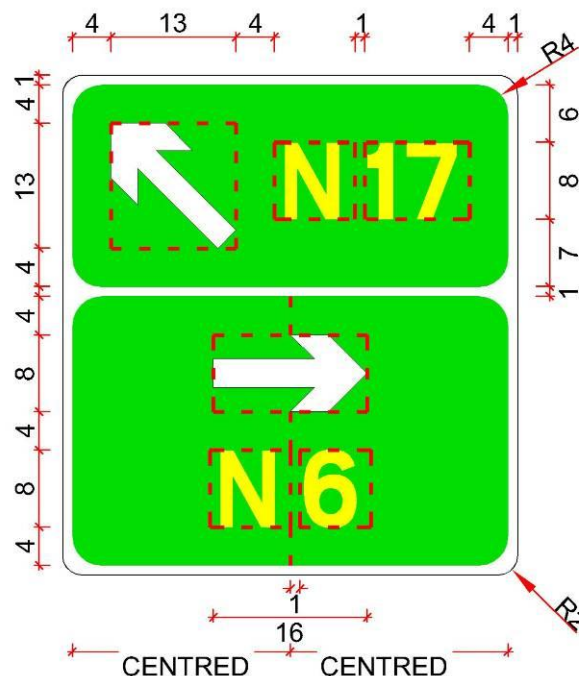
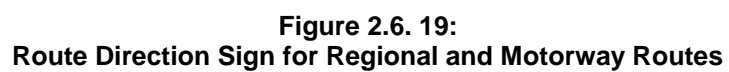
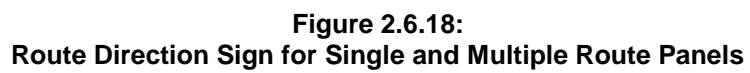


Figure 2.6.17:
Route Direction Sign for the Same Classification of Road



MAP TYPE SIGNS FOR ROUNDABOUTS

2.6.28 Map Type Advance Direction signs shall be used on approaches to roundabouts; they provide the driver with a representation of the road layout ahead.

2.6.29 The sign background maintains the colour scheme for the classification of route on which it is located, but the sign may incorporate colour legend panels to reflect the classification of the route(s) indicated.

2.6.30 Directions for local amenities and tourist facilities should generally be placed on separate signs. This is to allow for more efficient sign face design, as the inclusion of such information on Map Type signs can lead to excessively large signs and can distract the road user from the main message.

2.6.31 The roundabout symbol is used to represent the junction layout. Roundabout arms may be elongated as necessary to ensure that the direction of all destinations is absolutely clear. A typical roundabout symbol is shown in Figure 2.6.20, while the requirements for forming the symbol and arms are described in Paragraphs 2.6.40 to 2.6.50.

2.6.32 Once the orientation of the arrows has been designed the rest of the information can be added to the sign using the design parameters set out in Table 2.6.3.

2.6.33 The route number should be associated with the arrow:

- For the straight-ahead arm the route number may be placed on either side of the arrow or above for optimum layout. The destination(s) may then be positioned above the route number.
- For the left or right arms the destination(s) may appear above or below the route number. The number and orientation of arms will normally dictate the layout that is suitable.
- For destinations at 0° or 180° (horizontally right or left), the route number must be centred alongside the arrowhead.

2.6.34 In all cases, information for different exits shall be separated by a minimum of 12s/w.

2.6.35 Route numbers shall be 4s/w from the arrow to which they relate and a panel or patch edge shall be 3 s/w from the arrow.

2.6.36 Route numbers in a patch will always be placed in brackets (see Figure 2.6.22).

2.6.37 The dimensions for Map Type signs at roundabouts are given in Table 2.6.5 and represent distances between tiles. Dimensioned examples of Map Type signs are illustrated in Figures 2.6.32 to 2.6.49.

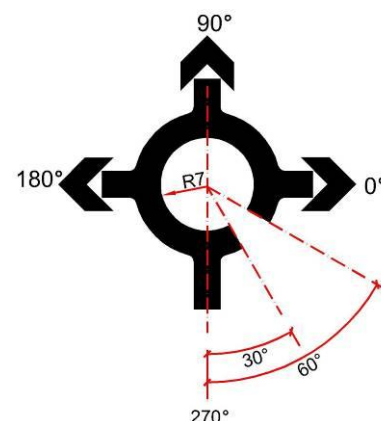


Figure 2.6.20:
Typical Roundabout
Symbol



Figures 2.6.21:
Typical Map Type Sign for
Roundabout with Regional
Legend Panel



Figures 2.6.22:
Typical Map Type Sign for
Roundabout with National
Route Patch.

2.6.38 Where a landmark junction name is to be provided by the Overseeing Organisation, this may be included in a separate panel and placed above the Map Type sign separated by a 3s/w gap. The panel shall have the same background colour and borders as the main sign. The panel shall have a maximum width no greater than that of the sign it is paired with and shall be placed centrally on a grey backing board.

2.6.39 At a grade-separated junction with a “dumbbell” roundabout layout, two separate signs are required for the roundabouts as shown in Figures 2.6.37 and 2.6.38. An alternative single sign is permitted with the approval of the Overseeing Organisation (see Figure 2.6.39).



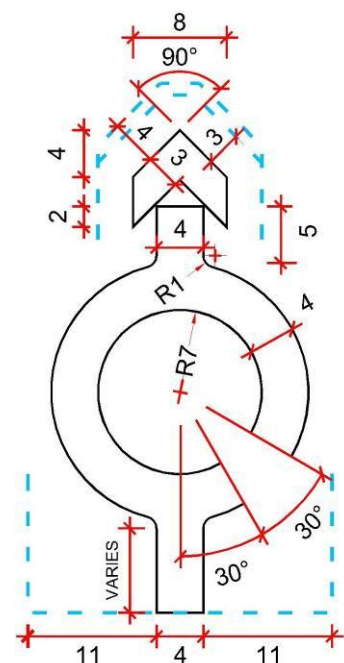
**Figures 2.6.23:
Map Type Sign for Start of
Motorway with Motorway
Legend Panels**

DESIGN OF ROUNDABOUT SYMBOL

2.6.40 The symbol and dimensions for a circular roundabout with an exit arrow and entry arm are as shown in Figure 2.6.24. The dimensions are also given in Table 2.6.3. The minimum length of the entry arm is 8s/w but may vary depending on the layout of exit arms and destinations. The double dashed blue lines around the arrow signify the position for the edge of a patch or panel (3s/w from the arrow head) or just plain text (4s/w from the arrow head). The single dashed blue line around the entry arm signifies the closest any information can be position.

Table 2.6.3: Dimensions for Roundabout Map Symbol

Description	s/w
Width of Symbol	4.0
Inner Diameter of Roundabout	14.0
Outer Diameter of Roundabout	22.0
Exit Arm Length (Minimum)	5.0
Entry Arm Length (Minimum)	8.0
Exit Stub Arm Length	3.0
Width of Arrow Head	3.0
Distance of Entry Route Symbol from Bottom Border	2.0
Distance of Arrow (Inner Angle) from Centre of Exit arm	2.5
No Entry Block	See Table 2.6.4



**Figure 2.6.24:
Circular Roundabout
Symbol with Entry Arm
and Exit Arrow.**

2.6.41 The entry to the roundabout is always shown vertically at the bottom (i.e. at 270° from the right horizontal) and should be extended to 2s/w from the border.

2.6.42 There should always be a break in the roundabout symbol to the right hand side of the entry arm. Figure 2.6.25 illustrates the construction of the 0, 90 and 180 degree layout and the 45, 135, 225 and 315 layout. The break is achieved by:

- Measuring angles of 30 and 60 degrees from the vertical anti-clockwise from the centre of the circular symbol for the 0, 90 and 180 degree layout and 15 and 30 degrees from the vertical anti-clockwise from the centre of the circular symbol for the 45, 135, 225 and 315 layout; and
- Form the ends of the break using the lines formed by these angles.

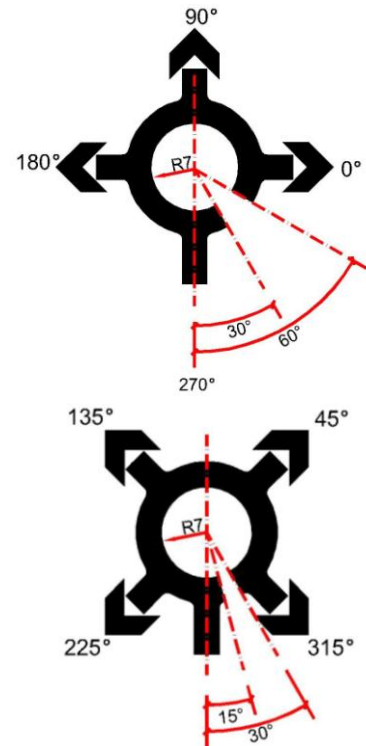


Figure 2.6.25:
Exit Arms for a
Roundabout Symbol

2.6.43 Exit points from the roundabout which cannot be represented accurately by using horizontal or vertical arms should be shown using arms at angles of 45°, 135°, 225°, or 315° from the right horizontal. A typical combination of exit arms is shown in Figure 2.6.26. A roundabout design may use any combination of these angles and when the layout is congested the default 5s/w exit arm length may be elongated to optimise the layout of the sign.

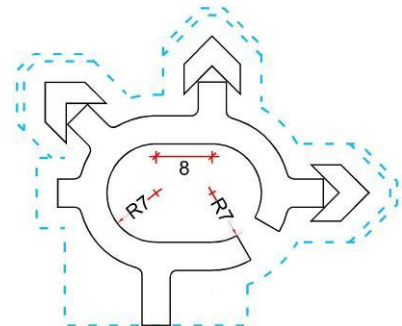


Figure 2.6.26:
Oval Roundabout Symbol

2.6.44 The symbol for an at-grade oval roundabout is shown in Figure 2.6.26. The dimensions for the rest of the roundabout are the same as that detailed in Figure 2.6.24 except for the 8s/w used to elongate the roundabout symbol. The break is set as described in Paragraph 2.6.42.

2.6.45 Roundabout symbols incorporate an arrowhead on the ends of each of the exit arms unless no information is displayed for an exit, in which case a stub end may be used, or a red bar is used to indicate a 'No Entry'. The dimensions to be used for the design of the red bar are given in Table 2.6.4.

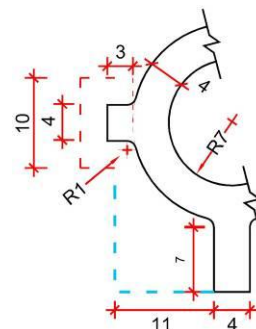
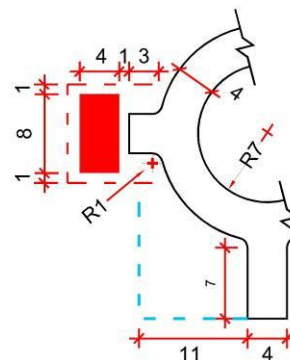


Figure 2.6.27:
Stub Arm.

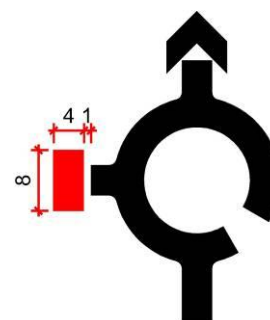
2.6.46 The dimensions for a stub arm symbol are shown in Figure 2.6.27. The dimensions for the rest of the roundabout are the same as those detailed in Figure 2.6.24. These stub arms may be omitted from complex roundabout layouts, at the discretion of the designer and with the approval of the Overseeing Organisation, if it is considered the overall clarity of the sign would be improved.



2.6.47 The dimensions for a 'No Entry' stub arm symbol are shown in Figure 2.6.28 and Table 2.6.4. The dimensions for the rest of the roundabout are the same as those detailed in Figures 2.6.24 and 2.6.27. These 'No Entry' stub arm symbols may be omitted from complex roundabout layouts, at the discretion of the designer and with the approval of the Overseeing Organisation, if it is considered the overall clarity of the sign would be improved.

Table 2.6.4: Dimensions for 'No Entry' Red Bar Symbol

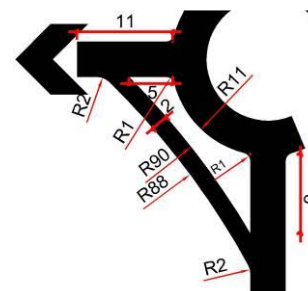
Description	s/w
Width of Symbol	4.0
Length of Symbol	8.0
Horizontal Space from Stub Arm	1.0



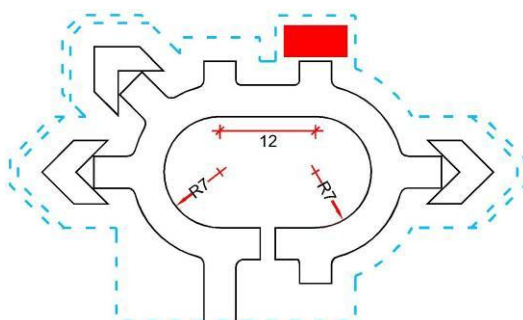
**Figure 2.6.28:
'No Entry' Stub Arm.**

2.6.48 Where a dedicated left slip is provided at a roundabout the symbol used is shown in Figure 2.6.29.

2.6.49 Grade separated gyratory roundabouts can be quite complex, as illustrated in Figure 2.6.30.



**Figure 2.6.29:
Dedicated Left Slip**



**Figure 2.6.30:
Typical Layout of Grade-Separated Gyratory Roundabout**

2.6.50 With this type of roundabout the information for the on slips and the opposite off slip may be deleted on large complex roundabouts, as shown in Figure 2.6.31.

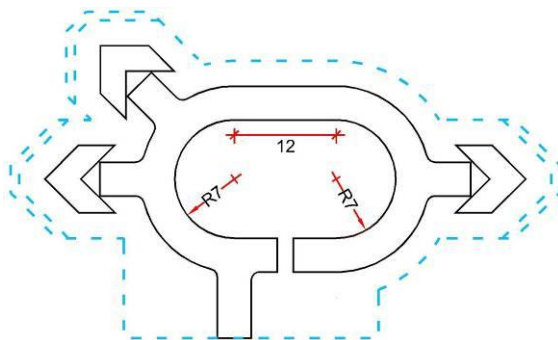


Figure 2.6.31:
Grade Separated Gyratory Roundabout with Minimum
Number of Relevant Exits Shown.

