18 May 2022

Paul Hunter Director CBRE Project Management Level 21, 363 George Street Sydney, NSW 2000

## Re: Nepean Hospital - Stage 2 - Review of noise impacts

Dear Paul,

This letter has been prepared in relation to potential noise impacts associated with amendments to Stage 2 of the Nepean Hospital redevelopment ('the Project') located at Derby Street, Kingswood NSW.

Noise and vibration impacts associated with the Project were addressed in the EMM 2021 *Nepean Hospital* - *Stage 2 - Noise and vibration impact assessment* prepared for Health Infrastructure.

Amendments to the design which are relevant to this review include:

- kitchen condensers located on the ground floor of the Stage 2 tower structure. The plant is located on the northern façade in proximity to Tresillian; and
- marginal increase in project height and subsequent potential impacts from rooftop plant.

Noise predictions at the nearest noise sensitive receiver (Tresillian) from the operation of kitchen condensers is in the order of 52dB  $L_{Aeq}$ . The noise objective for Tresillian is in the order of 48dB  $L_{Aeq}$ . Accordingly, additional noise mitigation will be required to meet project noise objectives which could include the following:

- speed control of the kitchen condenser units to achieve a 4dB reduction; and/or
- line of sight acoustic screen between the condenser units and Tresillian.

Finalised acoustic treatments or management (ie speed control) are to be determined upon final selections of plant and required capacities.

Rooftop plant equipment has been addressed to the most potentially impacted receiver, that being the Onyx residential apartment building located at 5 Lethbridge Street, Penrith. The multi-storey nature of the apartment building provides the most unobstructed view to the rooftop plant and thus the loudest predicted noise levels. Based on the equipment selections included with the design development tender package, no additional acoustic treatment to the rooftop plant will be required to meet the project noise emission requirements.

It is noted that the rooftop plant will be subject to ongoing review to ensure that any reselections or additions of plant continue to meet the project noise emission requirements.

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In summary, the amendments to the Project as identified above have been reviewed for potential noise impacts. Noise mitigation measures have been identified for plant equipment where required to meet noise emission requirements.

Yours sincerely

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