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September 30, 2024
Goodman Property Services (Aust) Pty Ltd
Attn: Lachlan O'Reilly
The Hayesbery
1-11 Hayes Road
Rosebery NSW 2018
Lachlan.OReilly@goodman.com

Re: SSD 10397 – Oakdale West Estate – Building 2B – Noise Verification Report

Dear Lachlan,

We refer to the following documents:

- NSW Department of Planning, Industry and Environment (DPiE) Oakdale West Estate Stage 2 Development (SSD-7348) – Consolidated Consent, dated April 2023
- NSW Department of Planning, Industry and Environment (DPiE) Oakdale West Estate Stage 2 Development (SSD-10397) - Consolidated Consent, dated 4 May 2021

The Conditions of Consent include the following:

Noise Verification

D75(b). A Noise Verification Report must be prepared by a suitably qualified and experienced acoustic consultant and submitted to the satisfaction of the Planning Secretary at the following stages of the development:

- (a) Within three months of commencing operation of any buildings on the site; and*
- (b) Two years after commencing operation of any buildings on the site.*

D75(c). The Noise Verification Reports required by Condition D75(b) must include:

- (a) An analysis of compliance with the noise limits in Condition B18, undertaken in accordance with the NSW Noise Policy for Industry (EPA 2017) and Australian Standard AS 1055:2018 Acoustics – Description and measurement of environmental noise (Australian Standards 2018);*
- (b) A detailed maximum noise level event assessment undertaken in accordance with the NSW Noise Policy for Industry (EPA 2017);*
- (c) An assessment of the performance and effectiveness of applied noise mitigation measures, including the noise barrier; and*
- (d) Identification of addition noise control measures to be implements to address any exceedances of the limits in Condition B18 and details of when these measures would be implemented and how their effectiveness would be measured and reported to the Planning Secretary.*

Further conditions referenced in the above Conditions of Consent is outlined below:



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Design and Validation

B18. The Applicant shall ensure the Development does not exceed the noise limits in **Table 3** at the receiver locations N1, N2, N3, N4 and N5 shown on the plan in **Appendix 5**.

Table 3: Noise Limits dB(A)

| Location | Day | Evening | Night | |
|---|---|------------------------------------|------------------------------------|-------------------------|
| | <i>L_{Aeq} (15 minute)</i> | <i>L_{Aeq} (15 minute)</i> | <i>L_{Aeq} (15 minute)</i> | <i>L_{AMax}</i> |
| N1 Emmaus Village Residential | 44 | 43 | 41 | 52 |
| N3 Kemps Creek – Nearest Residential Property | 39 | 39 | 37 | 52 |
| N4 & N5 Kemps Creek – Other Residences | 39 | 39 | 37 | 52 |
| N9 to N14 | 47 | 42 | 42 | 52 |
| N2 Emmaus Catholic College (school) | When in use: 45 L_{eq}(1h) | | | |

B25. The Applicant shall design and install all rooftop mechanical plant and services to ensure cumulative noise levels do not exceed 37 dB(A) at the western site boundary or 41 dB(A) at the southern site boundary. The Applicant shall provide written evidence to the satisfaction of the Planning Secretary, prior to the commencement of operation, confirming that rooftop mechanical plant and services have been installed to achieve these noise levels.

Two sets of measurements were conducted on Friday 23rd August 2024, the first between 12:00pm and 3:00pm, and the second between 9:00pm and 11:00pm. The purpose of the measurements was to determine operational mechanical plant and services noise, with respect to the consent noise limits described above.

Attended measurement locations are shown in Figure 1-1.