Table 2.6.5: Dimensions for Map Type Signs at Roundabouts

Description	s/w
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Horizontal Space to Side Border	3
Vertical Space to Bottom Border	2
Vertical Space to Top Border	3
N or M Route Number	8
R Route Number	6
L Route Number	5.6
Supplementary Routes in brackets	6
Vertical Space Between English and Irish versions of Place-Name	0.5
Vertical Space Between Different Place-Names	3
Vertical Space Between Route Number and Place-Name	3
Vertical Space Between Destination and Arrow	4
Clear Space Between Different Arm Destinations	12
Horizontal Space Between Route Number and Arrow	4
Horizontal Space Between Patch or Legend Border and Arrow	3

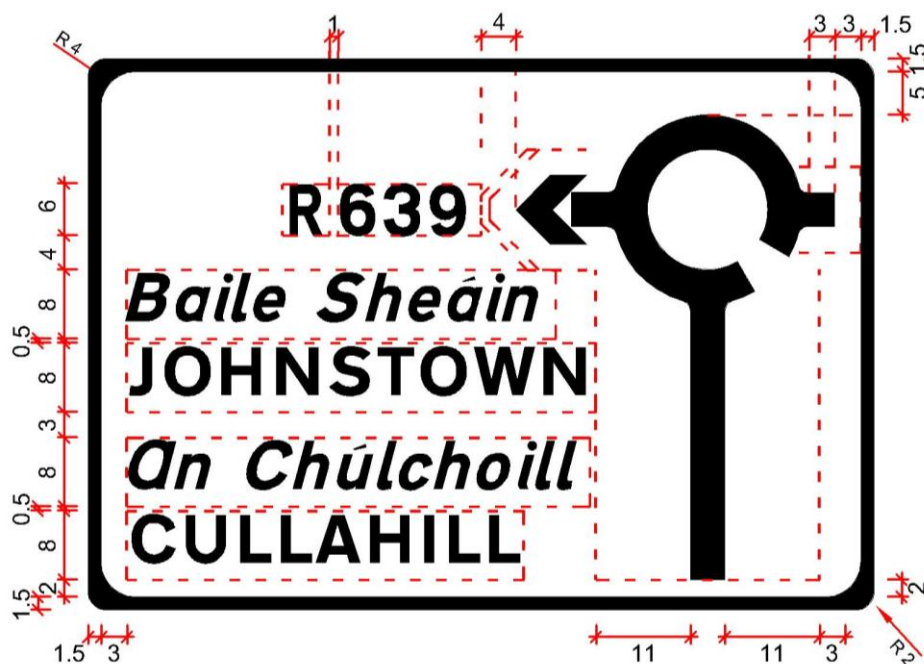


Figure 2.6.32:
Map Type Roundabout Sign on Regional Route with Stub Arm

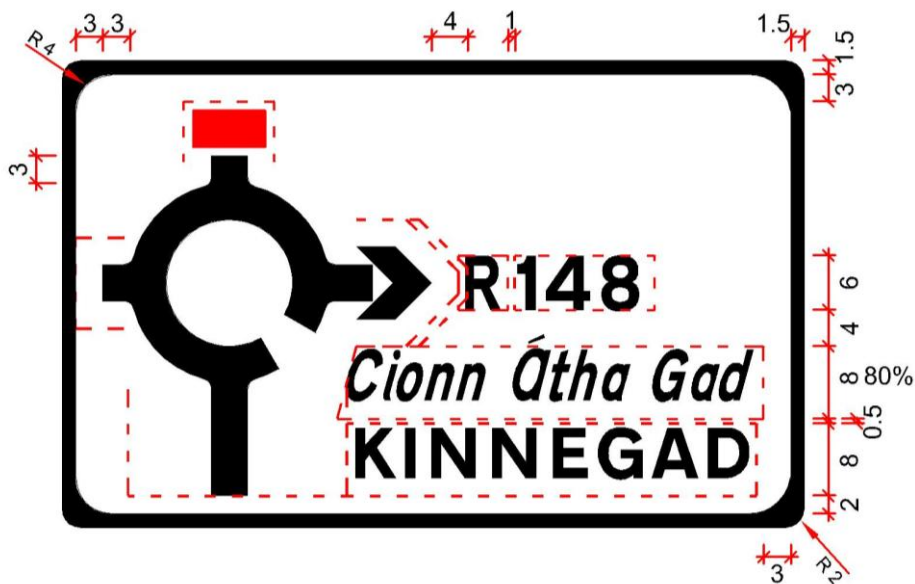


Figure 2.6.33:
Map Type Roundabout Sign on Regional Route with Stub and 'No Entry' Arms

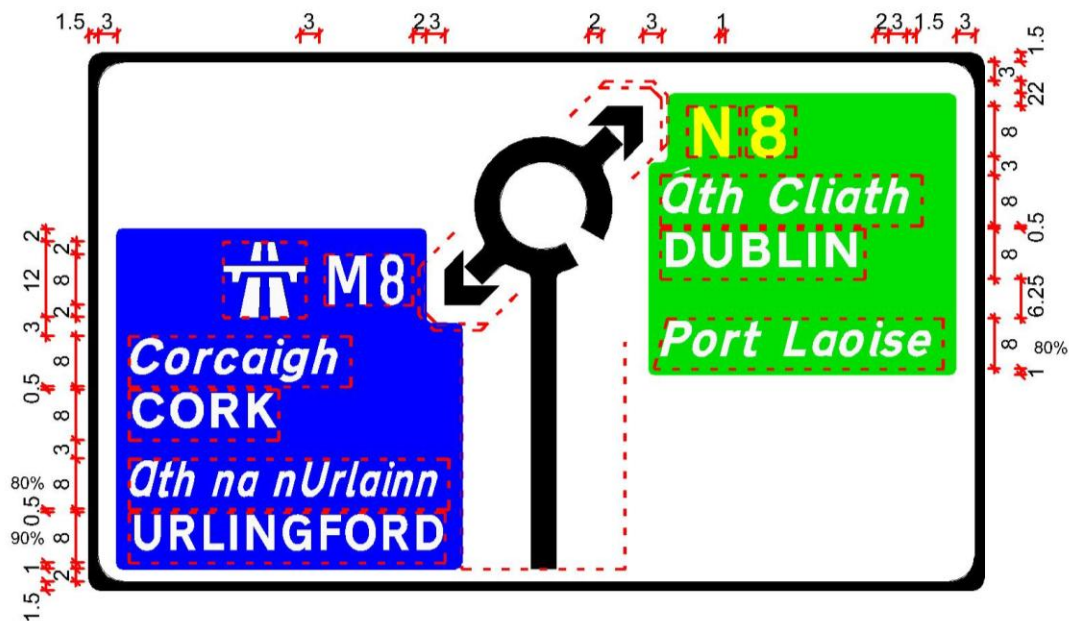


Figure 2.6.34:
Map Type Roundabout Sign on Regional Route with
Motorway and National Route Legend Panels

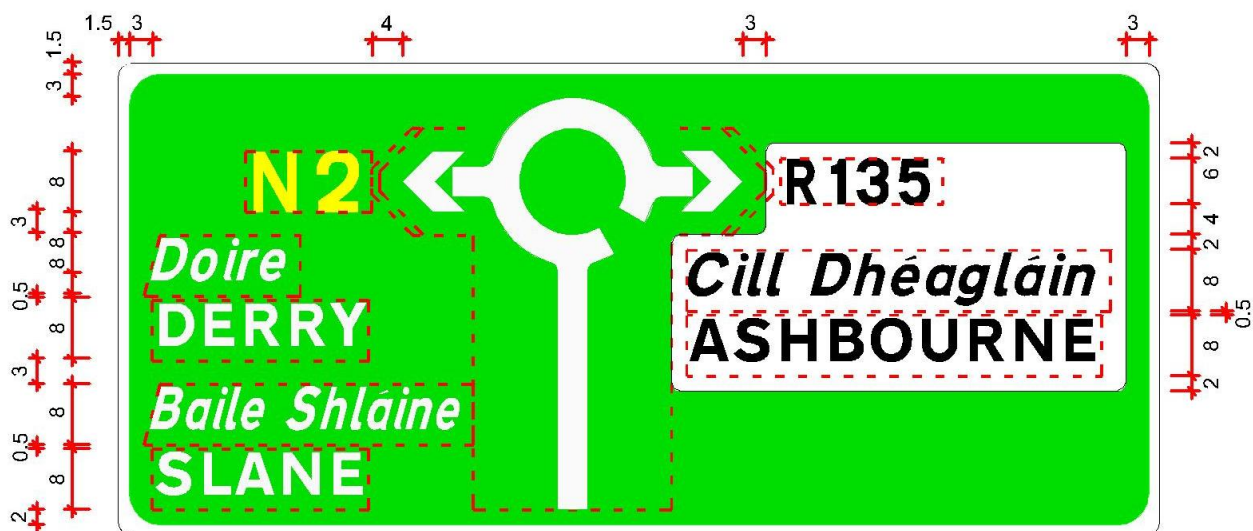


Figure 2.6.35:
Map Type Roundabout Sign on National Route with a Regional Legend Panel

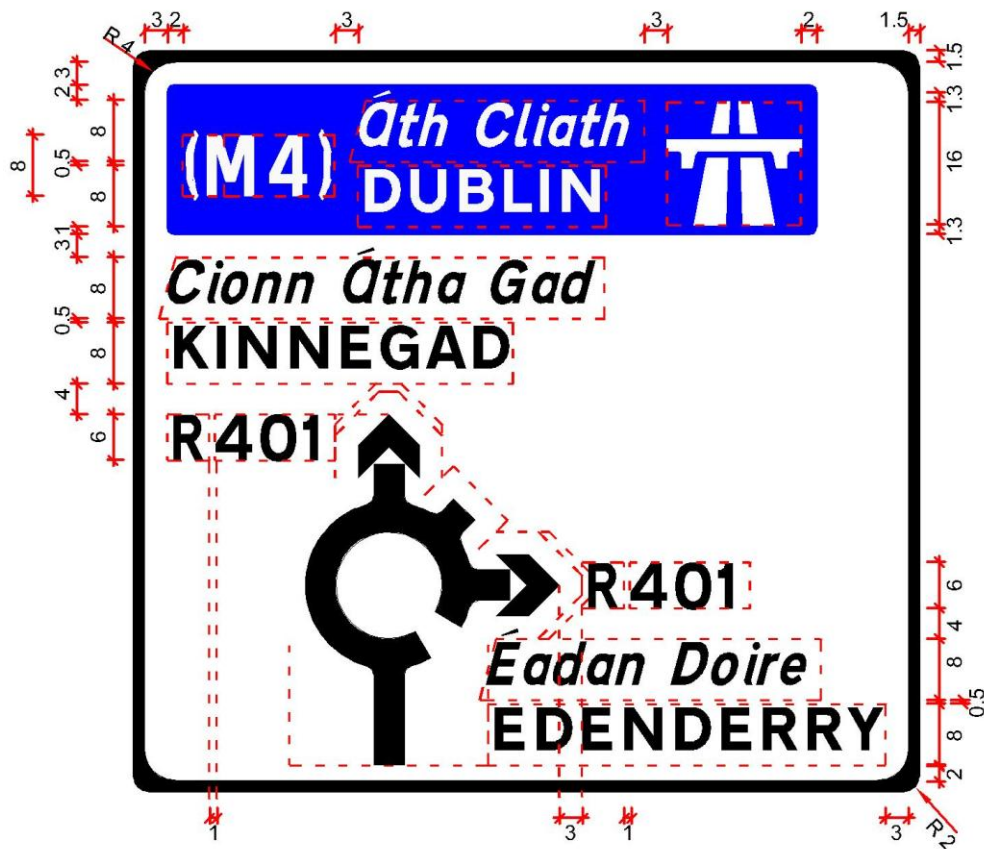
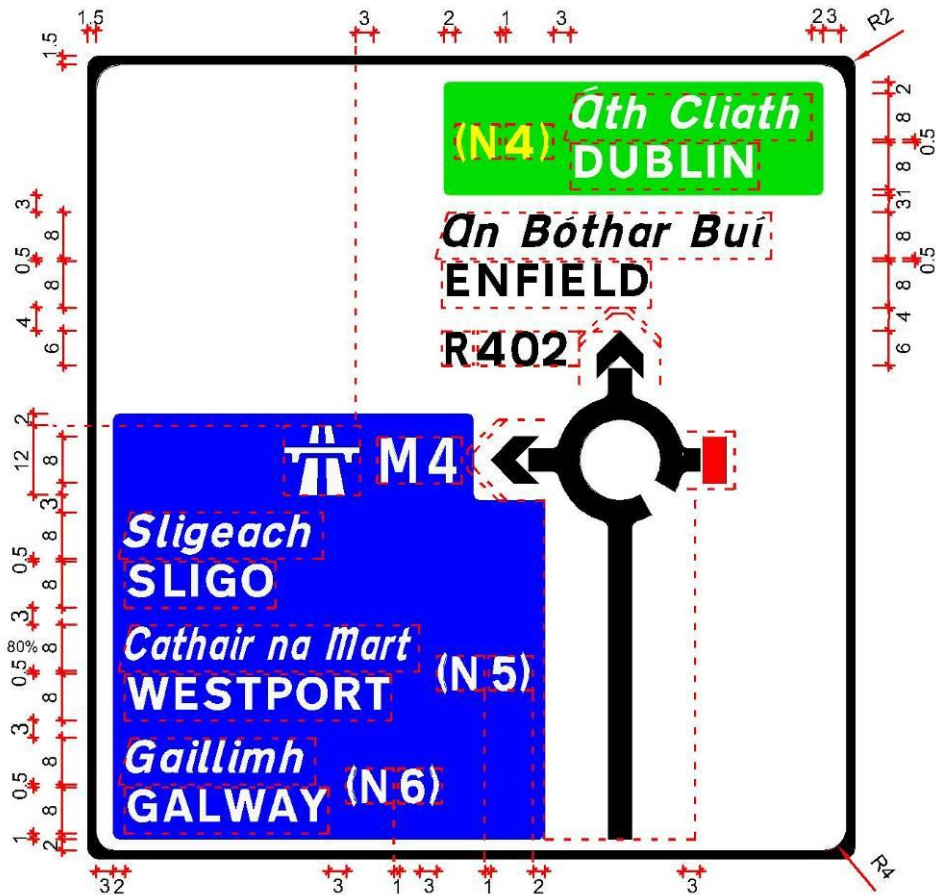


Figure 2.6.36:
Map Type Roundabout Sign on Regional Route with a Motorway Legend Panel



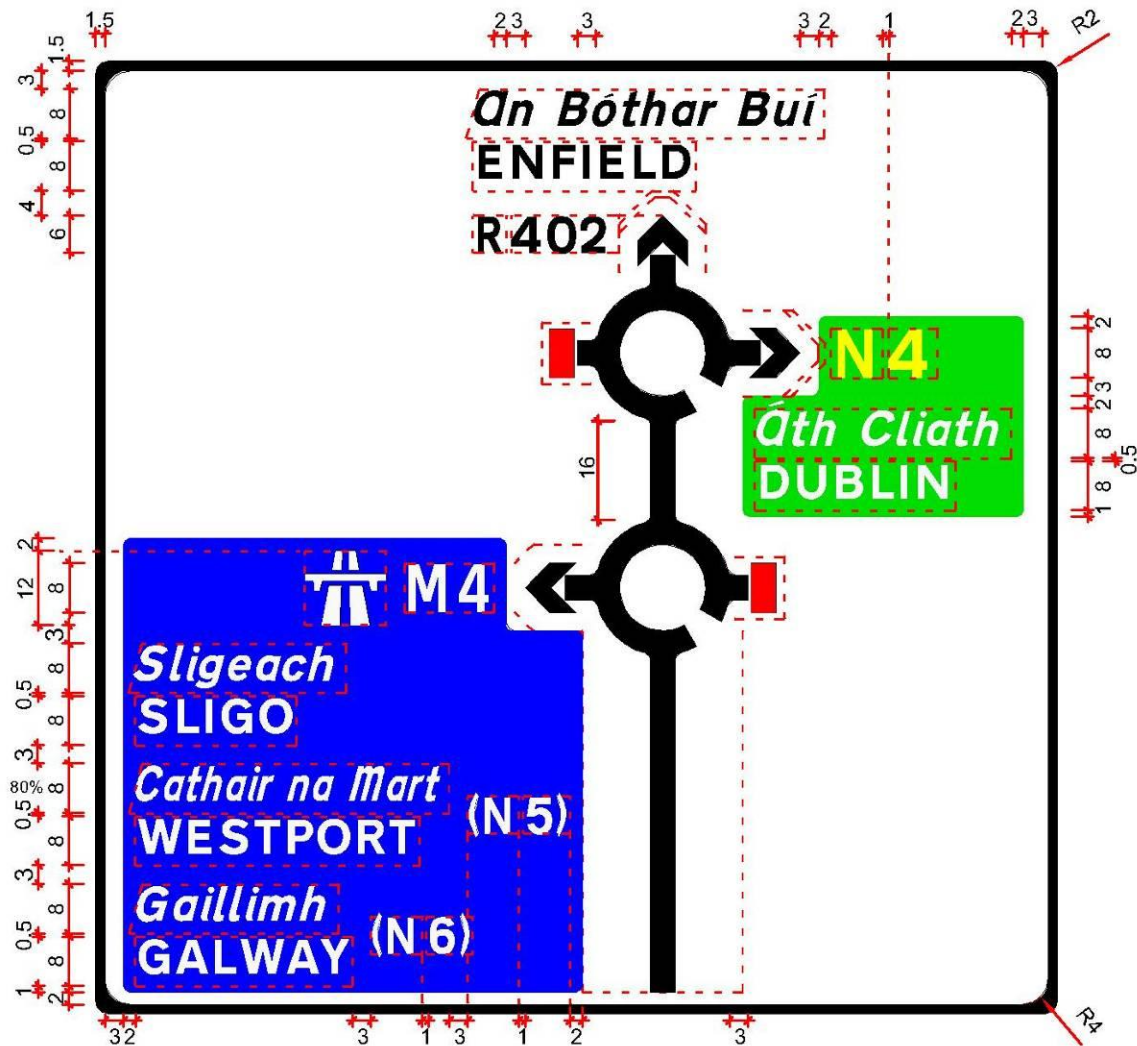


Figure 2.6.39:
Alternative Map Type Roundabout Sign on Regional Route at a Grade-Separated Junction showing the Layout of both Roundabouts from One Approach on One Sign

Note: Where space is available at ‘dumbbell’ interchanges, two separate signs should be provided for this type of layout, as shown in Figures 2.6.37 and 2.6.38.

