

3. Motorway Signs

CHAPTER 3



Chapter 3 Motorway Signs

		Page
3.1	Introduction	3-2
3.2	General Principles Of Design	3-3
3.3	Sign Face Design	3-5





Figure 3.1 Advance Direction Sign



Figure 3.2 Direction Sign

3.1.3

3.1.4

3.1.5

3.1.6

3.1.1

3.1.2





Figure 3.3 Route Confirmation Sign



Figure 3.4 End Of Motorway Sign

Chapter 3 Motorway Signs

3.1 Introduction

This chapter describes the design of signs on motorways and also the design of signs that direct traffic to motorways from other roads.

The provision of signs on motorways presents fewer problems than for other roads because:

- (i) there are no junctions at grade except at the terminals;
- (ii) there are standard road layouts for entering and leaving motorways;
- (iii) the classes of traffic using motorways are restricted.

Drivers of vehicles on motorways must be given adequate early indication of junctions and the end of the motorway. The high speed of traffic and infrequency of junctions make it essential to give clear and precise messages so that drivers have sufficient time to make any manoeuvres safely.

Whether signs are on motorways or indicate motorways from other roads, the design rules normally conform to those covered in Chapter 2 for directional information signs. A distinctive colour scheme of white lettering, symbols and borders on a blue background is used.

Motorway signs include advance direction signs, direction signs and route confirmation signs, examples of which are shown in Figures 3.1 to 3.3. They also include some other information signs which are used in specific situations such as the End Of Motorway sign shown in Figure 3.4.

A number of the warning signs described in Chapter 6 may also be sited on motorways to warn of merging traffic.



3.2 General Principles of Design

3.2.1 This section defines the general principles of design for motorway signs. It should be read in conjunction with the corresponding section of Chapter 2 which covers design rules applicable to directional information signs.

Colour Coding

- 3.2.2 Signs located on the main carriageway of motorways are normally white on a blue background. They do not contain any patches or panels of other colours except where a junction number is indicated, which should be shown as white on a black patch. This is illustrated in section 3.3.
- 3.2.3 At the terminals of the motorway, signs on the mainline should retain a blue background but connecting national or regional roads should be indicated by appropriately coloured legend panels. On motorway exit slips leading to other routes, the background colour of map type signs will be appropriate to the route with the higher classification.
- 3.2.4 For signs located on other roads, the route number of a motorway that can be reached by following that road, should be shown in brackets on a blue patch.
- 3.2.5 Direction signs on other roads approaching a motorway junction should show the motorway symbol illustrated in Figure 3.5 on a legend panel. Direction signs located at the same junction pointing down the motorway or a slip road should also include the motorway symbol but should be white on a blue background.
- 3.2.6 Signs demonstrating the system of colour coding are illustrated in the appendix to this chapter.

The Selection Of Destinations

3.2.7 The selection of destinations on motorway signs should be determined in accordance with the principles set out in Chapter 2.

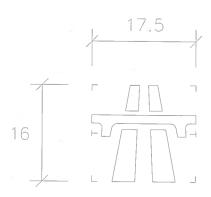


Figure 3.5 Motorway Symbol



Alphabets

- 3.2.8 Where motorway route numbers are indicated the "Motorway" alphabet shall be used as shown in figure A2.6 in Chapter 2.
- 3.2.9 The size of the alphabets is defined in terms of the 'x'-height which is fully described in Chapter 2. The 'x'-heights recommended for use on signs on different speed categories of road are given in Table A2.1 in the appendix to that chapter.



3.3 Sign Face Design

- 3.3.1 This section describes the sign face design of two categories of sign, namely:
 - (i) Signs located on national or regional roads that indicate motorways;
 - (ii) Signs located on motorways.

Signs on National or Regional Roads Indicating Motorways

In order to encourage the use of motorways in preference to other roads, appropriate advance information should be provided.

