

12 December 2010

Ms Sue Whyte
President, Catherine Hill Bay Progress Association

Dear Ms Whyte,

Re: CATHERINE HILL BAY DEVELOPMENT –TRAFFIC NOISE IMPACT
ASSESSMENT FOR EXISTING RESIDENCES AT MIDDLE CAMP

PAEHolmes has been engaged by Catherine Hill Bay Progress Association to conduct a desktop review of the C&A Middle Camp Catherine Hill Bay (CHB) Development – *Road Traffic Noise Assessment for Existing Residences Report (RT Report)* prepared by Renzo Tonin & Associates with reference TD261-14F01 (rev 0) dated 11 October 2010.

The initial Catherine Hill Bay Residential Development proposal recommended that the Middle Camp be bypassed. The size of the proposal has been revised and as a result of changes to the proposal, the bypass for Middle Camp has been removed. The RT Report was conducted to assess the potential traffic noise impact from the proposed development on Middle Camp.

Middle Camp is a small group of homes along Flowers Drive. From aerial measurements, most homes are within 4 to 6 m of the nearside road kerb.

Following a detailed review of the Report, PAEHolmes has the following comments:

1. Flowers Drive Noise Criteria

The Report suggests that Flowers Drive is a Collector Road and as such has criteria of 60 dBA $L_{Aeq, 1hour}$ daytime and 55 dBA $L_{Aeq, 1hour}$ night time. No justification has been provided for this assumption.

In the PB report *Lower Hunter Land Development – Southern Estate – Catherine Hill Bay (Middle Camp) Traffic and Transport*, the functional category for Flowers Drive though Middle Camp is considered as being both local road and collector road.

The classification of roads in rural areas is often not straight forward. This issue is acknowledged by DECCW and is currently being considered in a review of the ECRTN.

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Currently Flowers Drive connects to a sub-arterial road (the old Pacific highway) which would indicate a collector road classification; however the low volumes, characteristically intermittent traffic flows, proximity of residences on the road (houses in Middle Camp are 4 to 6 metres from the edge of the road), road geometry and traffic speed (proposed traffic speed of 40km/hr) would indicate a local road classification. In my experience, it is appropriate to assign the local road classification and criteria to Flowers Drive where it passes through Middle Camp. The criteria therefore to be considered would be 55 dBA $L_{Aeq, 1hour}$ daytime and 50 dBA $L_{Aeq, 1hour}$ night time. These criteria are 5 dB lower than the collector road criteria.

2. Traffic Volumes and Speeds

Section 3.7 (Traffic forecast on Flowers Drive through Middle Camp for noise assessment) of the Hyder "Catherine Hill Bay Traffic and Transport" Report (Hyder Report) presents the traffic data used for the noise assessment. It is recommended that traffic management procedures be implemented, particularly a speed limit of 40km/hr. The noise impact assessment has been undertaken based on an assumed road traffic speed of 40km/h. It is therefore considered important that this be implemented by posting and enforcing as a speed limit as higher speeds will result in higher noise levels and corresponding greater noise impact.

3. Existing Traffic Noise Levels

Table 3 in the RT Report presents calculated existing traffic noise levels. Assumptions for the traffic noise predictions have not been provided; as such it is not possible to confirm the accuracy of the results. For example, noise model, exact traffic volumes, distance, façade reflection, etc

4. Predicted Future Traffic Noise Levels (2012)

Table 4 in the RT Report present calculated future traffic noise levels. Not all the assumptions for the traffic noise predictions have been provided; as such it is not possible to confirm the accuracy of the results. Some initial comparative calculations have been conducted by PAEHolmes and suggest that the noise levels may be under predicted.

We note that there is no calibration of the traffic noise modelling. However, given the sensitive of this project, PAEHolmes believes this should have been undertaken in order to minimise the risk of traffic noise exceedances and higher noise impacts.

A desktop review of the RT Report has determined a number of areas which require further justification and clarification. If you have any question or require clarification please do not hesitate to contact me.

Yours faithfully,

A handwritten signature in black ink that reads 'John Wassermann'.

John Wassermann
PAEHolmes
Manager Noise Practice