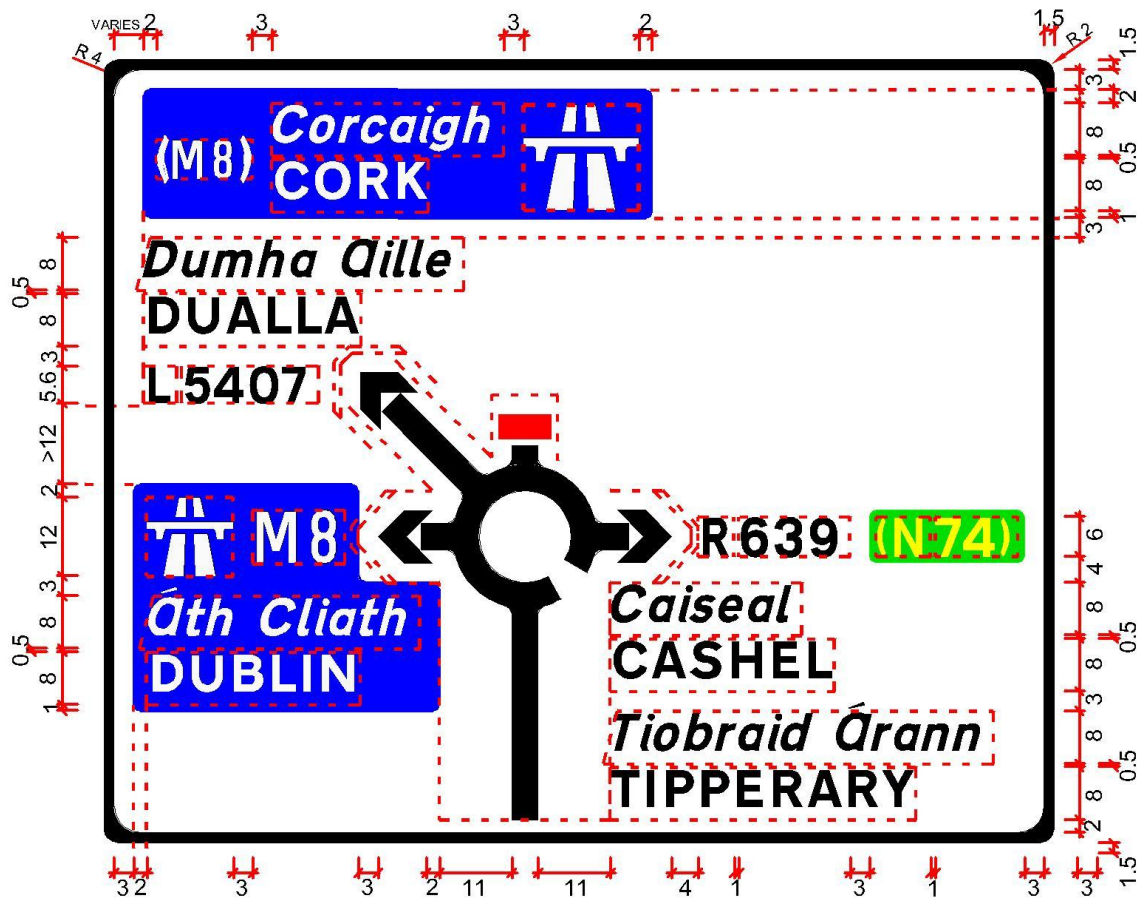


Figure 2.6.40:
Map Type Roundabout Sign showing the Layout Approaching the First Roundabout with
an Elongated Exit Arm

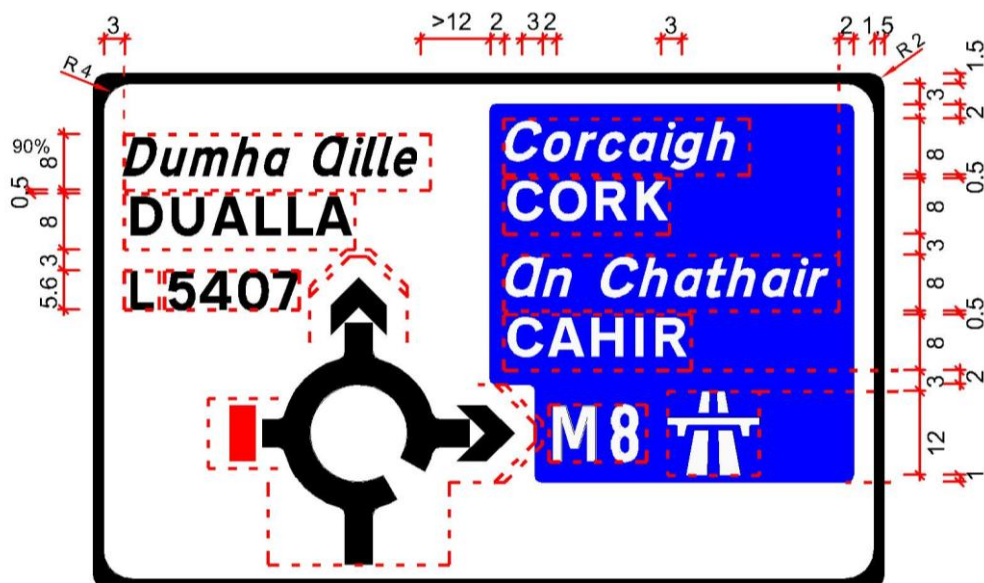


Figure 2.6.41:
Map Type Roundabout Sign showing the Layout Approaching the Second Roundabout

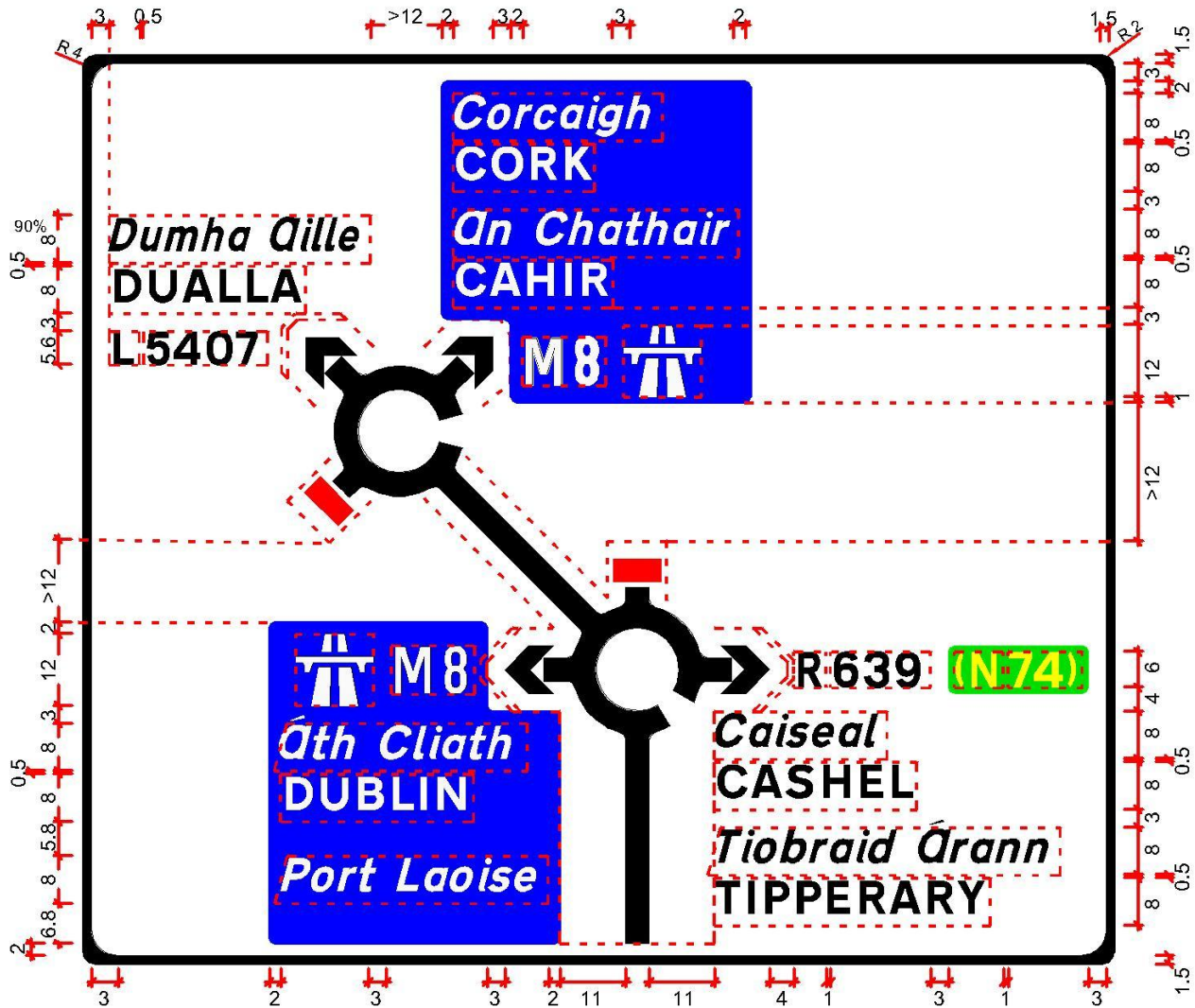


Figure 2.6.42:
Alternative Map Type Roundabout Sign on Regional Route at a Grade-Separated Junction
showing the Layout of both Roundabouts from One Approach on One Sign

Notes:

1. Where space is available at 'dumbbell' interchanges two separate signs should be provided for this type of layout as shown in Figures 2.6.40 and 2.6.41.
2. As another alternative to the above layout, the Stub and 'No Entry' arms can be deleted to help improve clarity of sign, as shown in Figure 2.6.43.

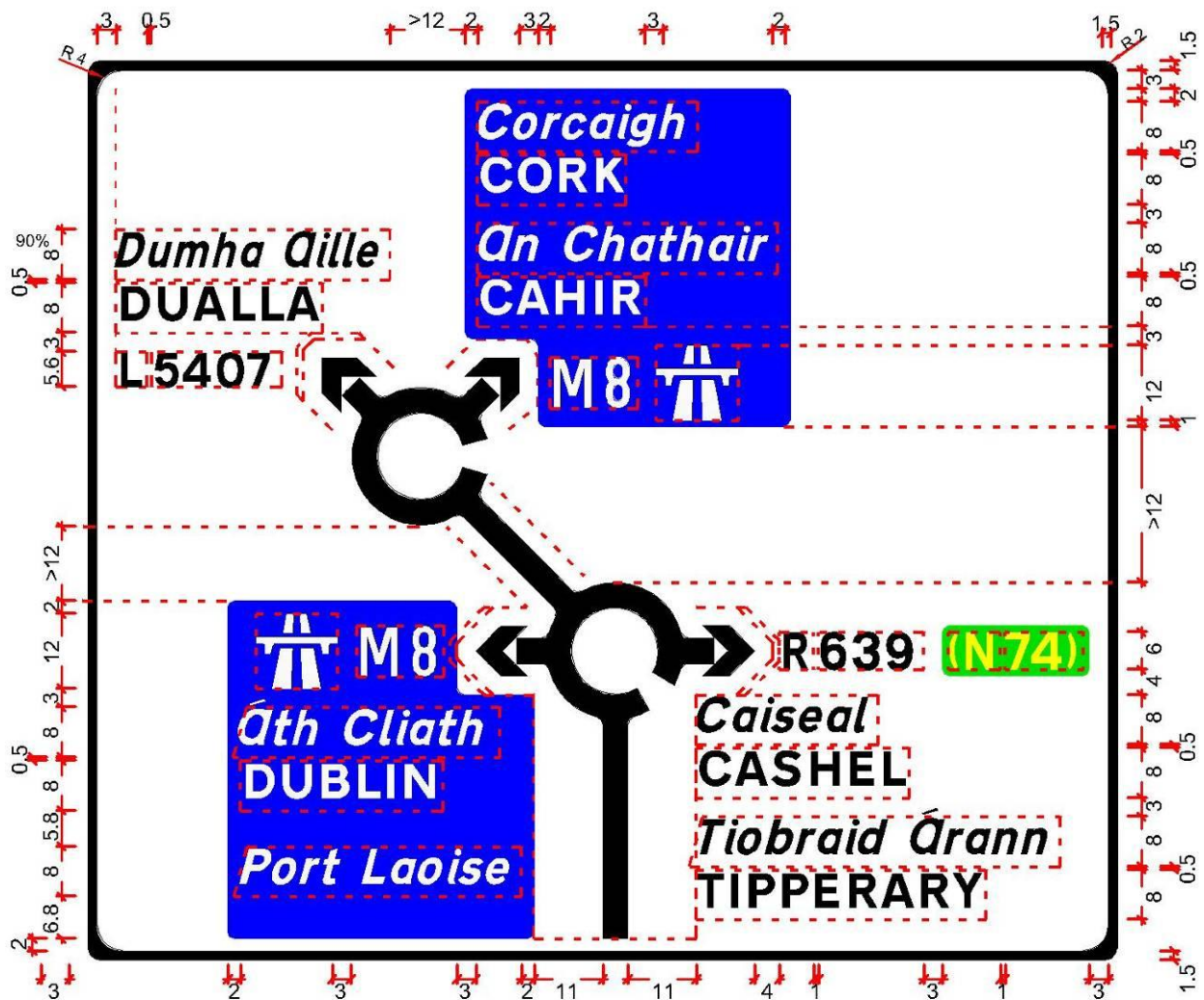


Figure 2.6.43:
Map Type Roundabout Sign Similar to Figure 2.6.42 but with 'No Entry' Arms Deleted to Improve the Clarity of the Sign

