

### 13. ROAD MARKING STANDARDS

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Corporate Plan Output: Traffic Signs & Markings	

The purpose of this report is to acquaint the Committee with standards that have been adopted by the City Street Unit for the establishment and maintenance of road markings on roads in the city.

#### BACKGROUND

All road controlling authorities are obligated by traffic law to establish and maintain certain traffic controls on roads within their jurisdiction. “Stop” and “Give Way” markings, for example, are laid out in accordance with standards prescribed by the Traffic Regulations 1976. Similar provisions are in place for zebra pedestrian crossings and broken yellow “no stopping” lines.

Most other markings, including lane treatments at intersections and longitudinal lines such as road centre lines, edge lines and cycle lanes, are provided for in a national publication maintained by Transit NZ in association with the Land Transport Safety Authority. The “Manual of Traffic Signs and Markings” (MOTSAM), is the recommended standard for road markings in New Zealand setting achievable standards for road controlling authorities and providing consistency across all roads and highways.

#### CHRISTCHURCH CITY COUNCIL

Over a number of years the City Streets Unit has been working toward improving road markings throughout the city with particular emphasis on arterial and collector roads. All road centre lines and edge lines now have reflective glass beads included as part of the specification to enhance nighttime visibility. Retro reflective raised pavement markers (RRPMs) are now more widely used and centre lines have been appearing on more collector roads than in the past.

With increasing traffic volumes and a need to cater for cyclists on arterial and collector routes, the Unit had set about adopting a more consistent standard for the city’s roading asset. The Committee will be aware of many traffic management proposals that have been adopted by the Council to provide for the safer management of traffic, particularly on arterial roads and busy collectors. It is proposed that more work be carried out in the next year or two to bring all road markings on roads in the city up to a standard that is consistent with the guidelines set out in MOTSAM.

In rural areas there is a need to provide for delineation, particularly as many of the minor roads are narrow and do not have many nighttime driving aids.

It is anticipated that the existing budget will be adequate for upgrading roadmarkings in the coming year. In future years, additional funding may be required to complete the upgrading programme and to maintain the asset to the required standard.

## EXISTING ROAD AUDIT

Existing road audits are often carried out by Transfund to gauge the level of compliance with national standards used by road controlling authorities. In the past some criticism has been levelled at Christchurch City Council for the maintenance of some road markings in some parts of the city. Route safety audits have also been commissioned by the City Streets Unit to determine whether or not standards adopted by the city are consistent with national policies.

Resulting from these studies and in line with the Unit's desire to provide an excellent level of service to all road users consistent with recognised safety standards, guidelines have been adopted that will provide for an enhancement of the city's roading network.

## STANDARDS

The following tables indicate the standards that have been set for road markings in the city. It has been estimated that road markings along arterial and collector roads in particular will all be brought up to standard within two years. New road markings will be installed in accordance with the guidelines set out in the tables. Maintenance contracts will be altered to include provision for future installation of road markings that may not, at the present time, be present on many of the roads in the various maintenance contract areas.

Road markings are targeted to be remarked on a regular maintenance cycle. Intervals of 9 or 18 months, depending on road classification and traffic volume, have been normal practice up until recently. Proposed maintenance cycles are to be consistent throughout the city with remarking being carried out every nine months. On some sections of roadway, conditions (road surface/traffic volumes) may require road markings to be repainted at shorter intervals to maintain a high level of service for road users.

**Table 1**

Urban	Centrelines/ Lane Lines	Edgelines	RRPMs	Flush Medians	Cycle Lanes	Edge Marker Posts
Local Roads	No* <sup>1</sup>	No	No	No	No* <sup>1</sup>	No
Collector Roads	Yes	No* <sup>2</sup>	No* <sup>2</sup>	Yes* <sup>3</sup>	Yes* <sup>4</sup>	No
Arterial Roads	Yes	Yes	Yes	Yes* <sup>3</sup>	Yes* <sup>4</sup>	No

**Table 2**

Rural	Centrelines/ Lane Lines	Edgelines	RRPMs	Flush Medians	Cycle Lanes	Edge Marker Posts
Local Roads	Yes* <sup>5</sup>	No* <sup>1</sup>	No	No	No	No* <sup>1</sup>
Collector Roads	Yes	No* <sup>1</sup>	No* <sup>1</sup>	No* <sup>1</sup>	No* <sup>1</sup>	No* <sup>1</sup>
Arterial Roads	Yes	Yes	Yes	No* <sup>1</sup>	No* <sup>1</sup>	Yes* <sup>2</sup>

- \*1 Isolated facilities may be provided to enhance traffic safety.
- \*2 Warranted if traffic volumes exceed 12,000 vpd (urban) or 1,500 vpd (rural).
- \*3 Warranted if traffic separation is required and/or pedestrian crossing points have been established.
- \*4 Warranted if the road is part of the cycle network or a traffic management plan for the area.
- \*5 Warranted for lengths of roadway over 0.5 km and if width exceeds 5.5 m.

## **CONCLUSION**

Adopting a minimum set of standards for road markings on roads in the city is consistent with recommended practice and will provide for the efficient use of the Council's roading assets. Road markings will relate to the function of the road with consistent standards being set for arterial, collector and local roads.

The Unit aims to complete the basic programme within the maintenance cycle for remarking roads over the next two years.

Maintenance cycles for road markings have been altered to provide for more frequent repainting of road lines to ensure that a high level of delineation is maintained throughout the city.

### **Chairman's**

**Recommendation:** That the information be received.