

PART E
ASSET IDENTIFICATION SIGNAGE

7 ASSET IDENTIFICATION SIGN DESIGN AND PLACEMENT

General

The location referencing system does not include asset identification. However, asset identification is critical for maintenance personnel and for the overweight permit system. Therefore, this chapter specifies the two types of asset identification signs along with their purpose, numbering and placement.

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7.1 General Specification

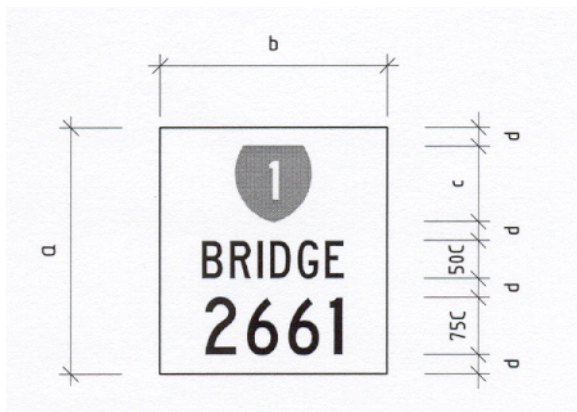
Introduction

The specific details of the asset identification signs and there placement are given in the following sections however, for general information on:

- Lettering
- Colouring and
- Safety

see Section 3.1 General Specifications

7.2 Bridge Information System (BIS) Structure Number Sign Details



| Sign | Text | a | b | c | d |
|----------|--------------|-----|-----|-----|----|
| AI-BIS-B | 50 C 75 C | 325 | 300 | 100 | 25 |
| AI-BIS-C | 50 C 75 C | 325 | 300 | 100 | 25 |
| AI-BIS-T | 50 C 75 C | 325 | 300 | 100 | 25 |

Purpose: Displaying the Bridge Information System (BIS) structure number is primarily to ensure the identification of the bridge, large culverts and tunnels so they can be clearly matched to the overweight permits.

Numbering: Bridges, large culverts and tunnels are to be given a unique Structure Number based on the approximate displacement, to the nearest 100m, from the RS (RAPID Approach).

For example:

RS 232 + 8.24km = Bridge 2402
 RS 232 + 11.56km = Bridge 2436
 RS 262 + 11.52km = Bridge 2735

The same structure number shall be recorded in the bridge structural inventory and on route data sheets..

Location: BIS structure number signs are located at each end of all bridges maintained by Transit New Zealand.

Sign: BIS structure number sign plates and posts shall comply with the physical requirements of the materials specification in the Road Safety Manufacturers Association *Standard for the Manufacture and Maintenance of Traffic Signs*. An acceptable solution would be:

- ❑ 2.5mm thick grade NS4 (5251-H34) aluminium,
- ❑ Powder coated (non-reflective), and fitted to a
- ❑ 100x100 Class H4 treated timber post, primed and finished with high gloss white paint.

These signs are single sided.



AI-BIS-B
Bridge



AI-BIS-C
Culvert



AI-BIS-T
Tunnel

7.3 Typical Placement of BIS Structure Numbers

Bridge and Large Culvert Placement:

Mounting shall be on the left-hand side of the roadway as viewed by approaching traffic, with the sign at right angles to the road centreline. The sign shall be located on the post supporting the bridge or large culvert name sign (if there is one), on the bridge end post, or on a post of its own, in that order of precedence.

The sign shall be within 5 metres of the end of the bridge or culvert barrier and outside of the window shown in Figure 7.1 Bridge Signage Envelope. The upper edge of the sign shall not be above 800 mm above the ground within 5.5 metres of the bridge centreline to allow clearance for overweight and over dimension vehicles.

