

SECTION 7

RAMP TERMINAL SIGNS

June 2009

RAMP TERMINAL SIGNS

June 2009

CONTENTS

Reference	Page Number	Page Date
SECTION 7: RAMP TERMINAL SIGNS		
7.1 GENERAL	7 - 1	June 2009
7.2 SIGN COLOUR	7 - 1	June 2009
7.3 MOTORWAY AND EXPRESSWAY NAMING	7 - 1	June 2009
7.4 ADVANCE DIRECTION SIGNS	7 - 1	June 2009
7.4.1 SIGN FORMAT	7 - 1	June 2009
FIGURE 7.1 AD - 1 ADVANCE DIRECTION SIGN	7 - 1	June 2009
FIGURE 7.2 AD - 5 ADVANCE DIRECTION SIGN	7 - 1	June 2009
7.4.2 STACK SIGNS	7 - 2	June 2009
7.4.3 DIAGRAMMATIC SIGNS	7 - 2	June 2009
7.4.4 DIAGRAMMATIC LANE ASSIGNMENT SIGNS	7 - 2	June 2009
7.5 ADVANCE LANE INDICATION SIGNS	7 - 2	June 2009
7.6 INTERSECTION DIRECTION SIGNS	7 - 2	June 2009
FIGURE 7.3 ID - 3 INTERSECTION DIRECTION SIGN	7 - 2	June 2009
7.7 RAMP TERMINALS	7 - 2	June 2009
7.7.1 ADVANCE DIRECTION SIGNS	7 - 2	June 2009
7.7.2 MOTORWAY ENDS SIGN	7 - 3	June 2009
7.7.3 INTERSECTION DIRECTION SIGNS	7 - 3	June 2009
FIGURE 7.4 ID - 3 INTERSECTION DIRECTION SIGN	7 - 3	June 2009
FIGURE 7.5 AD - 1 ADVANCE DIRECTION SIGN	7 - 4	June 2009
FIGURE 7.6 AD - 4 DIAGRAMMATIC AVANCE DIRECTION SIGN	7 - 5	June 2009
FIGURE 7.7 AD - 5 DIAGRAMMATIC ADVANCE DIRECTION SIGN	7 - 6	June 2009
FIGURE 7.8 AD - 6 DIAGRAMMATIC LANE ASSIGNMENT AVANCE DIRECTION SIGN	7 - 7	June 2009
FIGURE 7.9 ID - 3 INTERSECTION DIRECTION SIGN	7 - 8	June 2009
FIGURE 7.10 AD - 1 STACK TYPE ADVANCE DIRECTION SIGN	7 - 9	June 2009
FIGURE 7.11 ID - 3 INTERSECTION DIRECTION SIGN	7 - 10	June 2009

RAMP TERMINAL SIGNS

June 2009

7. RAMP TERMINAL SIGNS

7.1 GENERAL

Guide signing on local road approaches to on-ramp and off-ramp terminal intersections shall be provided in the same manner as other major intersections on those roads.

Where it is considered desirable to give additional directions to a motorway or expressway at other local road intersections, approach signs, generally in the form of intersection direction signs, should be used.

The distance from the motorway or expressway where approach signing should start depends upon the layout of the adjacent local roading system. Normally, signing should start no more than 2 km (approximately) from an on-ramp leading to a motorway or expressway, or at the previous arterial road intersection in advance of the interchange.

The legend on signs erected on approaches to motorway and expressway ramp terminals should be as simple as possible.

If the motorway or expressway is a named route, the name may be shown in addition to the route number.

Where necessary, additional information relating to the cardinal direction or destination of the motorway or expressway may also be given, particularly where some movements are not available after joining a motorway or expressway from a local arterial road.

FIGURES 2.7 and 2.8 gives details of signing required at ramp terminals.

7.2 SIGN COLOURS

On stack type advance direction signs the panels that direct traffic to motorway and expressway entrance ramps shall have white legends on standard green backgrounds. The remaining panels shall be in the colours used for destination signing by the local arterial Road Controlling Authority.