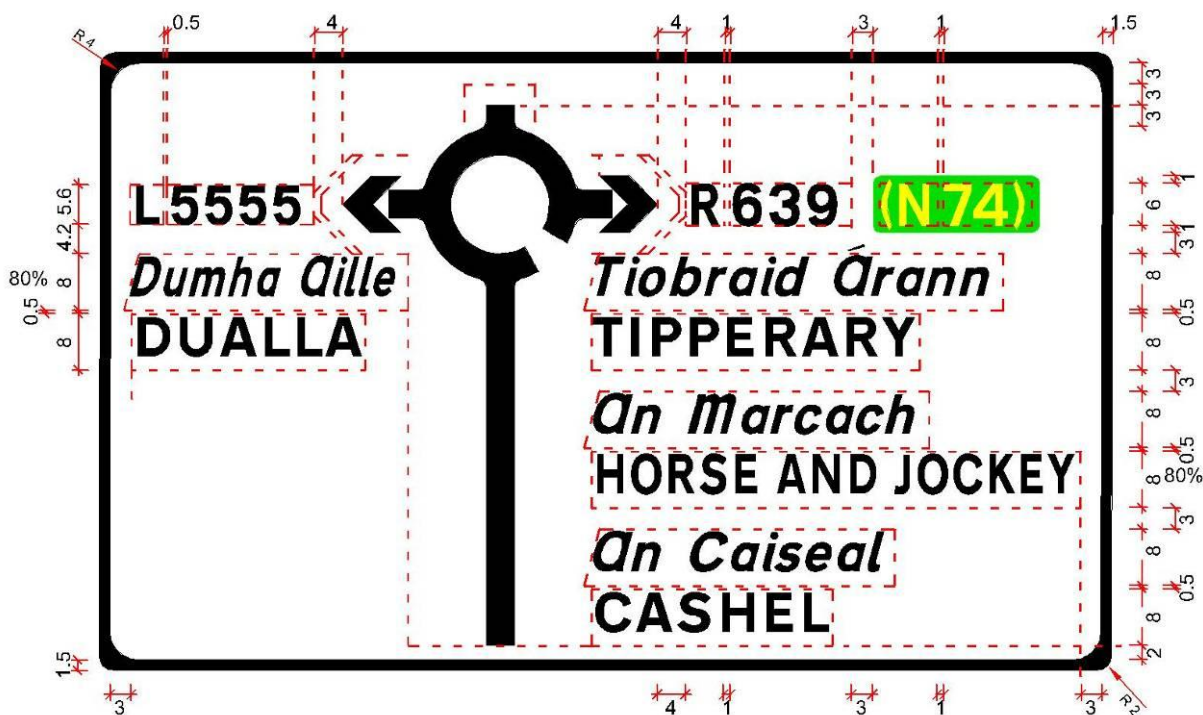


Figure 2.6.44:
Map Type Roundabout Sign showing the Layout Approaching the First Roundabout

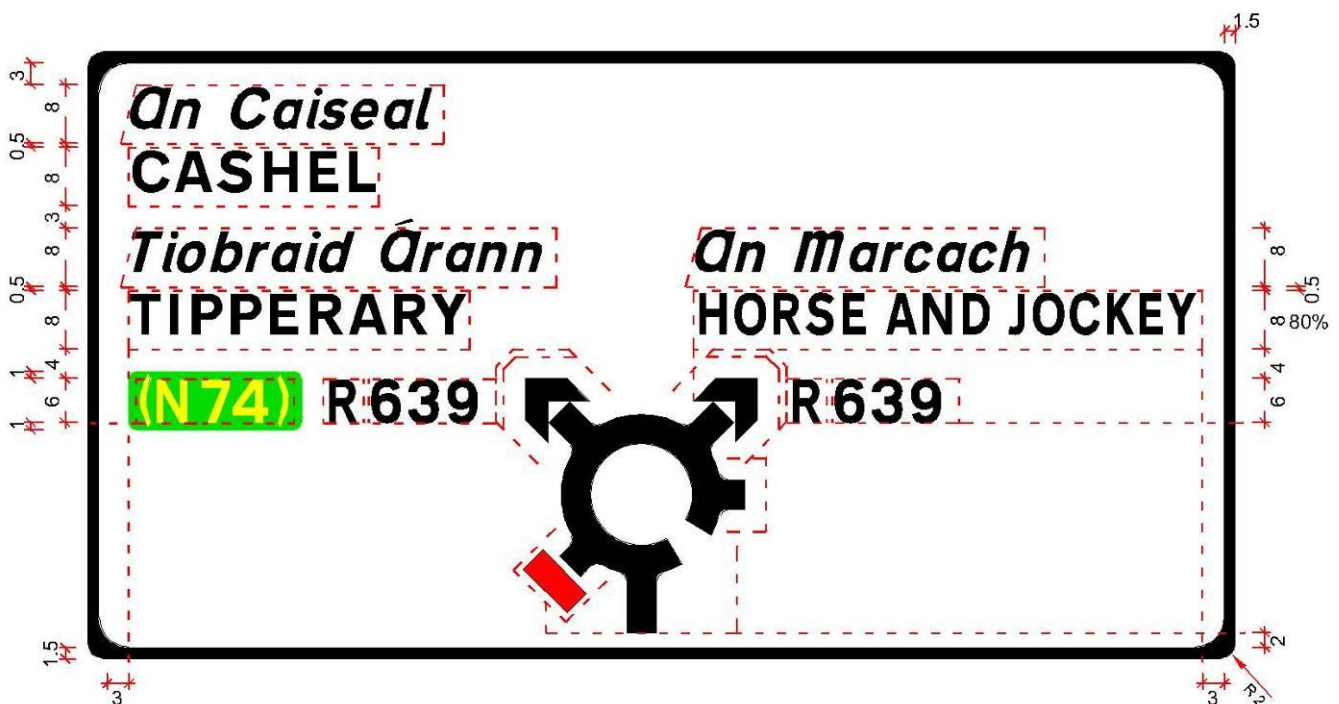


Figure 2.6.45:
Map Type Roundabout Sign showing the Layout Approaching the Second Roundabout

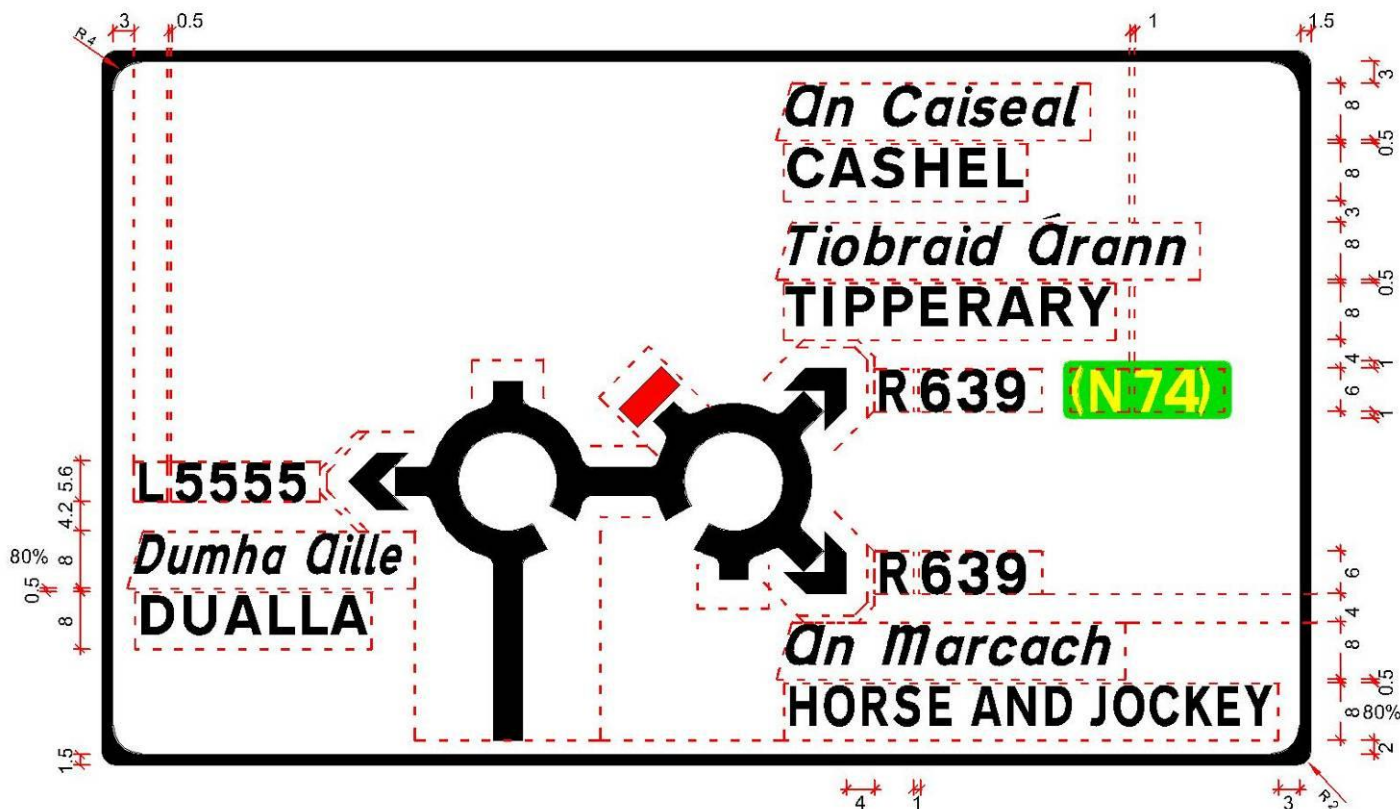


Figure 2.6.46:
Alternative Map Type Roundabout Sign on a Slip Road Exiting to a Regional Route
Showing the Layout of Both Roundabouts

Notes:

1. Where space is available at 'dumbbell' interchanges, two separate signs should be provided for this type of layout as shown in Figures 2.6.44 and 2.6.45.
2. On slip roads, the destinations relating to the route just exited are not listed and a stub arm is shown.

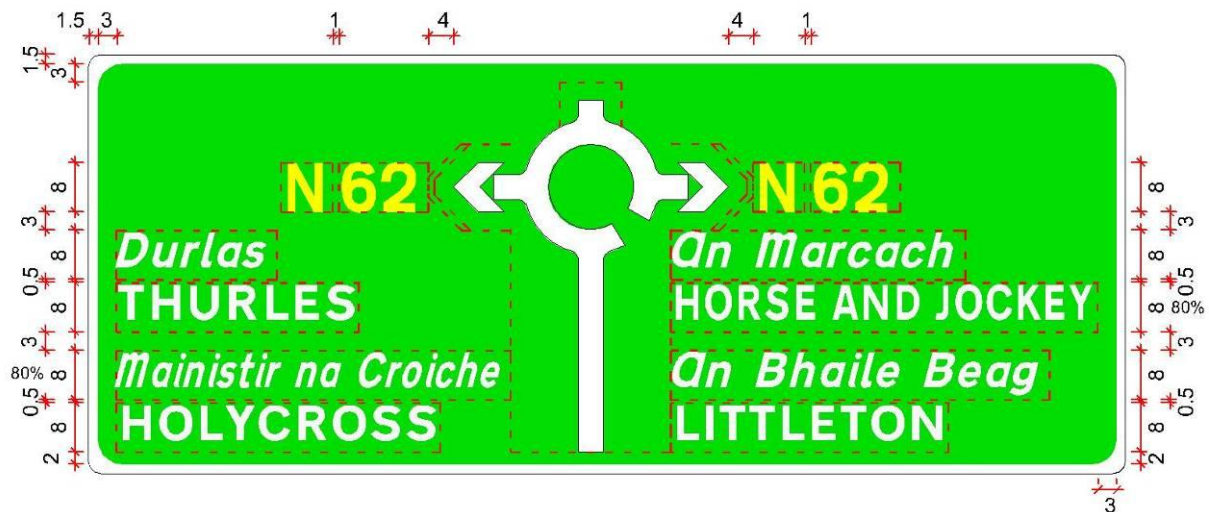


Figure 2.6.47:
Map Type Roundabout Sign on Slip Road Exiting from a Motorway to a National Route
Showing the Layout of the First Roundabout

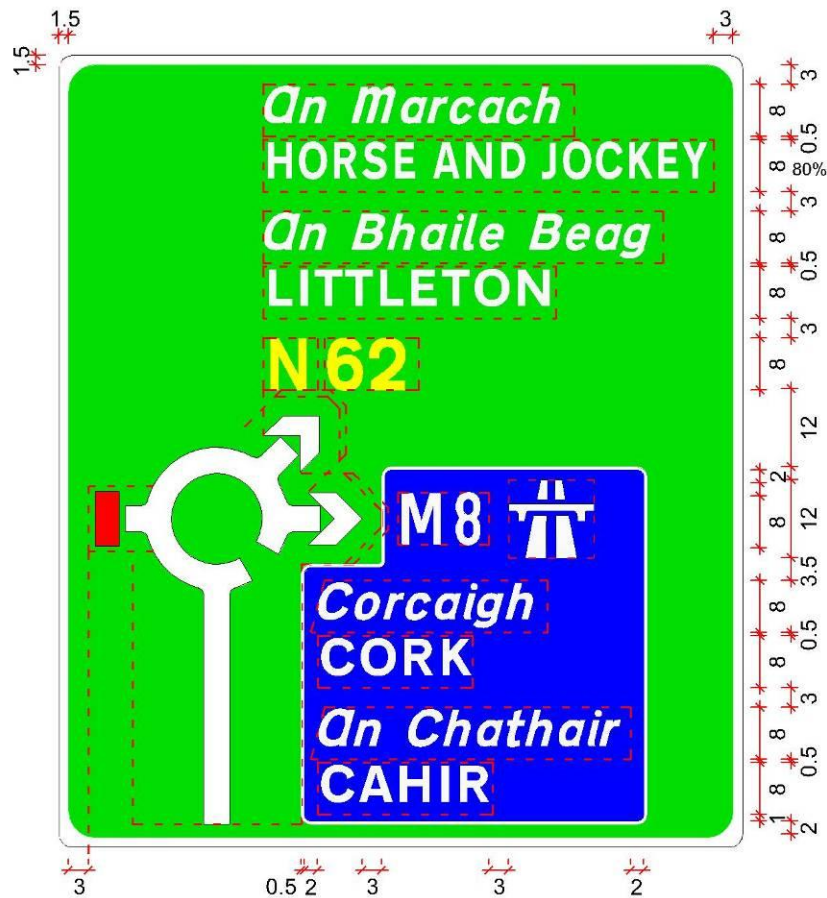


Figure 2.6.48:
Map Type Roundabout Sign on Over/Under Bridge
Showing the Layout of the Second Roundabout