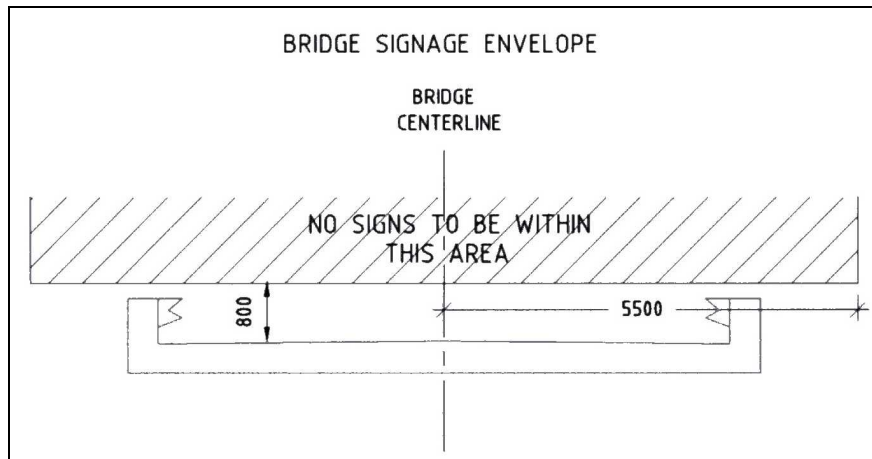


Figure 7.1 Bridge Signage Envelope

Tunnel Placement:

Mounting shall be on the left-hand side of the roadway as viewed by approaching traffic, with the sign at right angles to the road centreline. The sign shall be located on the outside wall of the tunnel or a post immediately before it in that preference order.

The upper edge of the sign shall not higher than 800 mm above the ground.

7.4 Small Culvert Marker Sign Details



| Sign | Text | Width | Height |
|-------|--------|----------|-----------|
| AI-SC | > 75 C | 50 - 100 | 500 - 900 |

Purpose: Culverts are marked so that maintenance personnel can readily locate them. The culverts which are to be marked and recorded are those which transport stormwater or natural water from a “normal water course” from one side of the highway to the other. They do not include the urban drainage system, such as pipes leading from sumps to collector systems. The maintenance of those is a local authority responsibility and there is no need for these to be included in the Transit New Zealand culvert inventory.

Numbering:

Culverts shall be numbered consecutively between reference stations. Additional culverts placed later shall be decimalised, e.g. 6.1, 6.2, etc.

For aesthetic reasons in urban kerbed situations the number need not be painted on the kerb. Instead the exact location and the number of the culvert shall be recorded so that it can be included in the State Highway culvert inventory in the RAMM system.

Although culverts under those circumstances need not have their number painted on the road they will have to be numbered in the inventory system. Hence the number of culverts needs to be taken into account to ensure that the correct number is shown on culvert markers once clear of the kerbed situation.

Post: Posts shall meet the material requirements specified in Transit New Zealand specification M/14.

Wooden posts shall meet the dimensional requirements in Transit New Zealand specification M/14 with the exception of the length, which shall be, such that the post when firmly installed is not less than 500mm or more than 900mm above existing ground level.

Non-wooden posts shall have a uniform width dimension of between 50mm and 100mm and the length requirement shall be as for the wooden posts.

Post Colour: Culvert marker posts need not be painted but when painted a single colour is preferred. The colour shall be chosen to ensure that the culvert marker cannot be mistaken for an edge marker post. Vivid colours shall be avoided and not reflector is to be attached.



AI-SC

7.5 Typical Placement of Small Culvert Marker

Small Culvert Marker Placement:

Culvert marker posts are placed above each culvert on the “true left” side of the carriageway. Facing the direction of increasing route distance. In exceptional circumstances where it is not possible to install or maintain a culvert marker post an alternative method of marking may be submitted to the Transit New Zealand Regional Office for approval.

Culvert marker posts shall not be closer to the edge of the trafficable highway than edge marker posts and wherever possible shall be placed at that end of the culvert in such a way to be readily seen from a vehicle.

Where a culvert runs at an acute angle to the centre line of the highway an additional culvert marker post may be used on the opposite side of the highway to indicate the general line of the culvert.

In urban kerbed situations it is not practical to install and maintain culvert marker posts. In such cases a culvert may be marked with a 50-mm wide 200 mm long painted line on the top and face of the kerb.

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