On diagrammatic type advance direction signs the colours used shall be as for destination signing by the local arterial Road Controlling Authority, while the insets that direct traffic to motorway and expressway entrance ramps shall have white legends on standard green backgrounds.

The intersection direction signs that direct traffic down motorway and expressway entrance ramps shall have white legends on standard green backgrounds.

7.3 MOTORWAY AND EXPRESSWAY NAMING

If motorway naming is introduced the name of the motorway may be shown on the MI - 30 'MOTORWAY BEGINS' and MI - 33 'MOTORWAY' signs. The name will be centre justified above the word 'MOTORWAY' and the sign designations will become MI - 30.1 and MI - 33.1 respectively.

The above also applies to expressways except that the sign designations are prefixed 'E' instead of 'M' as detailed in FIGURES 6.8 and 6.9.

7.4 ADVANCE DIRECTION SIGNS

With the appropriate changes e.g. 'EWY' in place of 'MWY', the following applies as much to expressways as to

motorways.

The panel or inset on the advance direction signs indicating the direction to the motorway shall include:

- Abbreviation for motorway and the cardinal direction in capital letters on the same line e.g. 'MWY NORTH'.
- The relevant SHRM and the name indicating the continuing direction of the motorway.

The name of the continuing direction of the motorway is the stage destination name used for the State highway destination signing system in that area.

7.4.1 SIGN FORMAT

There are three different formats for advance direction signs on the approaches on local roads to a motorway or expressway interchange and these are as follows:

- Stack signs – one panel for each direction of travel possible beyond the sign location, with the panels separated by a white border and stacked vertically. An example of an advance direction stack sign is given in FIGURE 7.1.
- Diagrammatic signs – show a simplified diagram of the geometric intersection layout. An example of a diagrammatic advance direction sign is given in FIGURE 7.2.



FIGURE 7.1: AD - 1 ADVANCE DIRECTION SIGN

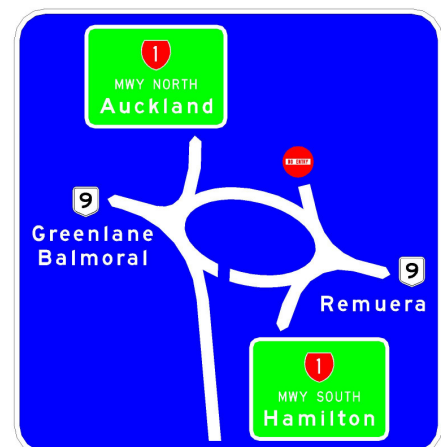


FIGURE 7.2: AD - 5 ADVANCE DIRECTION SIGN

- Diagrammatic lane assignment signs – this is a simplified diagram of the lanes and their destinations downstream of the sign location. An example of a diagrammatic lane assignment advance direction sign is given in FIGURE 7.8.

RAMP TERMINAL SIGNS

June 2009

NOTE: Symbols inset in the sign shall not include an individual white border.

7.4.2 STACK SIGNS

The vertical sequence of panels on an advance direction stack sign should, as far as practicable be:

- straight ahead arrows in the top panel,
- angled arrows above horizontal arrows, and
- angled or horizontal arrows indicating opposite directions placed in alternate panels.

When route marker symbols are shown they are always placed between the destination name and the directional arrow. Any symbol e.g. airport, tourist route etc will be placed between the destination name and the route marker or if there is no route marker, between the destination name and the directional arrow.

NOTES:

1. **Downward pointing arrows are never used on stack signs.**
2. **Horizontal and angled arrows are placed nearest the end of the panel to which they point.**

On a crossroad in advance of a 'diamond' type motorway interchange it will usually be necessary to indicate the right turn into the entrance ramp as a straight ahead arrow. This is necessary to deter drivers from making a wrong way movement into the adjacent exit ramp.

Where an advance direction sign on an arterial road appears in advance of the first intersection of an interchange (prior to the exit ramp) it is desirable, where two green panels of an advance direction stack type sign of different directions appear together, that the arterial road direction panel be placed between the two motorway panels.