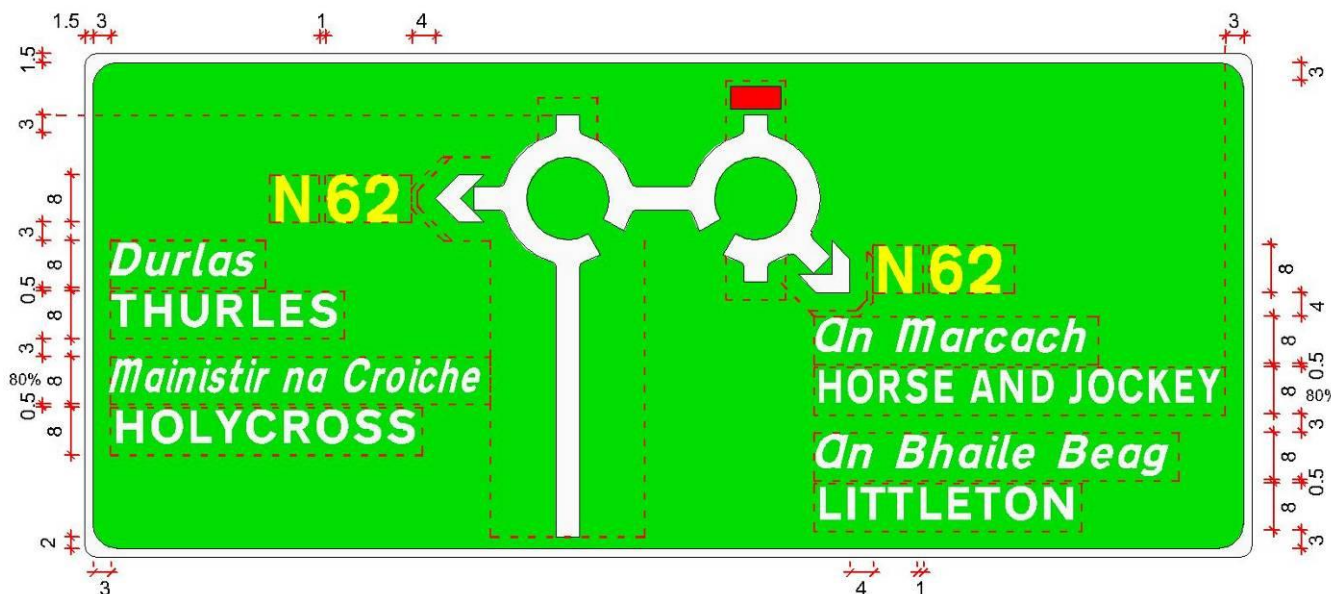


Figure 2.6.49:
Alternative Map Type Roundabout Sign on a Slip Road Exiting from a Motorway to a National Route Showing the Layout of both Roundabouts

Notes:

1. Where space is available at 'dumbbell' interchanges two separate signs should be provided for this type of layout as shown in Figures 2.6.47 and 2.6.48.
2. On slip roads, the destinations relating to the route just exited are not listed and a stub arm is shown.
3. If separate Map Type signs are used on the approaches to this junction on the N62, the Map Type signs will show destinations on the route intersected. Figure 2.6.48 shows a right exit to the M8 as this sign caters for traffic travelling on the N62 as well as exiting traffic.

LANE DESTINATION SIGNS

- 2.6.51 Lane Destination signs should only be used before junctions where destinations can only be reached by using specific lanes. With dedicated lanes on dual carriageways or in one-way streets, Lane Destination signs will assist in guiding vehicles into the most appropriate lane at junction approaches.
- 2.6.52 The background colour for the Lane Destination signs on a National route is green, and on Regional or Local routes is white.
- 2.6.53 Lane Destination signs use arrows and lane lines to direct motorists in to the correct lane for their destination on the approaches to junctions. See Section 2.3 for details of the types of arrows permitted.
- 2.6.54 A 'link line' is a horizontal line separating destinations from the lane lines or arrows below. A link line should be used only if two or more lanes relate to the same route or destination(s).
- 2.6.55 Single arrows referring to a route or destination ahead should be centred on the legend to which they refer (In the case of curved arrows their full width should be centred). However, when two arrows relate to the same route or destination, each arrow should be centred between the adjacent lane lines or border.
- 2.6.56 Lanes leading to the same destination should be depicted as having equal width. No single lane width should be more than twice the width of the narrowest lane. Where the lengths of legend are so different that they exceed the above ratio, the width of the narrowest lane must be increased. When this is done the horizontal spacing rules do not change, except that the gaps to the side border are increased (the legend being centred horizontally on the sign). Alternatively, the largest destination in the widest lane may be condensed, indented or abbreviated.
- 2.6.57 Where a lane line is truncated at the top of the sign, the minimum length of the top dash should be 3s/w. Where this cannot be achieved, the dash should be omitted.
- 2.6.58 Route numbers should normally appear underneath destinations and be justified left. However, route numbers may be justified right if they are associated with right turn lanes. When two destinations are shown in the same direction, the route number may appear alongside the destinations.
- 2.6.59 The dimensions for Lane Destination signs are given in Table 2.6.6 and represent distances between tiles. Dimensioned examples of Lane Destination signs are illustrated in Figures 2.6.51 to 2.6.53.



Figures 2.6.50: Typical Lane Destination Sign.

Table 2.6.6: Dimensions for Lane Destination Signs

Description	s/w
Border Width	1.5
Inner Radius of Border	4
Outer Radius of Border	2
Vertical Space to Top Border	3
Vertical Space to Bottom Border	2.5
Horizontal Space to Side Border	3
Lane Line Width	1
Length of Lane Line Segments	8
Length of Space Between Lane Line Segments	4
Vertical Space Above or Below Lane Lines	1.5
Link Line Width	1
Vertical Space Above Link Line	1.5
Vertical Space Below Link Line	2.5
Horizontal Space Between L, R, N and M Route Letters and Route Numerals	See Table 2.3.4
Mainline N or M Route Letters and Numerals	12 – route only 8 – with destination
Diverge M or N Letters and Numerals	8
R and L Letters and Numerals	6

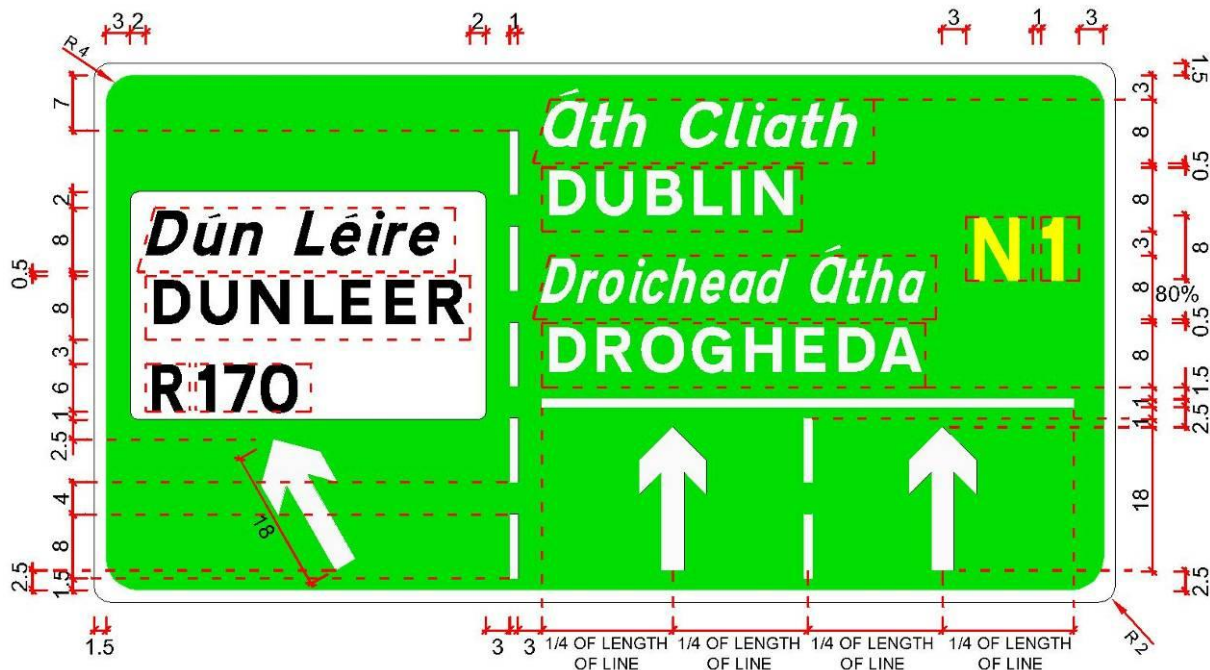
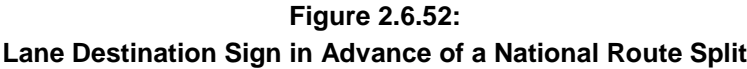


Figure 2.6.51:
Lane Destination Sign in Advance of a Regional Route Exit



DIRECTION SIGNS

2.6.60 Direction signs (sometimes called Flag signs) are located at the road junction itself and point along exits from the junction. They perform two main functions:

- They indicate the location of the junction; and
- They show destinations on the routes indicated.

2.6.61 In order to ensure continuity of signage, Direction signs at a junction shall include the complete set of route numbers and destinations shown on the associated Advance Direction signs.

2.6.62 Direction signs for “Local Access”, “Local Road”, and “Cul-de-Sac” should not be used.

2.6.63 A few anomalies occur when a short length of link road joins two National routes and at staggered junctions with 500m or less between the routes. These are explained in the Proximity Rule in Section 2.3.

2.6.64 Direction signs must show a route number and one or more destinations in accordance with Table 2.2.4.

2.6.65 Normally there should be no more than two Direction signs in any one direction at a junction. However, complex and staggered junctions may require more. In such cases the maximum number permitted is four.

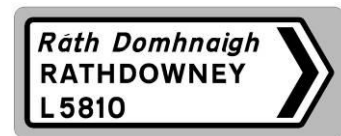
2.6.66 Where there is only one Direction sign pointing in a direction, the destination and the route number are shown with a distance if space is available.

2.6.67 Where there are two or more Direction signs pointing in the same direction, the route number should appear in the top Direction sign and the distance may be omitted to accommodate this. Where appropriate, the distance may appear on all other Direction signs below in that direction.

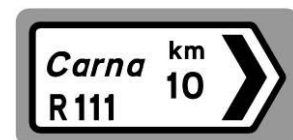
2.6.68 The route number can be positioned either to the side of or below the destination in order to produce an economic layout.

2.6.69 If there is no Route Confirmatory sign present after the junction, a distance should be shown. When distances are shown they are always accompanied by the abbreviation “km” which should be shown in lower case English Transport Heavy font at 6s/w (75% of the text size). The position of the “km” and distances vary according to the number and language of destinations shown.

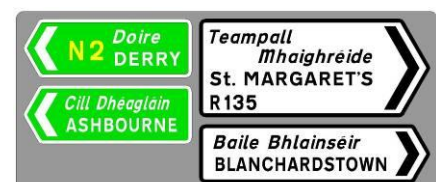
2.6.70 Where a terminal destination is indicated on a Direction sign no distance should appear.



**Figures 2.6.54:
Direction Sign to a Local
Road**



**Figures 2.6.55:
Irish Only Direction Sign
and Distance**



**Figure 2.6.56:
Grouped Destinations**

- 2.6.71 Where there are multiple Direction signs at one location, they are grouped together on a single sign-face with a grey backing board. The signs should be aligned either, left and right (see Figure 2.6.56) or vertically left above right with a minimum stagger of 4s/w to emphasise the directions (see Figure 2.6.57).
- 2.6.72 A double destination is only permitted within the same Direction sign when signing both terminals of the one route in the one direction (see Figure 2.6.58).
- 2.6.73 Where existing Direction signs which do not incorporate a route number are to be left in place, a separate sign indicating the route number should be provided above the main sign. Alternatively, this route number sign may be mounted below the main sign if sufficient clearance is available.
- 2.6.74 Where Direction signs are positioned at right angles to one another at the same location, they must be mounted at different heights so that they are visible to the driver, with the lowest sign mounted at the correct height to provide clearance for cyclists or pedestrians.
- 2.6.75 The dimensions for Direction signs are given in Tables 2.6.7 and 2.6.8 and represent distances between tiles. Dimensioned examples of such signs are illustrated in Figures 2.6.59 to 2.6.75. Refer to Table 2.3.1 for 'x'-heights.
- 2.6.76 For roundabouts with a central island diameter greater than 20m, a "lead-on" or "push around" Direction sign, showing the destinations for the next exit is to be provided. A "lead-on" or "push around" sign is essentially a mirror image of the Direction sign provided at the next exit on the roundabout. The splitter islands should be designed to accommodate both the Direction sign pointing down that exit and the 'lead-on' sign indicating the next exit.



Figures 2.6.57:
Bi-direction Direction Sign



Figures 2.6.58:
Example of Double
Destinations within the
same Direction Sign.

Table 2.6.7: Spacing According to Language and Number of Destinations

Description	s/w			
	One Destination		Two Destinations	
	Irish Only	Bilingual	Irish Only	Bilingual
Vertical Space between Irish and English versions of Place-Names	-	1	-	0.5
Vertical Space between Separate Destinations	-	-	1.5	2
Vertical Space between Place-Name and Top Border	5	2.5	2.5	2.5
Vertical Space between Place-Name and Bottom Border	5	1.5	1.5	1.5

Table 2.6.8: Dimensions for Designing Direction Signs

Description	s/w
Border Width	1.5
Inner Radius of Border ⁽ⁱ⁾	1
Outer Radius of Border	2.5
Outer Border Radius of Top and Bottom Corners at Pointed End	2
Outer Border Radius of Point ⁽ⁱ⁾	1.5
Horizontal Space Between Place-names and Side Border	2.5
Chevron Width	4
Vertical Space Between Chevron and Top Border	1.5
Horizontal Space Between Chevron and Side Border	2.5
Vertical Space Between Chevron and Bottom Border	1.5
Horizontal Gap Between Place-Names and Route Numbers and Chevron	3
End Radius	1.5
N or M Route Number	8
R Route Number	6
L Route Number	5.6
Supplementary Routes in brackets	6

Notes:

- (i) The inner border is not radiused at the point on the sign.
- (ii) End radii greater than those above will be accepted where extruded section framing dictates.