Patches

- 3.3.3 Where it is appropriate to indicate the direction to a motorway from a distant junction, the motorway route number (enclosed in brackets) should be placed on a blue patch on the main background of the sign. See Figures 3.6 and 3.7.
- 3.3.4 Blue patches containing motorway numbers should use the Motorway alphabet and can be placed on any of the advance direction or direction signs defined in Chapter 2. The design of patches is described in Section 2.2 of Chapter 2.
- 3.3.5 Patches should usually be placed to the right of the main route number indicated for the direction. They should usually be centred horizontally. Clearances shall be measured from the patch as though it were a normal route number. In the interests of minimising sign size, the patch may be placed underneath the main route number and vertically centred. Figures 3.6 and 3.7 show example signs incorporating motorway patches.



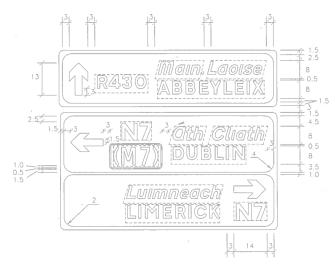


Figure 3.6 Sign Incorporating Motorway Patch

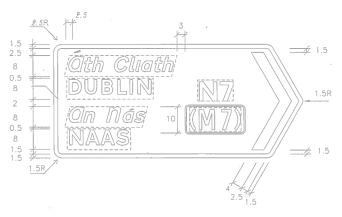


Figure 3.7
Sign Incorporating Motorway Patch

Legend Panels

- 3.3.6 Motorway legend panels should be used on map type advance direction signs on roads (other than motorways) which have junctions with a motorway. The junction arm indicated by the legend panel should be the start of the motorway or a motorway slip road. The motorway destinations, route number and the motorway symbol may be shown on the blue panel.
- 3.3.7 Legend Panels should be designed as described in Section 2.2 of Chapter 2. The relative positioning of the motorway symbol, route number and destinations may be varied to optimise the sign design. Alternative layouts of legend panels are illustrated in Figures 3.8 to 3.10.



3.3.8 Map type signs incorporating blue motorway panels are shown in Figures 3.8 to 3.10. Figure 3.8 shows how an intermediate junction on the motorway should be signed from a connecting national road. Figure 3.9 shows how the start of the motorway should be signed from an at-grade roundabout. Figure 3.10 indicates the sign used where the road ahead changes to a motorway.

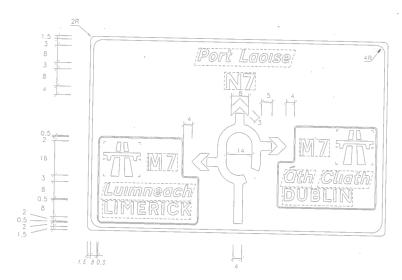


Figure 3.8
Intermediate Junction Signing From
Connecting National Route

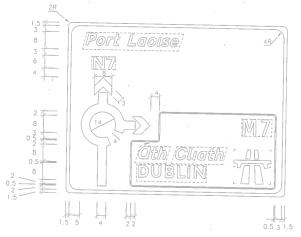


Figure 3.9 Signing From A Terminal Roundabout



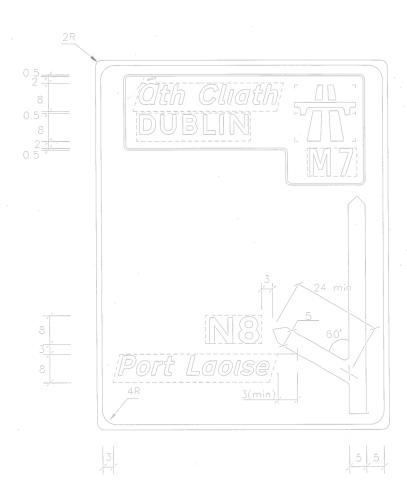


Figure 3.10 Signing Of Road Class Change Ahead

Stack type advance direction signs can be used to indicate routes of motorway status. Whilst map type advance direction signs incorporate blue legend panels to indicate the motorway, shown in fig. 3.10 above, stack type signs have separate coloured panels for each class of road. When a route of motorway status is shown, the normal design rules apply, except that the motorway symbol has also to be shown. For left and straight ahead directions, the symbol should appear to the right of the destinations mentioned. For a right turn the symbol should appear on the left. In each case normal clearances should be used to position the symbol which should sit 1 s/w above the baseline of the tiles of the English place-name. An example sign is illustrated in Figure 3.11. A coloured version of this sign is shown in the appendix.