7.4.3 DIAGRAMMATIC SIGNS

Diagrammatic signs should be used where it is considered that a simplified diagram of the geometric intersection layout would assist driver navigation.

On a crossroad in advance of a 'diamond' type motorway interchange, a 'No Entry' symbol shall be used to deter drivers from making a wrong way right turn movement into the exit ramp rather than the subsequent entrance ramp.

7.4.4 DIAGRAMMATIC LANE ASSIGNMENT SIGNS

At multi lane approaches with three or more significant destinations lane assignment diagrammatic type signs may be applicable.

On a crossroad in advance of a 'diamond' type motorway interchange, a 'No Entry' symbol shall be used to deter drivers from making a wrong way right turn movement into the exit ramp rather than the subsequent entrance ramp.

7.5 ADVANCE LANE INDICATION SIGNS

At busier interchanges it may be necessary to provide advance lane indication signs for traffic turning right onto the motorway. This is important if the motorway crosses over the local road where the entrance ramp can be partly hidden by bridge piers. Appropriate signs are either ground mounted 'RIGHT LANE' legend type signs or overhead mounted lane indication type signs.

Lane indication type signs shall be provided at the location where all approach lanes have been fully developed. Signs should only indicate the number of lanes actually available at the sign position.

Mounting signs overhead on a cantilever structure or on the overbridge is necessary where:

- (a) There is insufficient space for ground mounted signs, or
- (b) The width of the approach, or high traffic volumes, makes a ground mounted sign inappropriate.

Where appropriate the above also applies to expressways.

7.6 INTERSECTION DIRECTION SIGNS

With the appropriate changes e.g. 'EWY' in place of 'MWY', the following applies as much to expressways as to motorways.

These are different to the signs in Section 7: Guide Signs of MOTSAM Part 1: *Traffic Signs* in that they include:

- (a) The abbreviation for motorway and the cardinal direction in capital letters on the same line e.g. 'MWY NORTH'.
- (b) The relevant SHRM and the name indicating the continuing direction of the motorway.

The name of the continuing direction of the motorway is the stage destination name used for the State highway destination signing system in that area.

An example of this sign is illustrated in FIGURE 7.3.



FIGURE 7.3: ID - 3 INTERSECTION DIRECTION SIGN

7.7 RAMP TERMINALS

With the appropriate changes e.g. 'EWY' in place of 'MWY', the following applies as much to expressways as to motorways.

7.7.1 ADVANCE DIRECTION SIGNS

These may be either stack or diagrammatic type signs.

At multi lane terminals with three or more significant destinations lane assignment advance direction type signs may be appropriate.

Where relevant on any diagrammatic type signs, the inset indicating access to motorway on-ramp(s) shall include:

- (a) Abbreviation for motorway and the cardinal direction in capital letters on the same line e.g. 'MWY NORTH'.
- (b) The relevant SHRM and the name indicating the continuing direction of the motorway

The name of the continuing direction of the motorway is the stage destination name used for the State highway destination signing system in that area.

Advance direction signs shall be located 100 m in advance of the exit ramp terminal and on the right hand side as detailed in FIGURE 2.6 (a) *Standard Motorway and Expressway Exits and Entrances - Geometric Layout and Signing Details with Exit Numbering*.

7.7.2 MOTORWAY ENDS SIGN

Motorway ramp terminals shall be indicated using an MI - 34 sign as detailed in FIGURE 6.12. This sign shall be located 30 m in advance of the ramp terminal and erected on both sides of the off-ramp as detailed in FIGURES 2.7

RAMP TERMINAL SIGNS

October 2009

and 2.8.

7.7.3 INTERSECTION DIRECTION SIGNS

These will be signs generally in accordance with Section 7.6 of this Manual as illustrated in FIGURES 7.4 and 7.11.

Exit ramp terminals shall be treated in the same way as important non-motorway intersections, with relevant advance direction and intersection direction signs from Section 7: Guide Signs of MOTSAM, Part I: *Traffic Signs*.



