

W573-10-1/2



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25 February 2009

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REFERRED TO	Date	Initials	Action
B. Sparey			
FILE	RECALL		

HUTT CITY COUNCIL
27 FEB 2009

Dear Bryan

Review of Speed Limit on Marine Drive

Purpose

Provide NZTA recommendation for revising the 70 km/h speed limit on Marine Drive, York Bay and Sunshine Bay, Eastbourne.

Background

The legal document for establishing speed limits that can be warranted, i.e. tabled in a bylaw and therefore enforced is the Land Transport Rule: Setting of Speed Limits 2003. The Rule incorporates Speed Limits New Zealand (SLNZ) as the procedure for calculating the speed limit. The Rule allows for departures from the SLNZ process in cases where the calculated speed is not safe and appropriate. These are exceptional cases that typically relate to the context and use of the road that require established evidential justification.

Speed Zoning is an evidence-based process developed by NZTA to establish speed limits. Speed Zoning uses a risk assessment procedure to set a speed limit that matches the operational characteristics of a road. These operational characteristics are:

- Roadside activity including frontage development and side roads
- Amount of traffic and composition, specifically pedestrians and cyclists
- Roadside hazards and traffic crash potential
- Road design, including seal width, alignment and speed changes
- Traffic separation and sight distances
- Current speed profile

Roadside development is the primary determinant of a speed limit calculated using SLNZ; the more accesses onto a road, the lower the speed limit. The roads on the periphery of urban centres are most suited to this approach. However, Speed Zoning is suited and designed for long sections of rural road (i.e. 100 km/h) where road design and other features are better indicators of a safe and appropriate speed limit. Recent examples of Speed Zoning are Paekakariki Hill Road and Grays Rd in Porirua. Therefore, where a road fits within the wider road network must be considered when evaluating speed limits calculated by the two methods.

SLNZ and Speed Zoning were used to determine a speed limit for the 2.1 km section of Marine Drive from York Bay to Sunshine Bay in Eastbourne currently posted at 70 km/h. The following two sections describe the results.

M09/1056



SLNZ Determination and Assessment

SLNZ determined an 80 km/h speed limit, reflecting the low amount of roadside development on this section of road.

An 80 km/h speed limit would only be safe and appropriate if it more closely matched adjoining speed limits, reflected existing vehicle speeds, and fewer pedestrians and cyclists used the road. Currently the speed limits from Parkside Road roundabout to Eastbourne are: 70 km/h to Point Howard, 50 km/h to York Bay, 70 km/h to Sunshine Bay, 50 km/h to Eastbourne settlement. Introducing another speed limit value is confusing and therefore not safe or appropriate.

It is worth noting that SLNZ does not explicitly account for features specifically related to Marine Drive such as the informal pedestrian crossings and vehicle stopping that are a result of a road separating a residential area and an attractive harbour.

Speed Zoning Determination and Assessment

Speed Zoning determined a 60 km/h speed limit, reflecting the existing operational characteristics of the road¹. As noted above, Speed Zoning is designed for long rural stretches of road typically with 100 km/h speed limits, so this speed limit must be assessed whether it is safe and appropriate for this short predominantly urban road.

A significant number of pedestrians and cyclists use Marine Drive, and this number is likely to increase. The current provision for these vulnerable users includes footpaths and shoulders, but these exist only on some sections. Hutt CC is currently completing a cycle and pedestrian network, effectively continuous facilities for pedestrians and cyclists on common routes in the City. Part of this improvement is connecting Eastbourne to Petone with the Eastern Bays Shared Path project. The concept for the project is a wide path adjacent to the road edge that can accommodate pedestrians and cyclists. The project involves seawall construction and rearranging road space. Similar projects result in reductions in vehicle speed and increases in pedestrian and cycling activity. Considering the safety of these users a low speed limit is safe and appropriate.

NZ Police monitor the offences issued by speed cameras. Currently the 50 km/h section of Marine Drive between Point Howard Wharf and Gill Rd (Sorrento Bay/Lowry Bay) is the worst offending non-school site in the Wellington Police District (includes the 8 TLAs at the bottom of the North Island) with 6.7 photos taken per 100 vehicles passing. All other camera sites in Hutt City have less than 4 photos per 100 vehicles. These data indicate that the 50 km/h limit in Sorrento Bay between the 70 km/h limits either side may be too short and drivers are not realising that the speed limit has changed. By introducing another speed limit value, 60 km/h, to the current mix of 50 and 70 km/h speed limits would further confuse road users and possibly result in further infringements.

Speed limit changes must be located at points obvious to road users: where the roadside development or the road environment changes significantly. This reinforces the need for road users to change speed. A speed limit change from 50 km/h to 60 km/h is too subtle to be reinforced by changes to the roadside development or the road environment, especially along this relatively consistent section of Marine Drive.

¹ Refer Appendix 1 for consultant report on SLNZ and Speed Zoning calculations and Appendix 2 which is a revised chart and table to account for additional data (week long speed surveys at 3 locations)

Conclusion

The legal document for establishing speed limits is the Land Transport Rule: Setting of Speed Limits 2003. The Rule incorporates Speed Limits New Zealand (SLNZ) as the procedure for calculating the speed limit. The Rule allows for departures from the SLNZ process in cases where the calculated speed is not safe and appropriate. This is the case for the York Bay section of Marine Drive.

SLNZ determines a limit of 80 km/h for Marine Drive around York Bay. This is not safe and appropriate, so alternative methods were used to determine a limit. Speed Zoning, a method that emphasises a road's operational characteristics, determined a limit of 60 km/h. However, this limit is also not safe or appropriate given that the adjacent limits are 50 km/h, and the subtle change in limit from 50 km/h to 60 km/h would not be reinforced by the roadside development or the road environment.

In addition a 50 km/h limit is supported given the increasing pedestrian and cyclist volumes, vulnerable road users that are safer when the speed differential between travel modes is reduced.

Recommendation

That a 50 km/h speed limit be implemented on the section of Marine Drive including York Bay and Sunshine Bay currently posted at 70km/h.

Should Hutt City Council alter their existing Speed Limits Bylaw, both the NZ Police and the NZTA are required to be notified that a change has been approved in accordance with Section 7.2 (4) of Land Transport Rule, Setting of Speed Limits 2003.

Yours sincerely



Sam Wilkie
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