

Memorandum

To: Phillip Millar, Selwyn District Council
CC: Fiona Small, Incite
From: William Reeve, AES
File Reference: AC19243 – 03 – R2
Date: Friday, 28 August 2020
Project: Birchs Road Park – Notice of Requirement: Updated Masterplan
Pages: 4

Meeting

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Telephone

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Memorandum

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File Note

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Dear Phillip,

As requested, we have reviewed the updated masterplan dated the 21st of August 2020, along with your further comments on the anticipated use of the main changing rooms / toilet block. This results in some changes to the predicted noise levels from our Assessment of Environmental Noise Effects dated 15th April 2020 (AES reference AC19243 – 02 – R3) which we discuss below.

1.0 DOG PARK CARPARK

We understand that the capacity of the carpark beside the dog exercise area has increased to 65 – 75 carparks in response to submissions about demand for the fields close to this carpark. We also understand that the overall traffic generation figures will stay the same, but the split between the main carpark and the dog exercise area carpark will be different.

In our assessment we considered 35 – 45 carparks, with a worst-case scenario of 35 vehicle movements in a peak 15 minute daytime period. At the notional boundary of the closest receiver at 333 Leadleys Road, we previously predicted noise levels of 40 dB L_{Aeq} / 42 dB L_{A10} . We note that doubling the number of movements in this carpark (to 70 in 15 minutes) would increase noise to this receiver by only 3 dB to 43 dB L_{Aeq} / 45 dB L_{A10} . This remains well below the District Plan daytime noise limit of 55 dB L_{A10} and our recommended criteria of 55 dB L_{Aeq} .

Because this activity would replace use of the main carpark, predicted levels from the main carpark to 160 Birchs Road and 176 Birchs Road would reduce accordingly.

We consider that our scenario regarding the level of activity at night-time (i.e. before 7am), of four vehicle movements in a worst case 15 minute period, is still appropriately conservative for the increased carpark size.

2.0 MAIN CARPARK ENTRY

We understand that the entry to the main carpark is now wider due to more lanes being added. Because the location of the entry /exit point remains the same as what we have assessed previously, we do not consider this will result in any change to the predicted noise levels.

3.0 BUILDING USE

In our assessment we modelled the use of the building with a communal area used for post-match functions, assuming an internal noise level of up to 85 dB L_{Aeq} and doors open towards the playing fields. This internal level is consistent with what could be expected in a busy bar with high occupancy due to patron conversation and background music.

We understand that this type of activity is not anticipated, and the building will only accommodate changing rooms, toilets and storage. Submitters have also raised concern about noise levels if doors are open on other sides of the building.

Our model has been updated to match the now anticipated activity, based on plans for a similar building at Foster Park. This building has six change rooms / showers, two umpire change rooms, a storage area and six individual toilets.

We have assumed an internal sound pressure level of 75 dB L_{Aeq} within each changing room space, with doors wide open. This level of activity would be consistent with four people talking at a raised voice level at the same time continuously for 15 minutes in each changing room. Since we have also assumed the doors to the changing rooms are held open when this occurs this is expected to be a very conservative assumption.

The predicted levels based on this level of activity are presented in table 3.1 below, with a noise contour plot appended to this letter for reference. Noise levels increase at 160 and 176 Birchs Road, although the predicted levels at the notional boundaries of these dwellings are still less than 30 dB L_{Aeq} / 32 dB L_{A10} which is well below the District Plan noise limits and our criteria.

Table 3.1 – Break-out noise levels from the building

Location	Noise levels (dB L_{Aeq} / dB L_{A10})	
	Original AENE	Revised
A: Notional boundary of dwelling at 2 Hamptons Road	26 / 28	16 / 18
B: Notional boundary of dwelling at 32 Hamptons Road	28 / 30	19 / 21
C: Notional boundary of dwelling at 42 Hamptons Road	<20 / <20	17 / 19
D: Site boundary of 116 Birchs Road	<20 / <20	17 / 19
E: Notional boundary of dwelling at 142 Birchs Road	<20 / <20	19 / 21
F: Notional boundary of dwelling at 160 Birchs Road	<20 / 21	26 / 28
G: Notional boundary of dwelling at 176 Birchs Road	20 / 22	29 / 31
H: Notional boundary of dwelling at 333 Leadleys Road	24 / 26	16 / 18

I trust this is of some assistance. Please do not hesitate to contact me to discuss further.

Kind Regards,

A handwritten signature in black ink, appearing to read 'W. Reeve'.

William Reeve
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Senior Acoustic Engineer
Acoustic Engineering Services

Appendix A – Revised building breakout contours based on reduced activity