FIGURE 7.4: ID - 3 INTERSECTION DIRECTION SIGN

RAMP TERMINAL SIGNS

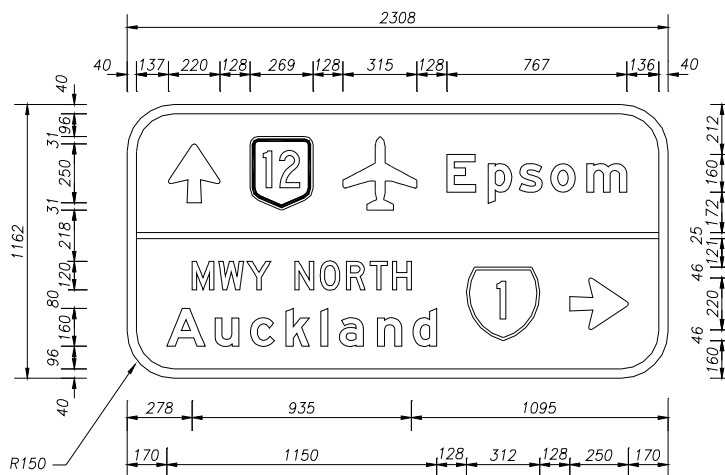
June 2009



AD - 1

SIGN DETAILS

LEGEND:	Reflectorised white
BACKGROUND:	
Arterial road	Reflectorised RCA colour – blue in this example
Motorway	Reflectorised standard green
BORDER:	Reflectorised white
LETTERS:	
Destinations:	
Initial capitals	Modified Series E 160
Lower case	Modified Series E 120 loop height
'MWY' 'Cardinal Direction'	Series D 120
ROUTE MARKERS:	Refer to MOTSAM Part 1, Section 7
SYMBOL:	Reflectorised white
ARROW:	Reflectorised white



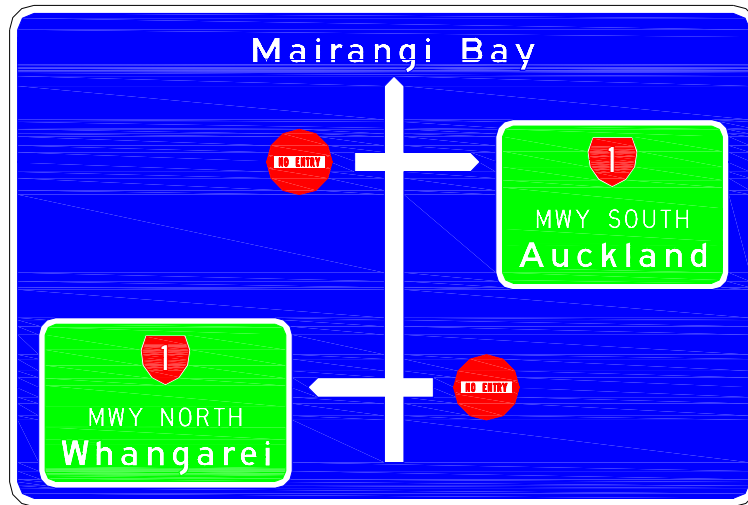
NOTE: Ground mounted sign.