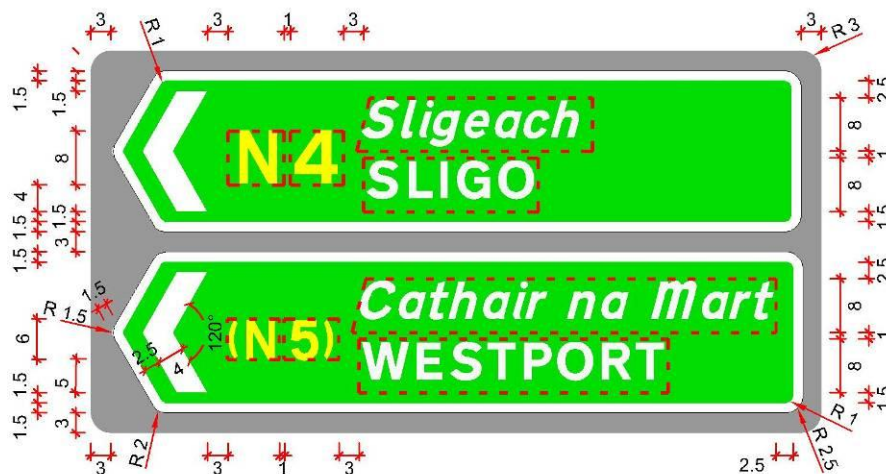


Figure 2.6.59:
Direction Sign for a National Route

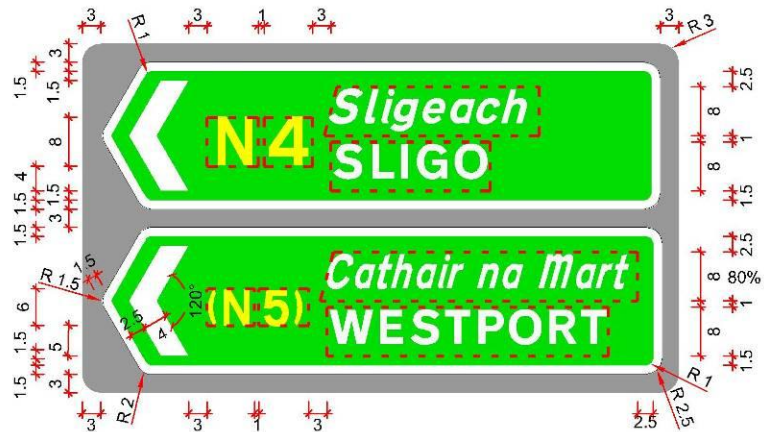


Figure 2.6.60:
Alternative Direction Sign for a National Route
with Cathair na Mart Condensed by 80% to Reduce the Overall Width

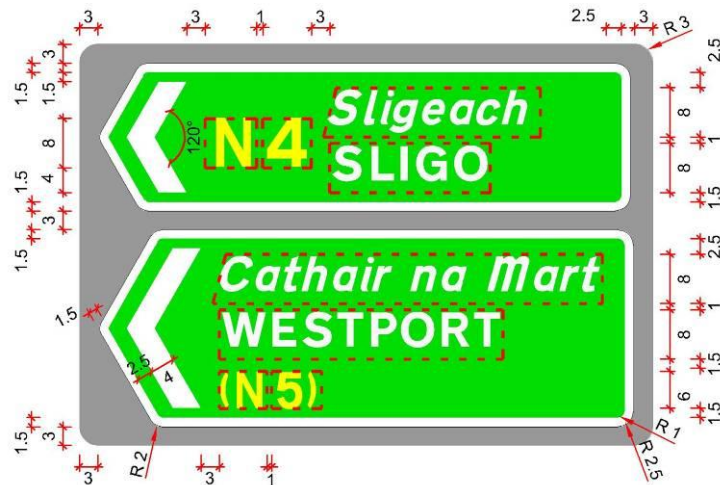


Figure 2.6.61:
Alternative Direction Sign for a National Route
with N5 Positioned Under the Destination and no Condensing

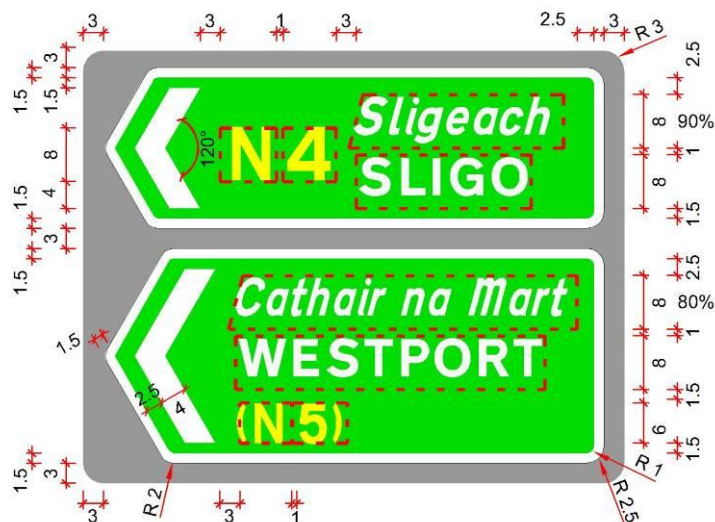


Figure 2.6.62:
Alternative Direction Sign for a National Route
with Cathair na Mart Condensed by 80% and N5 positioned Under the Destination

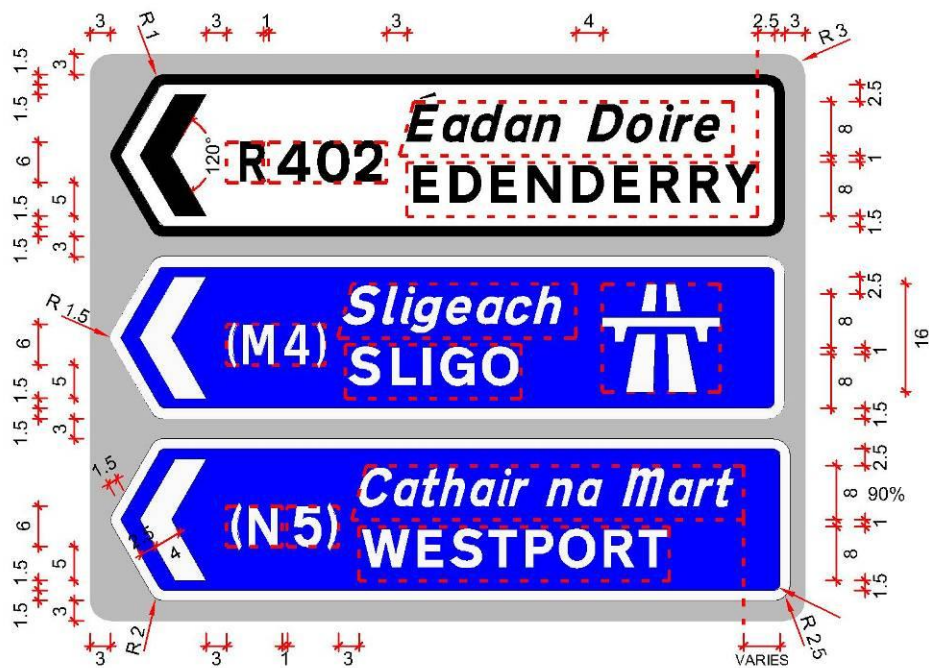


Figure 2.6.63:
Mixed Route Direction Sign when the Motorway is within 500m



Figure 2.6.64:
Direction Sign for a Regional Route



Figure 2.6.65:
Alternative Layout for Direction Sign for a Regional Route



Figure 2.6.66:
Alternative Layout for Direction Sign for a Regional Route
with Distance in Kilometres

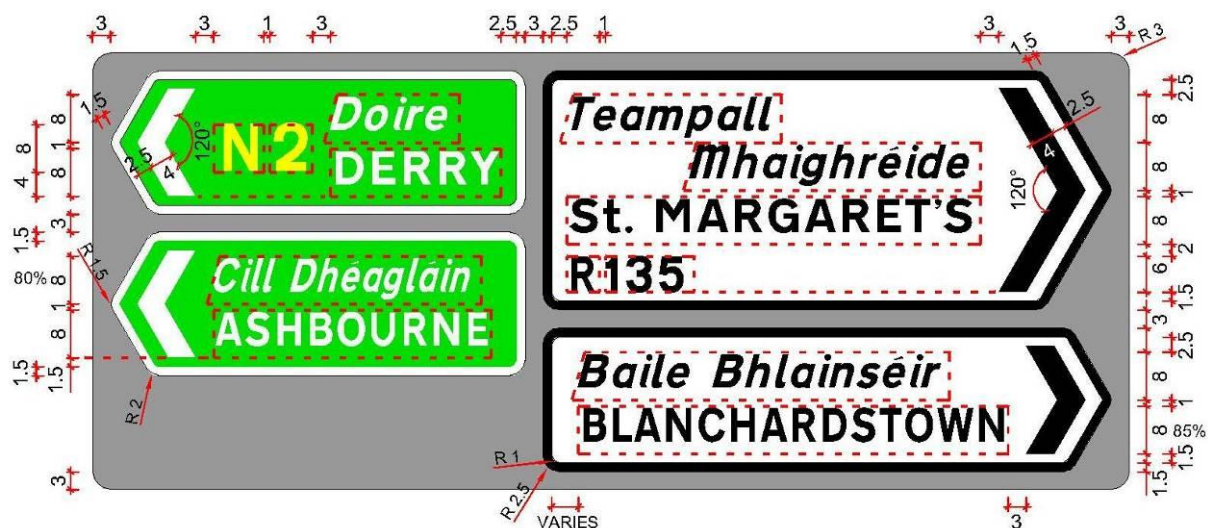
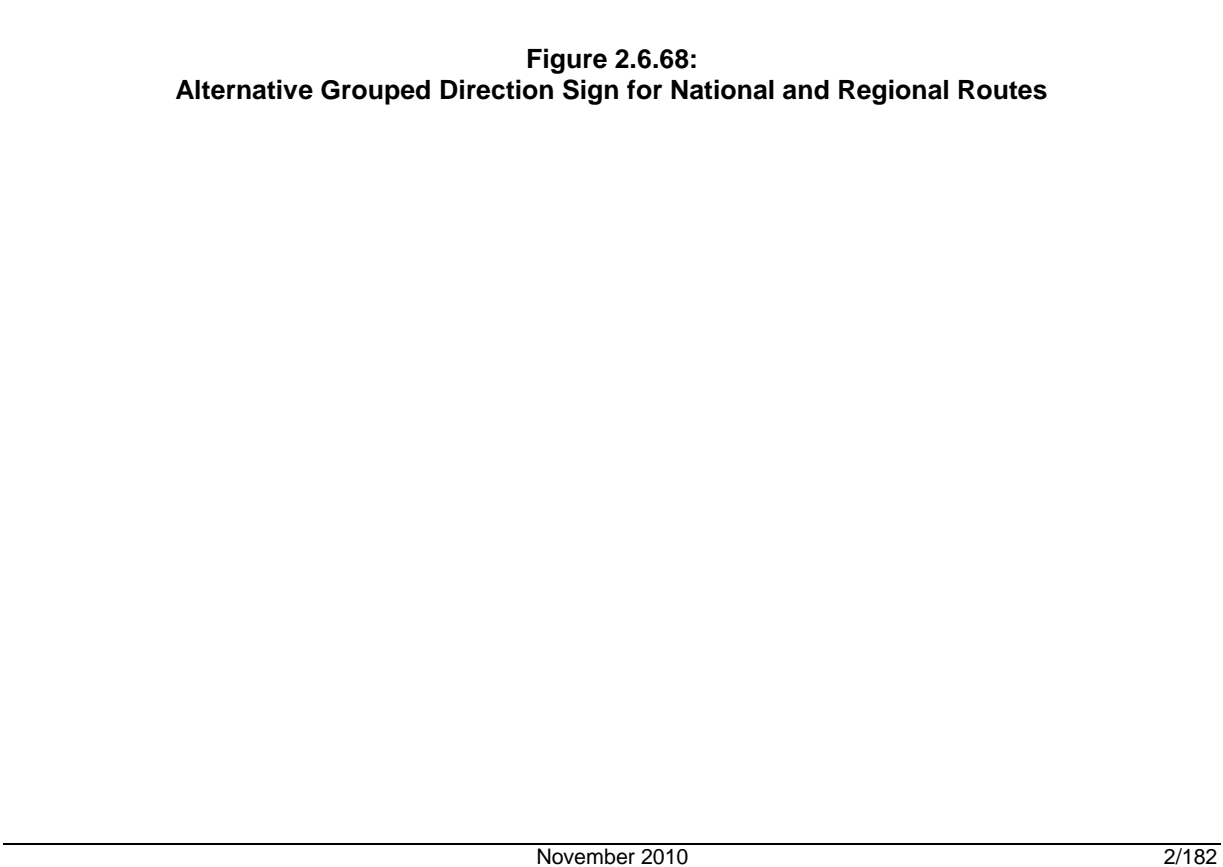


Figure 2.6.67:
Grouped Direction Sign for National and Regional Routes



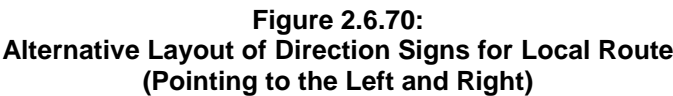




Figure 2.6.71:
Layout of Direction Signs with a Distance
(Pointing to the Left and Right)

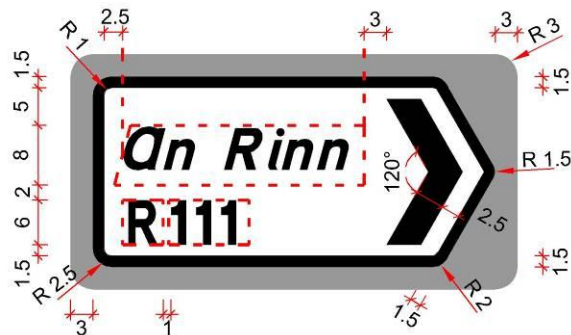


Figure 2.6.72:
Direction Sign for Regional Route in a Gaelteacht Area with One Destination – Irish Only

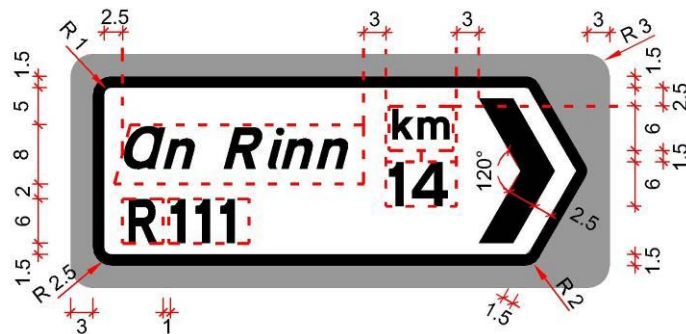


Figure 2.6.73:
Direction Sign for Regional Route in a Gaelteacht Area with One Destination
– Irish Only with a Distance

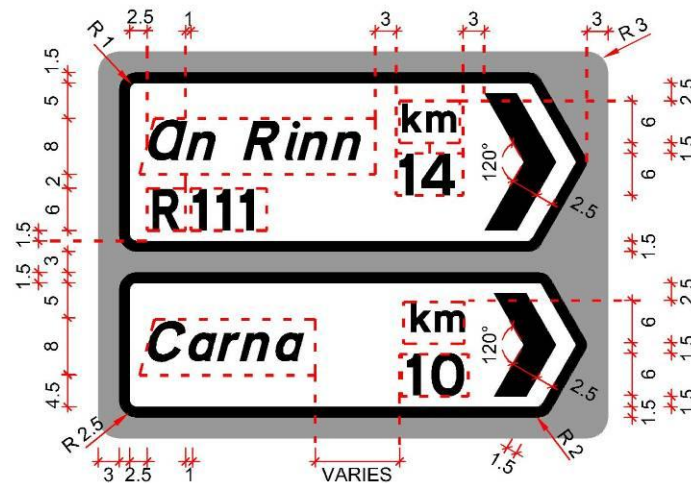


Figure 2.6.74:
Direction Sign for Regional Route in a Gaeltacht Area with Two Destinations
– Irish Only with Distances

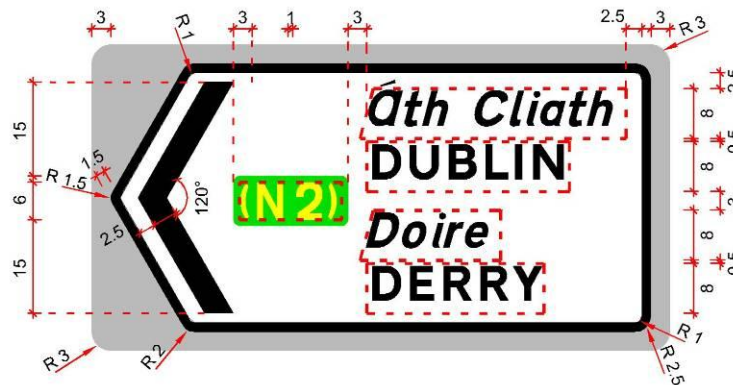


Figure 2.6.75:
National Route Double Terminal Destination Direction Sign from a Regional Route

FINGERPOST SIGNS

- 2.6.77 Fingerpost signs are small Direction signs mounted on a single post. They may be used at minor junctions on Regional and Local roads where space is restricted and as agreed with the Overseeing Organisation.
- 2.6.78 Where fingerpost signs are positioned at right angles to one another on the same post they must be mounted at different heights so that they are visible to the driver, with the lowest sign mounted at the correct height to provide clearance for cyclists or pedestrians.
- 2.6.79 On fingerpost signs the maximum length is 1100mm. If the design is longer than this the text should be condensed and the chevrons may be omitted in exceptional circumstances only.
- 2.6.80 Fingerpost signs are double sided and designed using the same design parameters as set out for Direction signs in Table 2.6.8.

