

To: Louis Towning

From: Adam Sirianni

Company: The Trustee for Huntingwood
Property Trust

SLR Consulting Australia

cc:

Date: 13 May 2024

Project No. 610.30770.00000

**RE: Augusta Street Warehouse and Distribution Centre
DPHI Comments on NVIA**

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1.0 Introduction

This memo provides a summary of and responses to comments raised by DPHI regarding the SSD-36138263 Augusta Street Warehouse and Distribution Centre Noise and Vibration Impact Assessment, prepared by SLR.

2.0 Comments to Responses

Comment 1

The Department understands that Table 20 of the NVIA provides the typical hardstand and loading dock noise sources. The Department requests confirmation that all noise sources have been appropriately considered such as public address (PA) speakers.

Response

Logos have advised that PA systems are not proposed to be installed in any external areas within the development. As a result, these have not been considered as part of the NVIA, as they are not expected to contribute to noise emissions from the site. As the development has no confirmed tenants, the NVIA has considered operational noise sources typically used in general distribution facilities. These noise sources are outlined in Section 4.2.1 of the NVIA, with a breakdown of realistic worst-case 15-minute operational scenarios provided in Table 22.

Comment 2

The Department requests clarification on if the typical duration of noise sources in a worst-case 15-minute period identified in Table 20, are indicative of the total duration of the noise sources during the 15-minute period or represents the duration of the noise source per occurrence.

If the latter, the Department requests further information on the assumptions of noise source duration with consideration to the modelled scenarios in Table 22. The Department does not consider the duration noise sources to be appropriately reflective of a 'worst-case' 15-minute period as it suggests 32 trucks and 32 forklifts reversing in the day-time period and 6 trucks and 3 forklifts reversing in the night-time period occurring for a total of 30 seconds and 90 seconds, respectively.

Response

The sources in Table 20 are each modelled with the representative duration of each source applied per vehicle based on the corresponding number of sources considered in the modelled scenarios, i.e Trucks with reversing alarms duration is 30s per truck, for 2 trucks, 60s of trucks and reversing alarms is assessed. For the night-time period, where 6 trucks and 6 forklifts are assumed, the assessment considers 180 seconds of reversing alarms (30s of reversing per truck) and 540 seconds of forklift alarms (90s of reversing per forklift) across the development within a worst-case 15-minute period.

Comment 3

The Department requests the NVIA be updated to provide the sound power levels of all heavy vehicle classes proposed to access the site (i.e. medium rigid vehicles and B-doubles) and be distinguished as separate noise sources. Further to the above, the operational noise model should be updated accordingly to consider each heavy vehicle class as separate noise sources.

Response

Table 19 of the NVIA provides the Sound Power Levels for heavy vehicles expected to access the site. As the detailed breakdown of all heavy vehicle classes accessing the site is unknown at this time, with the development having no confirmed tenants, the NVIA has conservatively assumed the following;

- Medium Trucks - Class 3 to Class 4
- Heavy Trucks - Class 5 to Class 12.

Further clarification has been added to Section 4.2.1.1 of the NVIA. No change to the operational noise model is required.

Comment 4

The Department does not consider the NVIA to have appropriately considered the height of noise sources in the noise modelling. The NVIA should be updated to specify the relative levels (RL) that noise sources have been modelled from.

Response

The NVIA noise model was developed using the design elevations provided in the civil designs for the development to establish the RLs across the site. All ground sources were modelled from these RLs. Figure 6 and Figure 7 of the NVIA were updated to specify the RLs for the two elevated warehouses in the development (RL 82.4m for Warehouse 5 L1 and RL 93.4m for Warehouse 5 L2).

Comment 5

Table 26 of the NVIA states that receivers have been modelled at 1.5 m above floor height. However, it does not demonstrate that both floors of two-storey residential receivers have been appropriately considered in the operational noise model. The Department requests the NVIA to be updated to clearly identify the height of receivers within the operational noise model.



Response

Receivers have been modelled in accordance with Section 2.6 of the Noise Policy for Industry and have been modelled at 1.5m above ground level. Table 26 of the NVIA has been updated to clarify receivers modelled as per Section 2.6 of NPfI.

Comment 6

The NVIA should be updated to assess off-site traffic noise impacts of the Great Western Highway and Warehouse 5 access intersection including the:

- *altered traffic flow conditions associated with the new signalised intersection and any additional lanes (without development traffic); and*
- *development related heavy vehicles using the new signalised intersection and additional lanes.*

Response

Further detail has been provided in Section 4.2.5 of the NVIA to specify development related Heavy Vehicles accessing Warehouse 5 via the new signalised intersection have been modelled to consider their use of the additional lanes when entering and exiting the site via the Great Western Highway. The altered traffic flow associated with the operation of the new signalised intersection on the GWH has also been considered in the TNM noise model.

Comment 7

The NVIA should also consider the 'maximum noise level assessment protocol' contained in Appendix A of TfNSW's Road Noise Criteria Guideline. Maximum noise assessment is to be carried out to help prioritise and rank mitigation strategies.

Response

The operational maximum noise levels associated with the development have been assessed as per the NPfI, and detailed in Section 5.3.2, and off-site traffic against the RNP, in accordance with the SEARs. The RNCG is applicable for Transport for NSW (TfNSW) projects. The new signalised intersection on the great western highway is part of the TfNSW Prospect Highway Upgrade project, which is currently under construction, with intersection operations and road noise impacts being part of that project.

Predicted and existing maximum noise levels for the nearest receivers in NCA01 and NCA02 have been quantified in Table 31 and Table 32 and discussed in Section 5.3.2.1 of the NVIA. The discussion provides context for the 1dB exceedance of the NPfI screening criteria and provides a detailed maximum noise level assessment undertaken with guidance from the RNP as recommended in the NPfI.

Comment 8

The Department additionally requests the Villawood Survey Results in Appendix D of the TIA be updated to also include maximum traffic generation over a 15-minute averaging period for each hourly period to verify the modelling inputs and assumptions of the Noise and Vibration Impact Assessment (NVIA) prepared by SLR Consulting Australia.



Response

As stated in Section 4.2.1.1 of the NVIA, SLR adopted operational traffic data inputs directly from the TIA. 1-hour peak volumes were adopted from Section 7.20 of the TIA, heavy vehicle breakdowns from Section 7.22 and heavy vehicle percentage derived from traffic generation outlined in Table 7.3.

SLR were informed by the Traffic Engineers that 15-minute data was not recorded during the Villawood Traffic Survey, as this data is not required for the TIA. Where needed, to determine a 15-minute volume for the purpose of assessing $L_{Aeq(15\text{minute})}$ noise impacts, SLR have applied the peak hour volumes and divided by 4, assuming the peak 1-hour volumes are spread evenly across each 15-minute period. This is discussed in Section 4.2.1.1 of the NVIA.

SLR Consulting Australia

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Authorised by: AM