FIGURE 7.5

AD - 1 ADVANCE DIRECTION SIGN

RAMP TERMINAL SIGNS

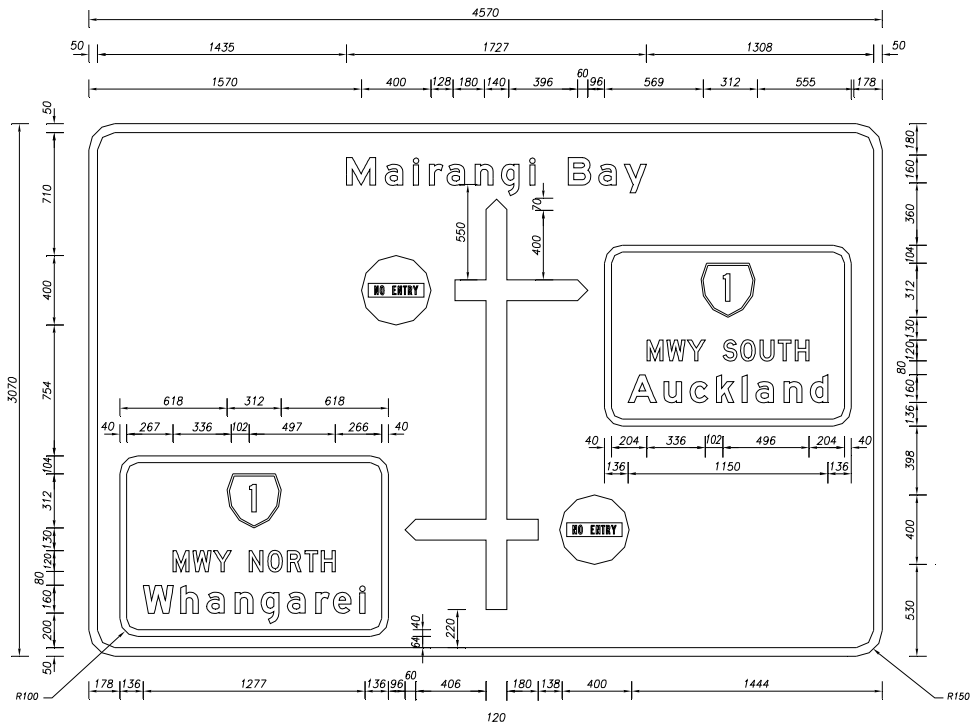
June 2009



AD - 4

SIGN DETAILS

LEGEND:	Reflectorised white
BACKGROUND:	
Arterial road	Reflectorised RCA colour – blue in this example
Motorway inset	Reflectorised standard green
BORDER:	Reflectorised white
LETTERS:	
Destinations:	
Initial capitals	Modified Series E 160
Lower case	Modified Series E 120 loop height
'MWY 'Cardinal Direction''	Series D 120
ROUTE MARKER:	Refer to MOTSAM Part 1, Section 7



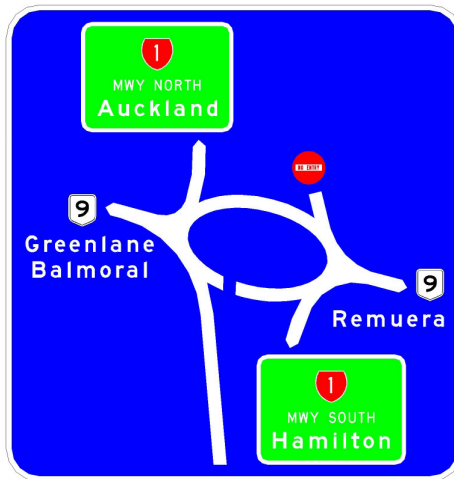
NOTE: Ground Mounted Sign.