LOCAL ROAD DIRECTION SIGNS AND NAME PLATES

2.6.81 Local Road Directions signs provide the local road number on a Direction sign with a grey backing board. These signs are designed using the design parameters as set in Table 2.6.9 and are positioned on either side of the local road at the mouth of the junction. See Figures 2.6.76 and 2.6.78.



Figure 2.6.76 Local Road Direction Sign

Table 2.6.9: Dimensions for Designing Local Road Direction Signs

Description	s/w
Border Width	1.5
Inner Radius of Border ⁽ⁱ⁾	1
Outer Radius of Border	2.5
Outer Border Radius of Top and Bottom Corners at Pointed End	2
Outer Border Radius of Point ⁽ⁱ⁾	1.5
Horizontal Space Route Number and Side Border	2.5
Chevron Width	4
Vertical Space Between Chevron and Top Border	1.5
Vertical Space Between Route Number and Top Border	5
Horizontal Space Between Chevron and Side Border	2.5
Vertical Space Between Chevron and Bottom Border	1.5
Vertical Space Between Route Number and Bottom Border	5
Horizontal Gap Between Route Number and Chevron	3
End Radius	1.5
Text Height	6
Horizontal Gap Between Route Letter & Number	0.5

Notes:

- (i) The inner border is not radiused at the point on the sign.
- (ii) End radii greater than those above will be accepted where extruded section framing dictates.

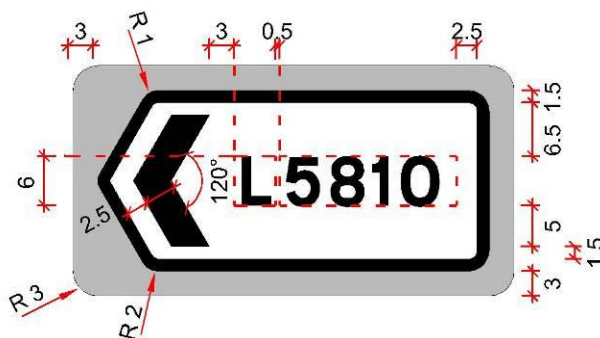


Figure 2.6.77:
Local Road Direction Sign

2.6.82 Local Road Name Plates provide the local road number and are designed by applying the design parameters set out in Table 2.6.10. They are positioned on either side of the local road at the mouth of the junction adjacent to and parallel to the boundary wall, fence or hedge.



Figure 2.6.78:
Local Road Name Plate

Table 2.6.10: Dimensions for Designing Local Road Name Plate Signs

Description	s/w
Border Width	1
Inner Radius of Border	3
Outer Radius of Border	2
Gap Between Route Number and Side Borders	2
Gap Between Route Number and Top or Bottom Borders	2
Gap Between Route Letter and Number	0.5
Horizontal Gap Between Route Letter & Number	0.5
Text Height	5.6

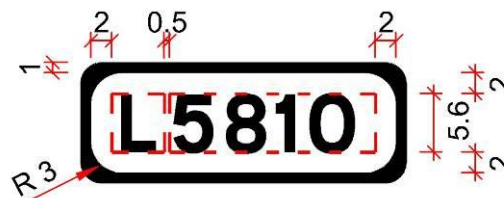


Figure 2.6.79:
Local Road Name Plate

ROUTE CONFIRMATORY SIGNS

2.6.83 Route Confirmatory signs should be provided at junctions in accordance with Tables 2.2.2 and 2.2.3. They serve two purposes:

- (i) To confirm to road users that they have taken their intended route; and
- (ii) To give additional information about the road ahead.

2.6.84 In addition to the requirements for Route Confirmatory signs in Tables 2.2.2 to 2.2.3, an additional Route Confirmatory sign should be placed at a suitable intermediate location where the interval between signs would otherwise be greater than 12km.

2.6.85 A Route Confirmatory sign has the route number placed centrally at the top of the sign similar to a route marker sign and followed by a list of destinations, as defined in Table 2.2.4 and arranged in distance order with the furthest appearing at the top, as described in Section 2.2.

2.6.86 When multiple destinations are shown, the sign is essentially a combination of a Route Marker sign and a Route Confirmatory sign, with the 'x'-height for Route Confirmatory signs applied in accordance with Table 2.3.1.

2.6.87 Where only one destination is shown, the route number appears within the sign and the gap between the Irish and English version of the destination is increased from 1s/w to 3s/w.

2.6.88 Route Confirmatory signs should generally show a maximum of four destinations ahead but must contain the destinations indicated previously on Advance Direction signs.

2.6.89 Distances in kilometres are 6s/w in the Route font (see Figure 2.3.13) and should be shown adjacent to each destination and aligned with the top of the English tile. For Irish only destinations the distances appear in line with the base of the place-name.

2.6.90 Distances are always accompanied by the abbreviation "km" in tiles. The "km" tile is 6s/w using the Transport Heavy font and is aligned with the top of the Irish tile of the first place-name indicated or if Irish only destination 3s/w above and centred over the first distance. Subsequent distances or brackets are right justified below.

2.6.91 Significant destinations that can be reached by turning off the route from a junction ahead can be displayed in brackets. The position of the bracketed destinations is governed by the distance to the junction at which the road user must turn off the main route to reach that destination, irrespective of the overall distance to the destination itself (see also Section 2.3).



Figure 2.6.80:
Route Confirmatory Sign
for Regional Route with a
Spur Destination



Figure 2.6.81:
Route Confirmatory Sign
for National Route with a
Single Destination



Figure 2.6.82:
Route Confirmatory Sign
in a Gaelteacht Area

- 2.6.92 Significant routes, ports and ferries can be referenced on a Route Confirmatory sign by placing the route numbers and symbols below the list of destinations and separated by a line as shown in Figure 2.6.84. This layout must be agreed with the Overseeing Organisation.
- 2.6.93 Route Confirmatory signs are coloured over their entire area according to the status of the road on which they are located. This is regardless of whether destinations reached by turning onto another classification of route are mentioned.
- 2.6.94 Route Confirmatory signs must be correctly sized and be clearly visible to approaching drivers, if the information is to be read and understood. Recommendations on sizes and clear visibility distances of Route Confirmatory signs are provided in Table 2.3.1.
- 2.6.95 Route Confirmatory signs may be provided approximately 100 to 150m after a junction or at the edge of town or village, but should be provided on National and Regional routes at intervals of no greater than 12km.
- 2.6.96 If a Route Confirmatory sign cannot be provided, a Route Marker sign may be used instead. This may be justified in dense urban areas where junctions are frequent and it is not possible to provide full Route Confirmatory signs.
- 2.6.97 The dimensions for Route Confirmatory signs are shown in Table 2.6.11 and represent distances between tiles. Dimensioned examples of such signs are illustrated in Figures 2.6.85 to 2.6.93.



Figure 2.6.83:
Route Confirmatory Sign
for National Route with a
Spur Destination

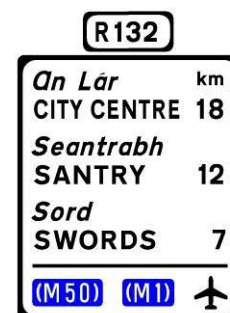


Figure 2.6.84:
Route Confirmatory Sign
with Significant Routes
and Symbols.

Table 2.6.11: Dimensions for Route Confirmatory and Route Marker Signs

Description	s/w	
	Route Confirmatory Sign (Main Panel)	Route Marker Sign
Border Width	1.5	1
Inner Radius of Border	4	3
Outer Radius of Border	2	2
Gap Between Route Number and Side Borders	-	2
Gap Between Route Number and Top or Bottom Borders	-	2
Gap Between Route Letter and Number	-	1
N Route Number	-	8
R Route Number	-	6
Gap to Top Border	3	-
Gap to Side Border	3	-
Gap to Bottom Border	2	-
Horizontal Clear space Between Place-Names and Distances	4	-
Vertical Gap Between destinations	3	-
Vertical Gap Between Irish and English version of a destination	0.5	-
km Symbol	6	-
Distance Numeral	6	-
Additional Dimensions for Single Destination Route Confirmatory Sign		
Horizontal Gap Between Irish and English version with single destination	3	-
Horizontal Gap Between Irish Text and Route Number with single destination	3	-
Additional Dimensions for Supplementary Routes and Symbols		
Gap Between Route Number or Symbol and link line	2.5	-
Gap Between Route Number or Symbol and Bottom Border	2	-
Link Line Width	1	-
Gap Between Route Numbers and Symbols	3 min	-

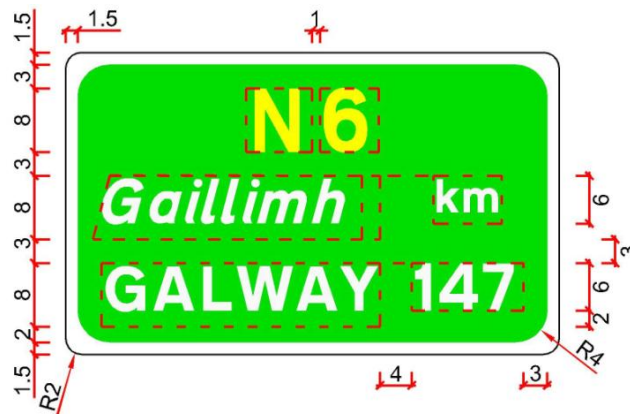


Figure 2.6.85:
Route Confirmatory Sign for a Single Destination on a National Route



Figure 2.6.86:
Route Confirmatory Sign for a Single Destination on a Regional Route

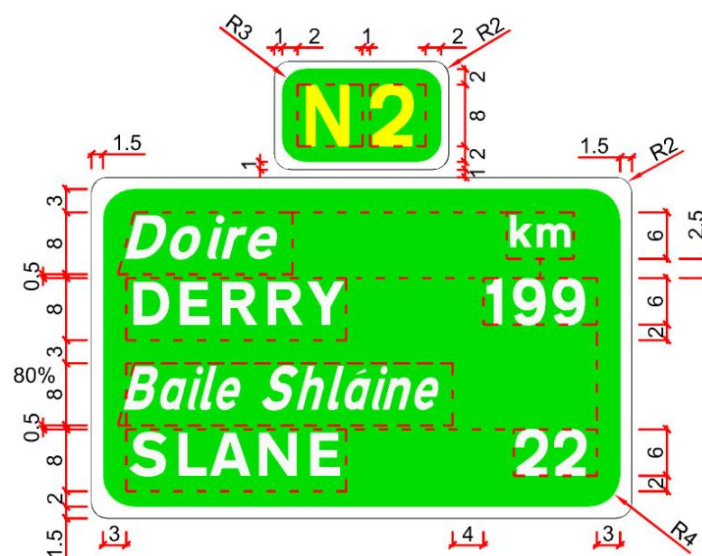


Figure 2.6.87:
Route Confirmatory Sign for Multiple Destinations

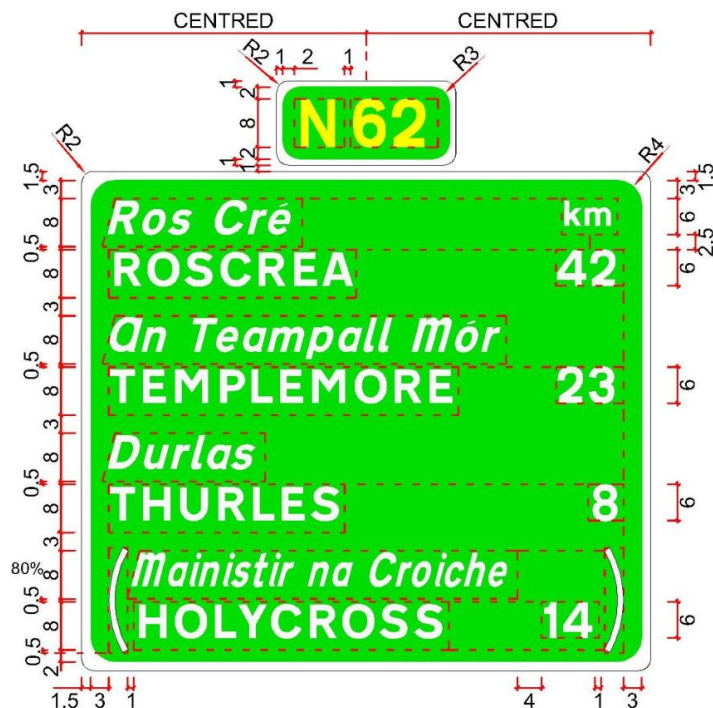


Figure 2.6.88:
Route Confirmatory Sign on a National Route, Including a Bracketed Destination

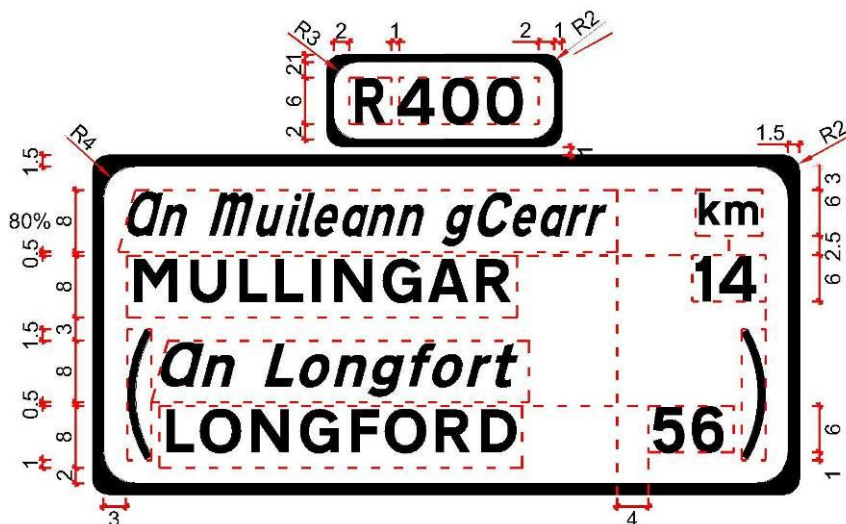


Figure 2.6.89:
Route Confirmatory Sign for Regional Route with Condensing of Text