3.3.9



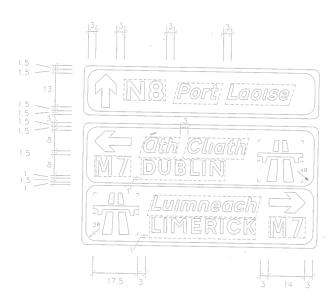


Figure 3.11 Motorway Status Sign On National Route

Direction Signs

3.3.10 Direction signs located on roads other than motorways but pointing directly onto a motorway should be white on a blue background. The motorway symbol should be placed at the opposite end of the sign to the chevron as indicated in Figure 3.12.



Figure 3.12 Direction Sign From National Or Regional Road

Signs on Motorways

3.3.11 All directional signs on motorways are in the blue and white colour scheme. On exit slip roads, map type signs should have a background colour appropriate to the higher classification of joining roads and appropriate coloured legend panels. Stack type signs on exit slip roads should have full coloured directional panels appropriate to the route indicated.



3.3.12

The "entry to motorway" sign (Fig. 3.14) indicates the commencement point of a motorway. An additional sign (Fig. 3.13) may be required to indicate the restrictions on traffic entering the motorway.

The Motorway ahead

NO L drivers
Vehicles under 50cc.,
Slow vehicles (under 30 mph).
Invalid - carriages,
Pedal - cycles,
Pedestrians,
Animals



Figure 3.13 Motorway Ahead Sign

Note:

This sign should be used in advance of the start of the motorway. Variations include "Motorway Left" and "Motorway Right".

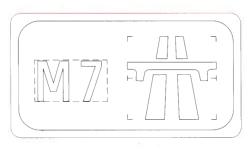
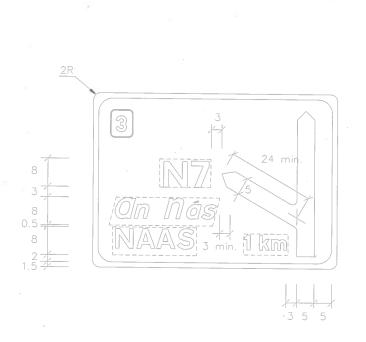


Figure 3.14 Entry To Motorway Sign



- 3.3.13 On the approach to intermediate junctions on the motorway, a map type advance direction sign should be sited at 1km from the start of the slip road taper. The design should incorportate the junction number and the distance as indicated in figure 3.15.
- 3.3.14 A final advance direction sign should be sited at 500m from the start of the exit slip road taper. This sign is shown in Figure 3.16 and should not indicate the distance. It should be sited to avoid obscuring the 300m countdown marker shown in Figure 3.17, or avoid being obscured itself by any overbridges.



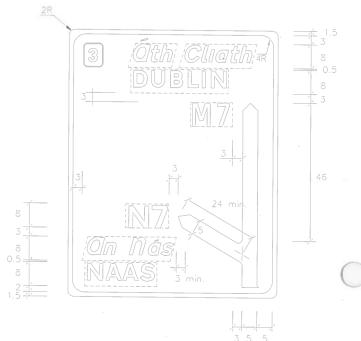


Figure 3.15
Advance Direction Sign For
Intermediate Motorway Junction

Figure 3.16
Final Advance Direction Sign For Intermediate Motorway Juncation,



3.3.15

The count down marker posts illustrated in Figures 3.17 to 3.19 should be used at 300m, 200m and 100m from the start of the slip road taper.



Figure 3.17 300m Count Down Marker



Figure 3.18 200m Count Down Marker



Figure 3.19 100m Count Down Marker

3.3.16

A direction sign should be sited on the nose of the division between the main carriageway and the exit slip road. It should show the major route or destination already signed on the advance direction sign for that junction. The sign should have white borders, chevron and text on a blue background. An example is shown in Figure 3.20.