AD - 4 DIAGRAMMATIC
ADVANCE DIRECTION SIGN

FIGURE 7.6

RAMP TERMINAL SIGNS

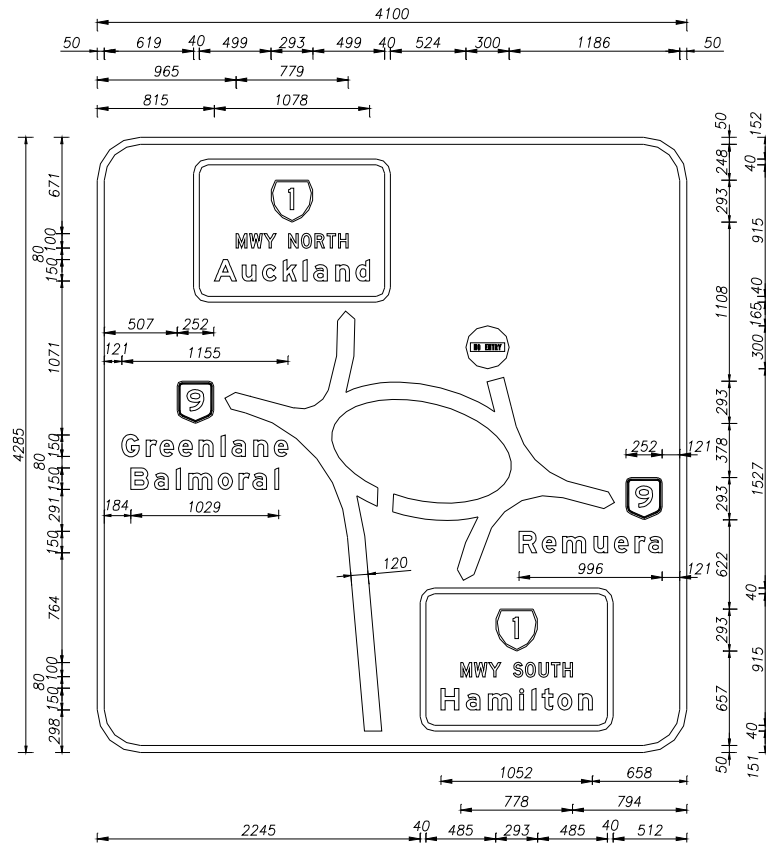
June 2009



AD - 5

SIGN DETAILS

LEGEND:	Reflectorised white
BACKGROUND:	
Arterial Road	Reflectorised RCA colour – blue in this example
Motorway inset	Reflectorised standard green
BORDER:	Reflectorised white
LETTERS:	
Destinations:	
Initial capitals	Modified Series E 150
Lower case	Modified Series E 110 loop height
'MOTORWAY'	Series D 100
ROUTE MARKER:	Refer to MOTSAM Part 1, Section 7



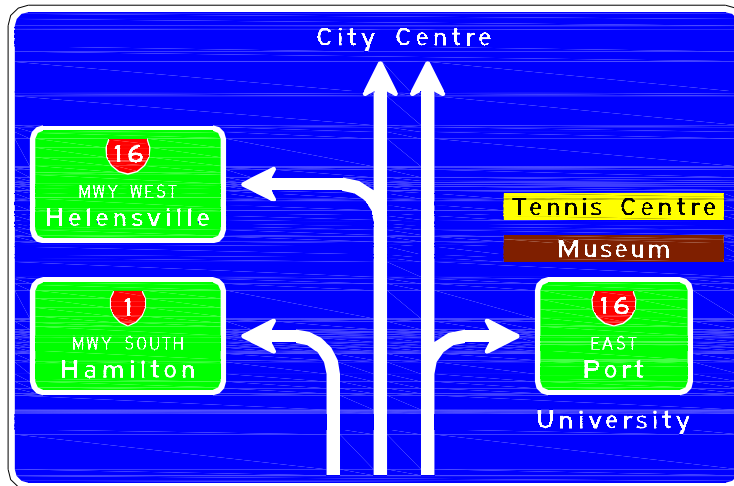
NOTE: Ground mounted sign.

FIGURE 7.7

AD - 5 DIAGRAMMATIC
ADVANCE DIRECTION SIGN

RAMP TERMINAL SIGNS

June 2009



AD - 6

SIGN DETAILS

LEGEND:

- Arterial road Reflectorised white
- Motorway Reflectorised white
- Tourist attraction Reflectorised white
- Local facility Black

BACKGROUND:

- Arterial road Reflectorised RCA colour – blue in this example
- Motorway inset Reflectorised standard green
- Tourist attraction inset Reflectorised brown
- Local facility inset Reflectorised yellow

BORDER:

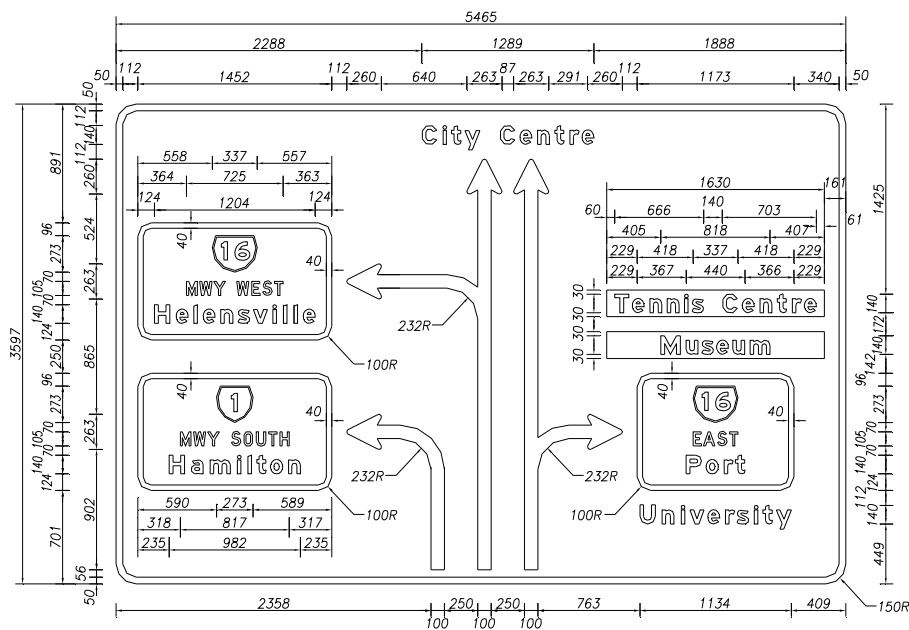
Reflectorised white

LETTERS:

- Destinations:
- Initial capitals Modified Series E 140
- Lower case Modified Series E 100 loop height
- 'MWY Cardinal Direction' Series D 105

ROUTE MARKER:

Refer to MOTSAM Part 1, Section 7



NOTE: Ground mounted sign.

AD - 6 DIAGRAMMATIC LANE ASSIGNMENT
AVANCE DIRECTION SIGN

FIGURE 7.8

RAMP TERMINAL SIGNS

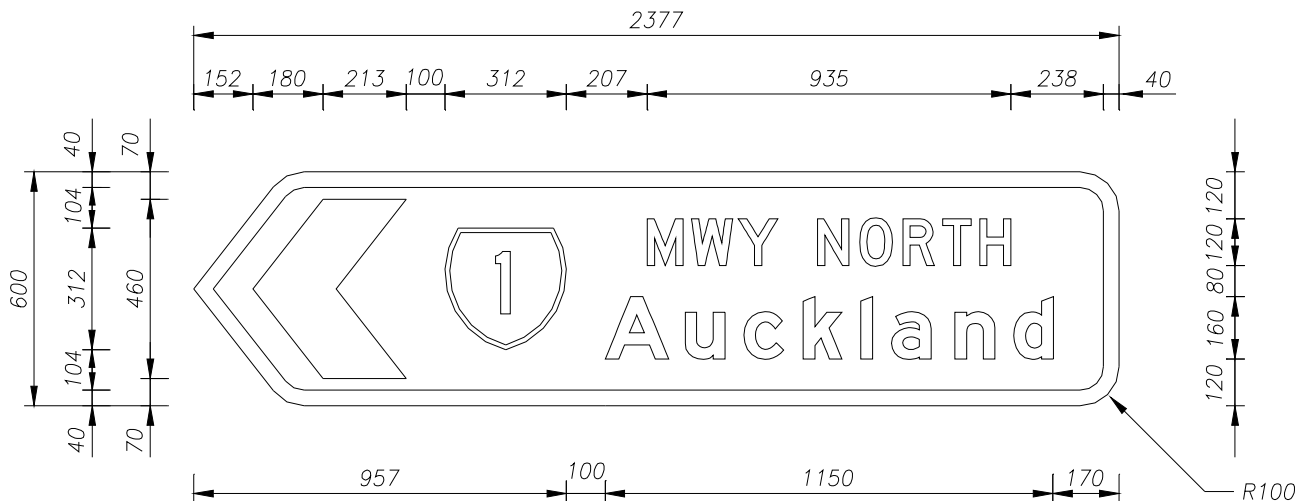
June 2009



ID - 3

SIGN DETAILS

LEGEND:	Reflectorised white
BACKGROUND:	Reflectorised standard green
BORDER:	Reflectorised white
LETTERS:	
Destinations:	
Initial capitals	Modified Series E 160
Lower case	Modified Series E 120 loop height
'MWY 'Cardinal Direction''	Series D 120
ROUTE MARKERS:	Refer to MOTSAM Part 1, Section 7
CHEVRON:	Reflectorised white



NOTE: Ground mounted sign..