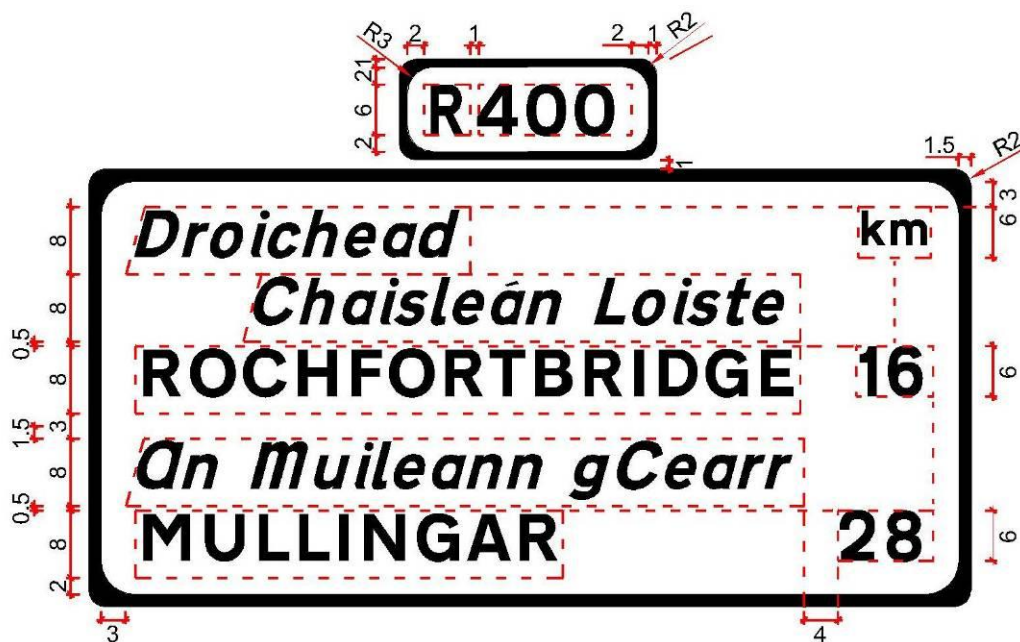


Figure 2.6.90:
Route Confirmatory Sign for Regional Route with Indentation of Text

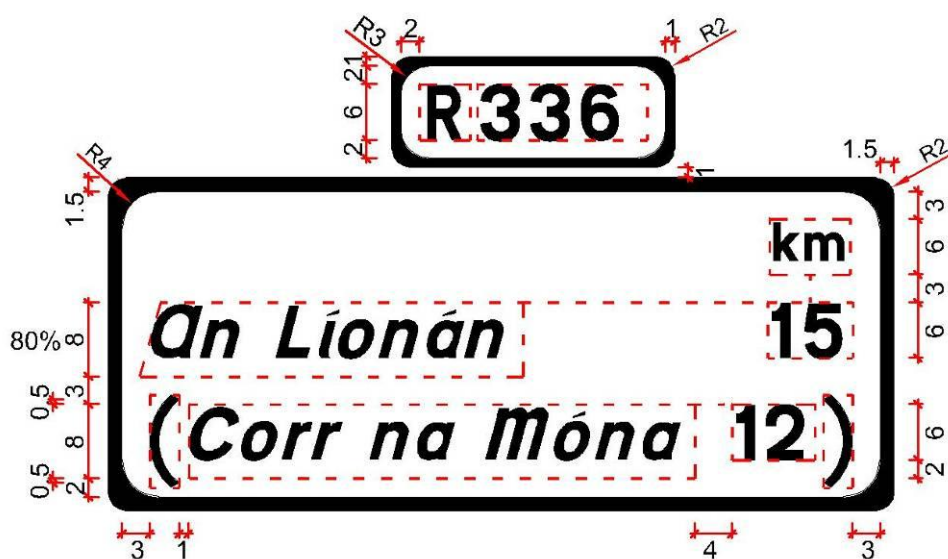


Figure 2.6.91:
Route Confirmatory Sign for Regional Route in Gaelteacht Area with Irish Only Destinations

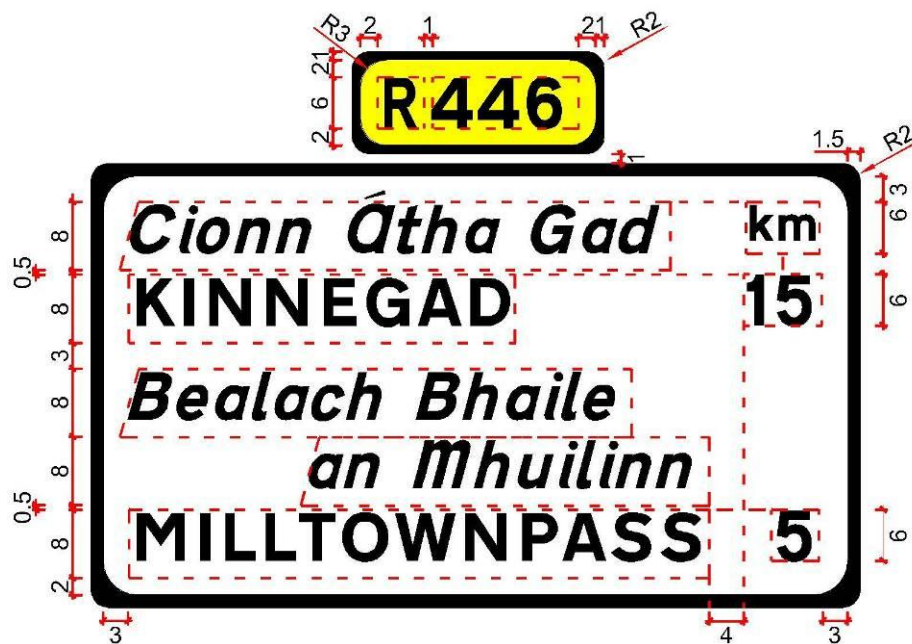


Figure 2.6.92:
Route Confirmatory Sign for a Regional Route using a Coloured Route Marker sign
to indicate an Alternative Route

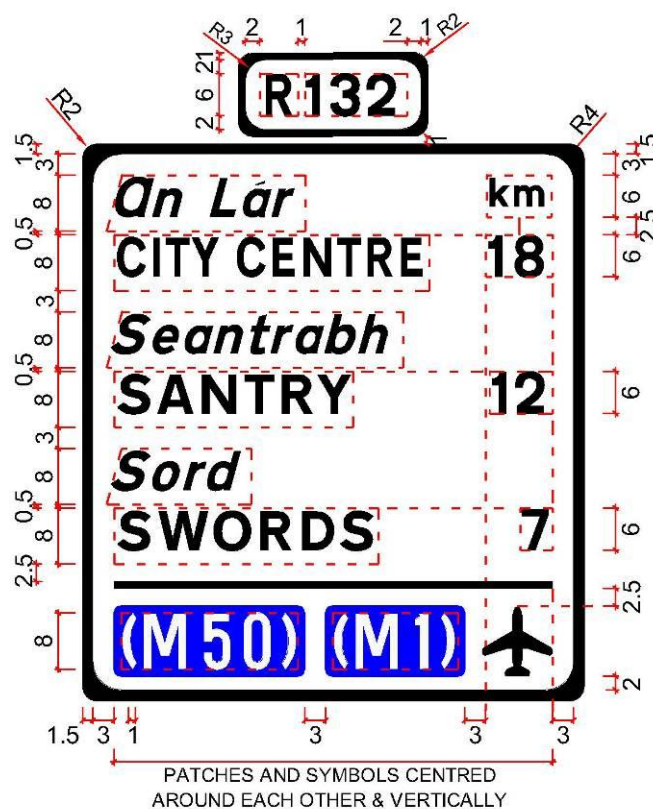


Figure 2.6.93:
Route Confirmatory Sign with Significant Routes and Symbols

ROUTE MARKER SIGNS

- 2.6.98 The Route Marker sign consists of just the route number and is used on long stretches of road and also as a top plate on Route Confirmatory signs.
- 2.6.99 Route Marker Signs should be placed in accordance with the requirements set out in Tables 2.2.2 and 2.2.3.
- 2.6.100 Route marker signs on a National route will always have a green background and on a Regional route a white background. The dimensions for such signs are shown in Table 2.6.11 and dimensioned examples are shown in Figures 2.6.94 and 2.6.95.

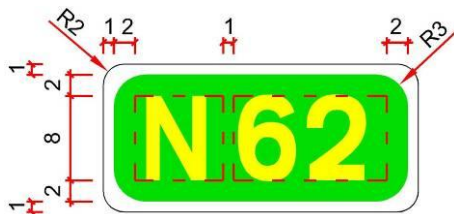


Figure 2.6.94:
Route Marker Sign for a National Route

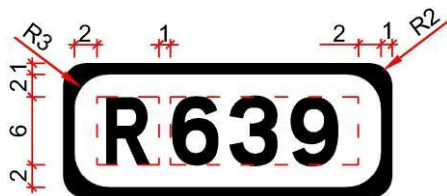


Figure 2.6.95:
Route Marker Sign for a Regional Route

USE FOR SIGNS

- 2.6.101 The Use For sign is similar to a Route Confirmatory sign and consists of a top panel which has the route number placed centrally with text, “Use for”, in Irish and English, positioned either side. The main panel consists of a list of destinations accessible via this route and arranged in distance order with the furthest appearing at the top, as described in Section 2.2.
- 2.6.102 Use For signs should generally show a maximum of four destinations ahead.
- 2.6.103 The background colour of the Use For sign reflects the classification of the route indicated, except in the case of a motorway where all signs have a blue background.
- 2.6.104 Use For signs must be correctly sized and be clearly visible to approaching drivers, if the information is to be read and understood. Recommendations on sizes and clear visibility distances are the same as those required for Route Confirmatory signs in Table 2.3.1.
- 2.6.105 The dimensions for such signs are shown in Table 2.6.12 and represent distances between tiles. A dimensioned example is shown in Figures 2.6.97.



Figure 2.6.96:
Use For Sign for a
National Route

Table 2.6.11: Dimensions for Use For Signs

Description	s/w	
	Main Panel	Top Panel
Border Width	1.5	1
Inner Radius of Border	4	3
Outer Radius of Border	2	2
Gap Between Use/Úsáid and Side Border	-	3
Gap Between For/Ígcóir and Side Border	-	3
Gap Between Text and Top Border	-	2.5
Gap Between Text and Bottom Border	-	1.5
Gap Between Route Letter and Number	-	1
N Route Number	-	12
R Route Number	-	8
Text and Destinations	8	8
Gap to Top Border	3	-
Gap to Side Border	3	-
Gap to Bottom Border	2	-
Horizontal Clear space Between Place-Names and Side Border	3	-
Vertical Gap Between destinations	3	
Vertical Gap Between Irish and English version of a destination	0.5	



Figure 2.6.97:
Use For Sign for a National Route

2.7 Signs For Orbital Routes In Urban Areas

- 2.7.1 Special directional signs are available for signing orbital routes in urban areas. Where Orbital Route signs are to be provided they shall conform to the following requirements.
- 2.7.2 The orbital signage structure can be deployed as a traffic management measure to relieve traffic congestion, by offering an alternative route to motorists to find their way to and from national routes and regional routes and thereby reducing through traffic in the urban centre.
- 2.7.3 The directional signs for orbital routes use a colour-coded system based on junction numbers. These numbers are assigned locally in respect of the orbital route and the signs display the existing route numbering for the major national and regional routes.
- 2.7.4 The colour coded signage system provides separate directional signage in respect of Inner Orbital and Outer Orbital routes: a light blue colour code is reserved as the distinctive colour for Inner Orbital routes signage and a purple colour code is reserved for Outer Orbital route signage.
- 2.7.5 It is intended that an orbital route signage system would be complemented by a user guide/route-map made available by the Road Authority and published on the local authority's website. This would set out supplementary information for the public to assist in the identification of the routes and junctions concerned.
- 2.7.6 Orbital Route signs shall be Stack Type signs. They should be erected in advance of the relevant junctions, at the distances recommended in Section 2.3 for Advance Direction signs. Repeater signs of the same design may be erected immediately before the junction. The orbital route signage system does not include direction signs with chevrons.



Figure 2.7.1:
Typical Inner Orbital
Route Sign (on Orbital
Route)

DESIGN RULES

Colour

2.7.7 Signs that form part of an orbital signage system use the following background colour for each orbital route:

- Signs on an Outer Orbital route use a purple background colour – the target colour chromaticity values are: Purple $Y = 1.35$, $x = 0.2292$, $y = 0.1047$;
- Signs on an Inner Orbital route use a light blue background colour – the target colour chromaticity values are: Light Blue $Y = 8.28$, $x = 0.1564$, $y = 0.1982$.

2.7.8 Signs forming part of an orbital signage system that are erected on the orbital route have a single background colour of purple or light blue as appropriate – see Figures 2.7.1, 2.7.2 and 2.7.4.

2.7.9 Orbital route signs on roads approaching the orbital routes use white background colour but have a top panel with a coloured background on a centred patch to show the appropriate colour code of the orbital route being approached – see Figure 2.7.3.

Content

2.7.10 The main on-route and off-route Orbital Route signs shall be designed as a Stack Type sign in accordance with the design rules set out in Section 2.6. These can be supplemented with directional signs indicating the destination served by the road number displayed. As a further development of the system a Road Authority may provide additional signs: i.e. similar to landmark signs, to highlight junction details and to indicate the names of the roads that form the various junctions where it is considered necessary.

2.7.11 Junctions on the orbital routes are to be numbered and all junction reference numbers are accompanied by the letter "J" in Transport Heavy font. The junction number is displayed in the centre of the top panel. The junction numbering system is to be 1 to 50 on the Inner Orbital route and from 51 upwards on the Outer Orbital route.

2.7.12 The local authority crest may be incorporated in each orbital route sign at the left hand side of the top panel. A logo has been assigned to denote Orbital Routes (the "orbital" logo) and it is to be displayed on the right hand side of the top panel. A copy of this logo is available from the Department of Transport. The line thickness in the orbital logo is 10mm with 20mm gap.

2.7.13 Orbital Route signs shall not incorporate regulatory signs. Such signs are to be mounted separately.



Figure 2.7.2:
Typical Outer Orbital
Route Sign (on Orbital
Route)

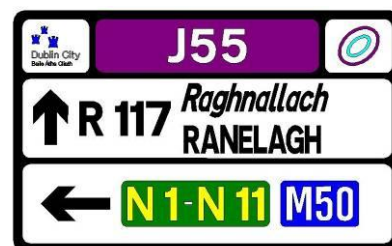


Figure 2.7.3:
Typical Outer Orbital
Route Sign (on Approach
Road)

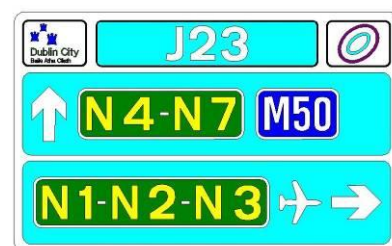


Figure 2.10.4:
Typical Inner Orbital
Route Sign (on Orbital
Route)

Design

- 2.7.14 Route numbers and junction numbers shall be based on an x-height of 80mm, with the numbers being 6s/w high (120mm). The spacing between letter “J” and the Junction Number is 1 s/w. Other spacings shall be in accordance with Section 2.3.
- 2.7.15 Route numbers (motorways, National or Regional) shall be displayed on patches of the appropriate colour. In all panels the clearance within patches between the border and route numbers shall be 1s/w (20mm) all round. The border width for each patch shall be 0.5s/w (10mm).
- 2.7.16 Motorway, National or Regional route numbers shall be arranged in ascending order, with a hyphen between route numbers. No brackets shall be used for route numbers.
- 2.7.17 Place names will not normally be provided alongside motorway and National route numbers. However, Regional route numbers should have place names associated with the “R” number.
- 2.7.18 Text, where used, is to have an x-height of 70mm. Text may be condensed to a minimum of 70%.
- 2.7.19 The signs’ external borders are to be 1.5s/w wide, while internal borders between panels are to be 1s/w wide. On signs with a white border, the top panel is to be defined by a black line of 0.5s/w width.