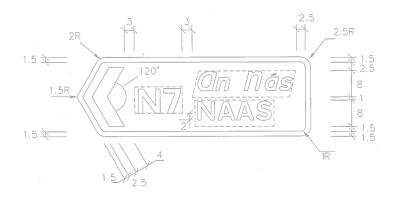


Figure 3.20
Direction Sign For Motorway Exit
Slip Road



3.3.17 The relative positioning of all signs on the motorway at an intermediate junction is indicated in Figure 3.21.



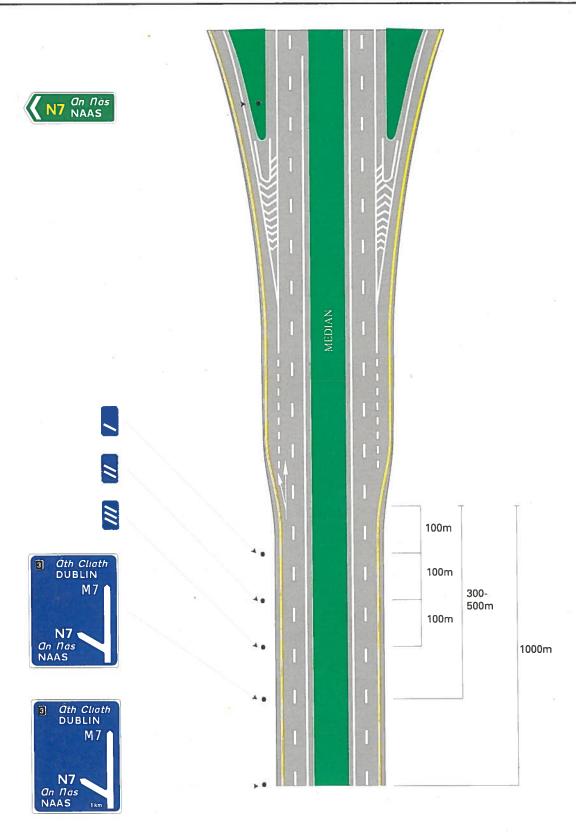


Figure 3.21
Position Of Motorway Signs At An Intermediate Junction



3.3.18 On exit slip roads, map type advance direction signs take the background colour appropriate to the higher classified route at the junction. Information relating to other routes are shown on legend panels. See Fig 3.22.

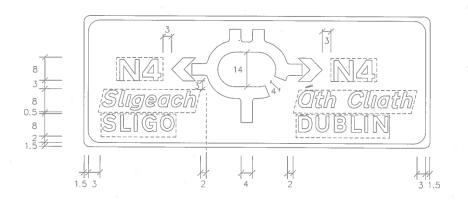


Figure 3.22
Map Type Advance Direction Sign on Motorway Exit Slip Road

3.3.19 A route confirmation sign may be provided at a distance of 350 metres beyond the acceleration lane of an entry slip road. See Figure 3.23. Where interchanges are at close intervals, these signs may be omitted.

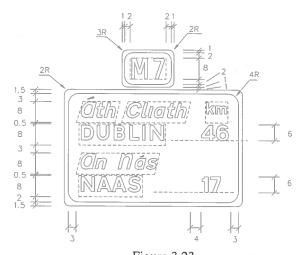


Figure 3.23
Route Confirmation Sign For Placement Beyond Entry Slip Road



3.3.20

When a motorway ends at an at-grade terminal roundabout, advance direction signs should be sited at 1km and 0.5km from the roundabout. Roads leading from the junction should be indicated on coloured legend panels appropriate to their classification. Count-down markers should be placed on both sides of the approaching carriageway. See Fig 3.24.

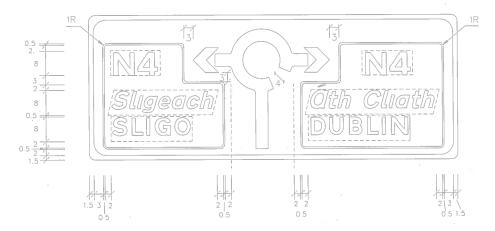


Figure 3.24 Sign for Terminal Roundabout

3.3.21

Where a motorway leads straight into a road of another classification at a grade separated junction, the junction will be signed as normal. Details of the joining roads appear on the blue background in legend panels, coloured according to their classification. See Fig 3.25.