FIGURE 7.9

ID - 3 INTERSECTION DIRECTION SIGN

RAMP TERMINAL SIGNS

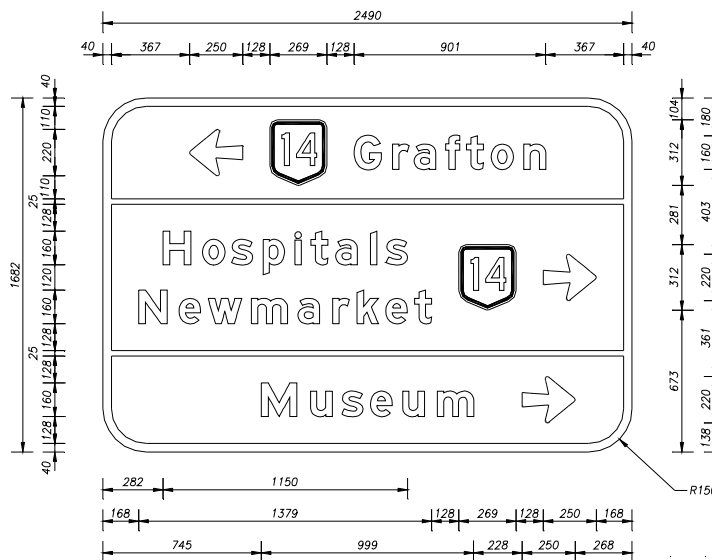
June 2009



AD - 1

SIGN DETAILS

LEGEND:	Reflectorised white
BACKGROUND:	
Arterial Road	Reflectorised RCA colour – blue in this example
Tourist Destination	Reflectorised standard brown
BORDER:	Reflectorised white
LETTERS:	
Destinations:	
Initial capitals	Modified Series E 160
Lower case	Modified Series E 120 loop height
ROUTE MARKERS:	Refer to MOTSAM Part 1, Section 7



NOTE: Ground Mounted Sign.

AD - 1 STACK TYPE
ADVANCE DIRECTION SIGN

FIGURE 7.10

RAMP TERMINAL SIGNS

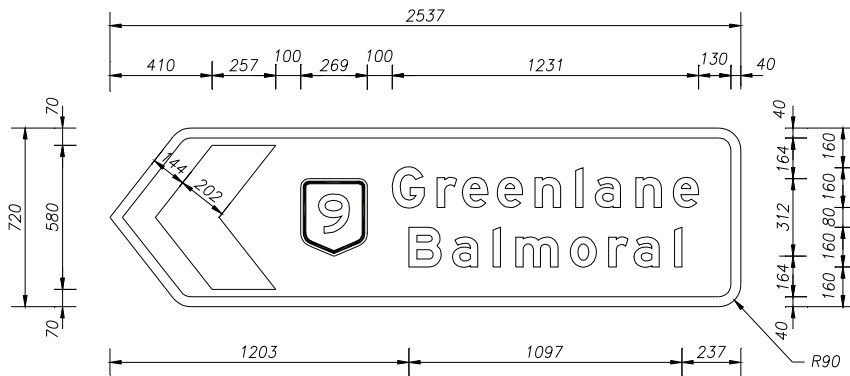
June 2009



ID - 3

SIGN DETAILS

LEGEND:	Reflectorised white
BACKGROUND:	Reflectorised standard blue
BORDER:	Reflectorised white
LETTERS:	
Destinations-	
Initial capitals	Modified Series E 160
Lower case	Modified Series E 120 loop height
ROUTE MARKER:	Refer to MOTSAM Part 1, Section 7



NOTE: Ground Mounted Sign.

FIGURE 7.11

ID - 3 INTERSECTION DIRECTION SIGN