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November 3, 2020
File: 310003165

Attention: Connor Marner
Dunedin City Council
PO Box 5045
Dunedin 9054

Dear Connor,

Reference: LUC -2020 -293– 20 Bay Road, Warrington - Request for further information

This report supersedes the earlier information dated 1 September and includes some minor corrections.

The New Zealand Motor Caravan Association (NZMCA) has lodged an application for resource consent to establish a camping ground for its association members at 20 Bay Road, Warrington. Dunedin City Council (DCC) has requested further information regarding the application. This report provides a response to those parts of the request that relate to transport.

1 HILL ROAD / BAY ROAD INTERSECTION



Figure 1-1: Hill Road / Bay Road Intersection (Source: DCC GIS Maps)

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Figure 1-1 shows an aerial view of the Hill Road / Bay Road intersection. Although Hill Road forms the side road approach at the intersection with Bay Road, the road has been marked to provide a continuous movement from Hill Road to Bay Road east of the intersection. Give-way signs and markings have been installed on the western approach. The non-standard road markings at the intersection reflect the fact that the dominant vehicle flows are between Hill Road and Bay Road east which provides access to the Esplanade and Warrington Reserve.

Hill Road north of the intersection and Bay Road west of the intersection have been formed within 16m wide road reserves. East of the intersection, the Bay Road road reserve reduces to 12m wide. Figure 1-1 also shows that the driveway to the 37 Bay Road and the hedge on the western side of Hill Road are located within the road reserve. Photograph 1-1 shows that the driveway has not been constructed in a position that would comply with the District Plan rules for separation of crossings from an intersection.



Photograph 1-1: Driveway and hedge adjacent to Bay Rd / Hill Rd intersection

Within Warrington, intersections and bends have been constructed with a wide range of inside corner radii ranging from 5m to 10m. The inside radius for the left turn from Bay Road into Hill Road is at the lower end of this range but is of a similar standard to other intersections in the area. The small radius corner does require that vehicles turn at low speed and larger vehicles such as waste collection trucks will cross the centre line as they turn left into Hill Road. This could be mitigated if the inside radius was increased to 10m in line with the inside radius on the opposite side of the road. This will require DCC approval to remove the hedge and will affect the existing vehicle access to 37 Bay Road.

The hedge on the western side of Hill Road is located within the road reserve and does constrain the sightlines on the Bay Road approach. In practice, the shortfall in sight distance does not represent a

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significant safety concern in this location because of the low vehicle speeds on the road network in this area. Approach speeds of less than 35km/h are expected because of the small radius corner connecting Hill Road with Bay Road and also connecting Bay Road with Esplanade. Although no crashes have been reported at the intersection, it is acknowledged that increasing the sight distance would provide safety benefits. As outlined earlier, this will require DCC approval to remove the hedge and will affect the existing vehicle access to 37 Bay Road.

Vehicle tracking analysis has been undertaken with and without the widening of the intersection. This demonstrates that NZMCA member vehicles can negotiate the intersection without improvements being made but that widening the intersection would ensure that two-way movement of large vehicles would be possible. In practice, the anticipated low volume of movements generated by the camping ground and generally tidal nature of the flows means that the potential for this type of conflict will be very low.

2 SIGNPOSTING

There are existing signposts to the Warrington Reserve camping area at the Coast Road / Park Road, Park Road / Hill Road and Hill Road / Bay Road intersections that clearly indicate routes for campervans. There are no reasons why NZMCA members would choose to follow other routes to access their site at 20 Bay Road. However, any Council concerns with the potential use of Bank Road could be addressed with additional signage at the Park Road / Bank Road intersection to reinforce the route for campervans.

Bay Road has been constructed with a 4.8m wide seal and has a gravelled footpath along its southern edge. The seal width is sufficient to allow slow speed, two-way movement of a 2.5m wide vehicle and a 99th percentile design vehicle with 300mm separation. The seal width is not sufficient to allow two-way movement of two large vehicles without one vehicle traversing the footpath. Given that the peak hour volumes generated by the proposed campground even with the Stage 2 development are expected to be less than 20 movements and that movements will be tidal in nature, the likelihood of two large vehicles meeting on Bay Road is very low, less than 1 in 10. Since the volume of pedestrian movements in the area is also low and the low speed of NZMCA vehicles, the rare use of the gravelled area to allow the vehicles to pass each other is considered acceptable.

The road carriageways on the signposted route between Coast Road and Warrington Reserve are all over 6m wide which is sufficient to allow safe two-way movement of large vehicles. Additional widening of these roads is not considered to be necessary.

3 ROAD CONSTRUCTION

The analysis of traffic generation for the camping ground indicates that it is likely to generate an average of about five additional vehicle movements per day on the road network during off-peak periods and 15-20 movements per day on average during the summer peak period. This represents the typical traffic generation of two to three households measured over a year-long period.

The DCC Development Contributions Policy already requires that this includes a transport component. Since the minor improvement works are recommended at the Bay Road / Hill Road intersection, it is considered appropriate that some additional contribution is made to these works but that this is conditional on the works being implemented by Council within an agreed timeframe, e.g. one year.

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4 SITE ACCESS

4.1 ACCESS DESIGN

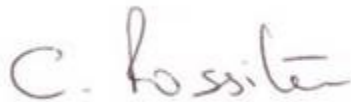
The detailed design for the entrance from Bay Road has not been completed at the current time but there are no reasons why the Council's comments in relation to the gate location and sealing would not be taken into account. These represent matters for Engineering Approval.

4.2 ON-SITE MANOEUVRING

The camping ground has been set out to provide individual sites that are 6m wide and 13m deep which is sufficient to accommodate all vehicle types anticipated while still providing separate from adjacent vehicles. The central access aisle is 20m wide which is adequate to accommodate all the manoeuvres associated with parking vehicles.

We trust that this report addresses the request for further information in relation to transport matters but would be happy to discuss any matter raised as necessary.

Regards,



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Attachment: Vehicle tracking figures

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