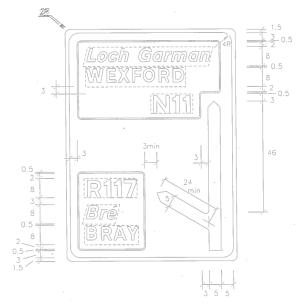


Figure 3.25
Sign For Terminal Grade Separated
Junction



3.3.22 The sign shown in Fig. 3.28 should be placed on both sides of the carriageway, at the point where the motorway regulations cease to have effect. The signs shown in Figs. 3.26 and 3.27 should also be placed on both sides of the carriageway in advance of the sign in Fig. 3.28 at the distances shown.







Figure 3.26 End Of Motorway 1km

Figure 3.27 End Of Motorway 500m

Figure 3.28
End Of Motorway

Gantry Signs on Motorways

- 3.3.23 Consideration may be given to the use of gantry signs where:
 - (i) lane indication is necessary for the appropriate destinations ahead.
 - (ii) the geometric configuration at the junction (e.g. horizontal or vertical curve) requires it.
 - (iii) there are 3 traffic lanes or more in one direction.
- 3.3.24 There are two types of gantry signs:
 - (i) one for the "lane-drop" situation where the left lane of the approach carriageway forms the off-slip lane and does not continue through the junction.
 - (ii) One for the "non lane-drop" situation where the number of lanes on the approach carriageway continue through the junction.



Non Lane-Drop

3.3.25

The non lane-drop sign is similar in design to standard stack type signs. The assembly consists of two main signs, one above the other. The lower sign with the ahead arrow should be centred over the main running carriageway whilst the upper sign is offset so that the inclined arrow is not directly above the lower sign. An example sign is shown in Figure 3.29.

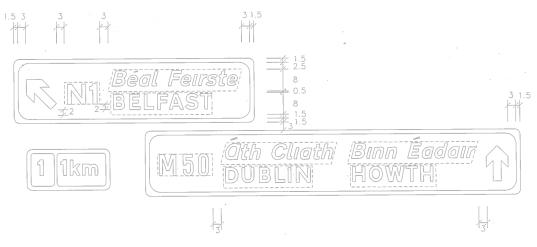


Figure 3.29 Non Lane-Drop Gantry Sign

Lane-Drop Signs

3.3.26

Lane-drop signs are also similar in design to stack type signs although directional arrows are replaced by lane arrows located below the main signs. Each route should be shown on a separate directional panel to give the appearance of two panels side by side. These separate signs should be aligned over the appropriate traffic lanes. See Fig 3.30.

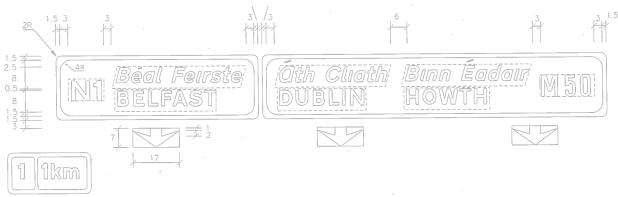


Figure 3.30 Lane-Drop Gantry Sign





















The Motorway ahead

NO L drivers
Vehicles under 50cc.,
Slow vehicles (under 30 mph),
Invalid - carriages,
Pedal - cycles,
Pedestrians,
Animals

















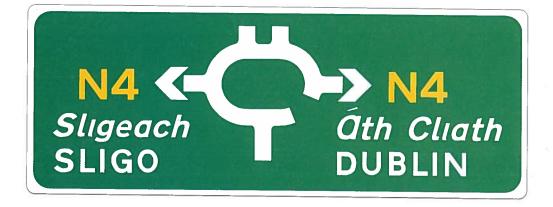
M7

Áth Cliath km

DUBLIN 46

An Nás

NAAS 17



















M50 *Áth Cliath Binn Éadair* 1



Ath Cliath Binn Eadair M50 DUBLIN HOWTH







