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Project 4835 27 April 2021

Trend Investments Pty Ltd

C/o- Palladium Property Attention: Mr Phillip Hoare **133 Alexander Street CROWS NEST NSW 2065** Email: Phillip.Hoare@palladium.net.au Ph: 02 9432 7866

Dear Mr Hoare

27 SUNNY BANK RD LISAROW – MIXED-USE LIGHT INDUSTRIAL PARK **ACOUSTIC ADDENDUM – LETTER 01**

INTRODUCTION

Acoustic Dynamics has been engaged by Trend Investments Pty Ltd to assess noise emission for the proposed mixed-use light industrial park development at 27 Sunny Bank Road, Lisarow, NSW.

The acoustic report prepared for the development application (reference: 4835R001.MW.200708, dated 9 July 2020) provides a technical assessment, as well as acoustic design recommendations for remediation works to reduce noise emission with a view to achieving compliance with the relevant acoustic criteria and requirements.

Acoustic Dynamics understands Council has reviewed the development proposal and has expressed concern regarding noise impacts to residential dwellings to the west of the site due to the operation of the waste collection facilities and loading docks located on the western side of the scheme.

Further to the information provided within the acoustic report, Acoustic Dynamics provides the following clarification regarding the assessment methodology and the potential for acoustic disturbance to adjacent western receivers.

2 **ASSESSMENT METHODOLOGY**

2.1.1 NOISE EMISSION SCENARIOS

Acoustic Dynamics conducted cumulative noise emission calculations based on worst-case operating scenarios during each of the relevant assessment periods. Conducting the assessment in this manner ensures that even during an unlikely worst-case noise emitting event, the amenity of neighbouring residents can be adequately protected.

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Acoustic Dynamics conducted modelling of three (3) scenarios, relating to the time of day, as follows:

Scenario A – Daytime (7am to 6pm)

 All noise sources operating simultaneously and continuously, over any 15-minute period during the day.

Scenario B – Evening (6pm to 10pm)

- The proposed gym and associated mechanical equipment operating;
- o The proposed child care centre and associated mechanical equipment operating;
- o The restaurant and associated mechanical equipment operating;
- o Warehouse and Storage units operating at 50% of daytime capacity; and
- o All mechanical plant operating.

NB: Assumed to be operating simultaneously and continuously, over any 15-minute period during the evening.

Scenario C – Night-time (10pm to 7am)

- The proposed gym and associated mechanical equipment operating;
- Warehouse and Storage units operating at less than 5% of daytime capacity (i.e., only very occasional activity); and
- No mechanical plant operating (other than Gym).

NB: Assumed to be operating simultaneously and continuously, over any 15-minute period during the evening.

Each of the scenarios include expected light and heavy vehicles ingress and egress from the site, on-site manoeuvring, accessing car parks and accessing loading bays throughout the site.

The results of the noise calculations predict that even during the highly unlikely worst-case noise events described above, compliance can be achieved with the relevant criteria at neighbouring western receiver locations (and all other locations further away) and the amenity of residents will be protected.

3 LOADING DOCKS, WASTE COLLECTION & REVERSING ALARM NOISE IMPACTS

Acoustic Dynamics understands noise impacts associated with the use of the loading docks, waste collection and truck reversing alarms requires additional clarification. The following information is provided in regard to these concerns.

3.1.1 LOADING DOCKS & WASTE COLLECTION

At this stage of the development, the loading dock activity and waste collection schedule is yet to be determined. Due to the relatively infrequent use of the loading docks and the waste collection areas, it is likely that noise associated with other regularly occurring activities on site (i.e., heavy



vehicle access and mechanical plant) will be the contributing factor to noise emission from the site.

Without the specific operating details of the loading docks and waste collection areas, it is challenging to prescribe explicit noise controls. However, following approval of the development application and prior to construction certification, a qualified acoustic consultant should be engaged to provide suitable advice and recommendations, where required, for the design of the loading dock and waste control areas and to provide appropriate noise management measures.

To ensure the use of the loading docks and waste collection areas does not cause unreasonable disturbance, the following practicable acoustic control measures should be implemented by the site operator. Suitable controls would include:

- 1. Limiting the frequency of waste collection to no more than twice a week;
- 2. Limiting waste collection to weekday, daytime hours only;
- 3. Limiting heavy vehicle deliveries to daytime and evening hours only;
- 4. Signage at the entrance of the site advising drivers switch off engines during deliveries;
- 5. Signage at the entrance of the site advising drivers switch refrigeration units whilst on site;
- 6. Signage at the entrance of the site advising drivers restrict the use of air brakes when in close proximity to residential properties; and
- 7. Training and induction of all staff in appropriate behaviour and use of the loading dock and waste collection areas.

3.1.2 REVERSING ALARMS

Acoustic Dynamics advises that the use of tonal reversing alarms has the potential to cause disturbance to neighbouring residential properties.

To ensure impacts are minimised, Acoustic Dynamics recommends the incorporation of broadband reversing alarms on all vehicles used on site. The broadband reversing alarm will reduce the tonal aspects of the traditional beeping alarm and will maintain the safety of the workers on site.

Further to the above, noise impact associated with alarms can be addressed via the following measures:

1. Where feasible, reduce the need for reversing alarms by implementing drive-through vehicle access paths;

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- 2. "Smart" broadband alarms should be installed to all site vehicles and mobile machinery (i.e., forklifts or loaders) and should be programmed to operate at a suitable volume;
- 3. In addition to broadband alarms, site vehicles and mobile machinery should be fitted with flashing lights and reversing cameras;
- 4. Ensure that the broadband alarm is mounted in an ideal position on the vehicle or machinery; and
- 5. Staff are to be provided with appropriate instruction and training to ensure safe and appropriate manoeuvring procedures.

4 CONCLUSION

Acoustic Dynamics has provided clarification regarding the assessment methodology and the potential for acoustic disturbance to adjacent western receivers from the use and operation of the proposed mixed use light industrial park development, located at 27 Sunny Bank Road, Lisarow.

Acoustic Opinion

Further to the information provided within the acoustic report and the clarifications within this addendum, the noise impacts to residential dwellings from the operation of the site, and in particular waste collection and loading dock activities, will <u>comply</u> with the acoustic requirements of Central Coast Council, NSW guidelines and Australian Standards.

We trust the above information meets with your immediate requirements and expectations. Please do not hesitate to contact us on 02 9908 1270 should you require more information or clarification.

Kind Regards ACOUSTIC DYNAMICS



MATTHEW WESTON

Senior Consultant MDesSc(Audio & Acoustics), MAAS, AASA

Document	Rev	Date	Prepared	Reviewed	Authorised	Approved
4835L001.MW.210426	0	27 April 2021	MW	RH	RH	lel