Figure 1-1: Attended Monitoring Locations

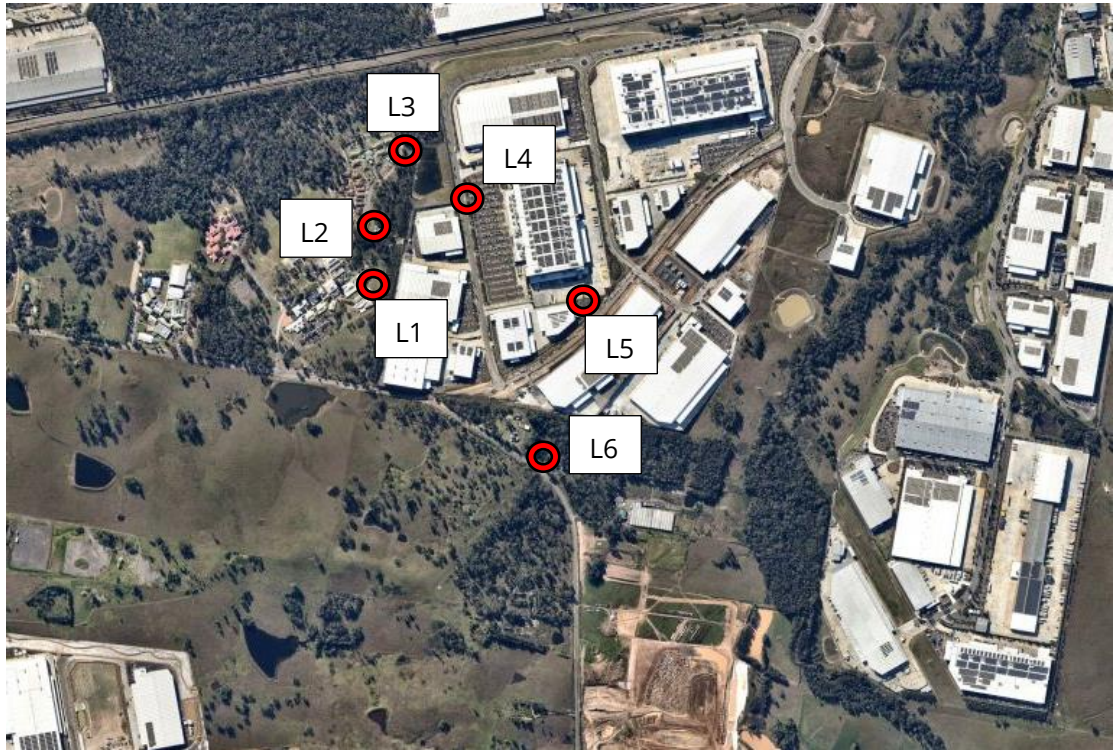


Table 1-1: Monitoring Location Addresses

| Location ID | Address |
|-------------|---|
| L1 | 87-109 Bakers Lane, Kemps Creek (Emmaus Catholic College) |
| L2 | 85 Bakers Lane, Kemps Creek (Catholic Healthcare Emmaus Retirement Village) |
| L3 | |
| L4 | 13 Emporium Avenue, Kemps Creek (Western Site Boundary) |
| L5 | 13 Emporium Avenue, Kemps Creek (Southern Site Boundary) |
| L6 | 20 Aldington Road, Kemps Creek |

It is understood that the residential properties located at 25 Aldington Road, Kemps Creek (N3) have an agreement with Goodman, thus assessing noise emission levels at this receiver is not applicable. It should also be noted that the other residential buildings N4 and N5 have since been demolished in advance of future industrial development, thus assessing at these locations is no longer applicable.

Noise criteria for each monitoring location is outlined in Table 2.



Table 2: Monitoring Location Noise Criteria

| Location ID | Noise Criteria | |
|-------------|--------------------------------------|--------------------------|
| | Daytime (07:00-18:00) | Night-time (22:00-07:00) |
| L1 | 45 dB L _{Aeq} (when in use) | |
| L2 | 44 dB L _{Aeq} | 41 dB L _{Aeq} |
| L3 | | |
| L4 | 37 dB L _{Aeq} | |
| L5 | 41 dB L _{Aeq} | |
| L6 | 47 dB L _{Aeq} | 42 dB L _{Aeq} |

All measurements were conducted using a NTi Type XL2 sound level meter (SLM). This SLM is a type approved system offering Class 1 performance according to IEC 61672-1:2013 *Electroacoustics – Sound level meters – Part 1: Specifications* and has current with National Association of Testing Authorities, Australia requirements (NATA) calibrated and has current calibration with National Association of Testing Authorities, Australia requirements (NATA) calibrated to IEC 61672-3:2013 *Electroacoustics – Sound level meters – Part 3: Periodic tests*.

The A-weighting filter of the meter was selected, and the time weighting was set to “Fast”. The field calibration of the meter was checked before and after the measurements with a GRAS 42AG sound level calibrator (SLC) and no significant drift was noted. This SLC is a Class 1 calibrator according to AS IEC 60942-2004 *Electroacoustics – Sound calibrators* and has been calibrated to the same Standard. The NTi Type XL2 and Brüel & Kjær Type 4231 hold current laboratory calibrations in accordance with NATA and our in-house Quality Assurance Procedures.

Results of the 15-minute operator attended measurements are summarised in Tables 3 and 4.

Table 3 Attended Measurement Results (15-minute) – Daytime Period

| Location | Date / Start Time / Weather | Primary Noise Descriptor (dBA re 20 µPa) | | | | | Description of Noise Emissions and Typical Maximum Noise Levels |
|----------|---|--|-----------------|------------------|------------------|------------------|---|
| | | L _{Amax} | L _{A1} | L _{A10} | L _{A90} | L _{Aeq} | |
| L1 | 22/08/2024 1:10 pm 23°C 3.6 m/s NW | 81 | 62 | 49 | 41 | 52 | <u>Site Noise:</u> Site noise inaudible. <u>Ambient Noise:</u> Distant schoolchildren playing 40-42 dBA. Birdsong 43-45 dBA. Distant RTN from Bakers Lane 40 dBA. Infrequent PA system use from school 75–81 dBA. |



| | | | | | | | |
|----|---|----|----|----|----|----|---|
| L2 | 22/08/2024 2:18 pm 20°C 5.3 m/s NE | 64 | 56 | 47 | 40 | 45 | <p><u>Site Noise:</u> Site noise inaudible.</p> <p><u>Ambient Noise:</u> Birdsong 43-48 dBA. Car idling nearby 42 dBA. Reversing sirens from industrial estate to the north 40-42 dBA. Irrigation water tanks (part of Retirement Village) 40-41 dBA. Car Pass bys 47-53 dBA.</p> |
| L3 | 22/08/2024 2:34 pm 20°C 5.3 m/s NE | 70 | 52 | 47 | 42 | 45 | <p><u>Site Noise:</u> Site noise inaudible.</p> <p><u>Ambient Noise:</u> Birdsong 50-60 dBA. Operational noise from industrial estate to the north 44-46 dBA. Cars maneuvering on car park 45-55 dBA.</p> |
| L6 | 22/08/2024 2:56 pm 20°C 5.3 m/s NE | 86 | 78 | 63 | 42 | 64 | <p><u>Site Noise:</u> Site noise inaudible.</p> <p><u>Ambient Noise:</u> Birdsong 42-45 dBA. Vehicle pass bys 55-80 dBA.</p> |

Table 4 Attended Measurement Results (15-minute) – Night-time Period

| Location | Date / Start Time / Weather | Primary Noise Descriptor (dBA re 20 µPa) | | | | | Description of Noise Emissions and Typical Maximum Noise Levels |
|----------|---|--|-----------------|------------------|------------------|------------------|---|
| | | L _{Amax} | L _{A1} | L _{A10} | L _{A90} | L _{Aeq} | |
| L4 | 22/08/2024 9:06 pm 18°C 5.0 m/s NE | 79 | 70 | 64 | 40 | 52 | <p><u>Site Noise:</u> Site noise inaudible.</p> <p><u>Ambient Noise:</u> Infrequent car pass by 45-55 dBA. HGVs entering warehouse to the north 50-60 dBA. Infrequent aircraft flyover 42-47 dBA.</p> |
| L5 | 22/08/2024 9:23 pm 18°C 5.0 m/s NE | 79 | 70 | 61 | 42 | 53 | <p><u>Site Noise:</u> Site noise inaudible.</p> <p><u>Ambient Noise:</u> Infrequent car pass by 42-54 dBA. Siren/Alarm from warehouse to the west 50-53 dBA.</p> |
| L3 | 22/08/2024 10:00 pm 17°C 4.1 m/s N | 64 | 57 | 48 | 43 | 45 | <p><u>Site Noise:</u> Site noise inaudible.</p> <p><u>Ambient Noise:</u> Infrequent car pass by 45-60 dBA. Insect noise 42-44 dBA.</p> |
| L2 | 22/08/2024 10:17 pm 17°C 4.1 m/s N | 61 | 51 | 48 | 45 | 46 | <p><u>Site Noise:</u> Site noise inaudible.</p> <p><u>Ambient Noise:</u> Pedestrian pass by 40-45 dBA. Infrequent car pass by 45-55 dBA.</p> |



| | | | | | | | |
|----|---|----|----|----|----|----|--|
| | | | | | | | Insect noise 40-43 dBA. |
| L6 | 22/08/2024 10:36 pm 17°C 4.1 m/s N | 81 | 67 | 46 | 43 | 56 | <u>Site Noise:</u> Site noise inaudible. <u>Ambient Noise:</u> Occasional vehicle pass by 55-80 dBA. Insect noise 42-45 dBA. |

The measured noise levels were used to determine the noise levels at each assessment location. The following assessment of compliance against the relevant conditions is presented in Table 5 and Table 6.

Table 5 Assessment against Condition B18

| Location / Receivers | Attended Measurement Location | Estimated OWE contribution, dB L _{Aeq} | Condition B18 Noise Limit, dBA | Compliance |
|----------------------|-------------------------------|---|--------------------------------|------------|
| N2 | L1 | < 31 | 45 | Yes |
| N1 | L2 | < 35 | 44 @ Day | Yes |
| | L3 | | 41 @ Night | |
| 20 Aldington Road | L6 | < 33 | 39 @ Day 37 @ Night | Yes |

Table 6 Assessment against Condition B25

| Location / Receivers | Attended Measurement Location | Estimated OWE contribution, L _{Aeq} , 15 min | Condition B25 Noise Limit, dBA | Compliance |
|----------------------|-------------------------------|---|--------------------------------|------------|
| Western Boundary | L4 | < 30 | 37 | Yes |
| Southern boundary | L5 | < 32 | 41 | Yes |



Based on the above we can confirm that the development is operating in accordance with Conditions D75(b) and D75(c) of the Conditions of Consent outlined above.

Yours sincerely

A handwritten signature in black ink, appearing to read 'AJ', with a stylized flourish extending from the top right.

Alex Jang
Project Engineer
RWDI Australia Pty Ltd