
Panel Appointed Acoustic Expert – Response to Minute 17 of the Expert Panel

Southern Link Inland Port FTAA-2604-1207

1 October 2026

[1] Acoustic Engineering Services were appointed as an Acoustic Expert advisor to the Expert Panel in Minute 10, with specific reference to Dr Jeremy Trevathan or his approved colleague Mr William Reeve.

[2] Dr Trevathan participated in the production of the Noise Joint Witness Statement dated 10th of September 2026, as directed. However as foreshadowed to the Application Lead, Dr Trevathan is unavailable between the 28th of September and 23rd of October 2026, so Mr Reeve has assisted in the production of this statement, produced in response to Minute 17. Dr Trevathan and Mr Reeve had the opportunity to collaborate on the drafting of this statement, on the 25th of September 2026, and Mr Reeve has finalised it.

[3] Please find a response to the questions outlined in paragraph 8 of Minute 17 below.

Question a: Is DCC condition 60B that there be no nighttime operations in Stage 1 no longer necessary in light of the applicant's proposed 40dBLAeq noise limit at Stage 1 and 2.

[4] This condition is still necessary, to ensure the operation remains in accordance with the Application. Aside from compliance with noise limits, the other potential effects of night time operations during Stage 1 have not been presented or considered – for example the effect of night time heavy vehicle movements on Dukes Road North.

Question b: Is DCC condition 60D (sequencing of the construction of the Stage 2 warehouses) no longer necessary in light of the applicant's proposed 40dB LAeq noise limit at Stage 1 and 2.

[5] The key receiver in this scenario is 273 Dukes Road North (which is shielded by Warehouse 2B and 2C), where we understand based on the Applicants correction to their draft Conditions¹ the proposed limit remains 45 dB LAeq at all stages. Regardless a limit of 40 dB LAeq will be impractical to achieve at this location, and Warehouse 2B and 2C are required to achieve the limit of 45 dB LAeq for Stage 2 night time operations. So Condition 60D should not be removed.

Question c: Is the Panel correct in our understanding that an increase in noise level's up to ~3dB is unlikely to be perceived by sensitive receivers, but a 5dB increase would be clearly noticeable and may cause significant adverse health effects?

[6] The traditional rule of thumb is that a noise level change of 1 – 2 dB typically cannot be perceived, 3 dB is just perceptible, and 5 dB is clearly noticeable.

[7] In this case, noise is assessed as the average noise level over any given 15 minute period. During a 15 minute period, the noise will be made up of several components of slightly different characters and levels, which will also 'come and go' to varying extents over the 15 minute period. That may make changes to the average level slightly less perceptible than the 'rule of thumb' descriptions.

[8] Whether a 5 dB increase in noise level will cause "significant adverse health effects" will depend on what other noise is already present in the area, the absolute level of noise, the character of the noise, and when it is experienced. For example, in the case of the increase in road traffic noise expected at 273 Dukes North Road – this dwelling already experiences some traffic noise, of a similar character to that which will be associated with the SLIP. That is why in Q1.1 of the JWS the overall expected effect was described as "moderate".

[9] In the case of operational noise received at rural dwellings to the east, a 5 dB increase in night time noise levels from the SLIP from 40 to 45 dB LAeq would not be expected to cause significant adverse health effects, as the absolute levels do not exceed a level of 45 dB

¹ Our understanding is based on the comment "*Drafting note - this was an error in the updated proposed condition set and this should be 45dB in line with current 2GP limit*" which appears in the document *Southern Link Property Limited Conditions – DCC response document – Applicant Comments*

LAeq, which is a common design level at a dwelling facade to protect against sleep disturbance for people sleeping with windows ajar.

[10] The issue for these dwellings is whether it is reasonable to permit 45 dB LAeq, when the Application demonstrated that the activity could be undertaken in the manner desired, while only generating 40 dB LAeq. A limit of 45 dB LAeq would enable an increased level of activity which is much higher than necessary. An example of this is discussed further in paragraph 15 for 340 Dukes Road North, where a large increase in the number of truck movements could be enabled.

Question d: Based on your understanding of the applicant's operational noise modelling is ~43dB LAeq(15min) achievable at the notional boundaries East of the site at 345 Puddle Alley (owned by the applicant) or at 243 Puddle Alley?

[11] Noise levels have not been provided in the MDA assessment for 245 Puddle Alley, on the basis that it is owned by the Applicant, and the proposed noise limits would not apply there. The two dwellings which will be key receiver locations to the east are 340 Dukes Road North (Stage 3 predicted noise level 40 dB LAeq) and 243 Puddle Alley (Stage 3 predicted noise level 40 dB LAeq).

[12] Based on my understanding of the MDA operational noise modelling, a night time noise limit of 43 dB LAeq during Stage 3 would be readily achievable in these locations.

[13] In fact, it is my view that while the modelling to the east is 'less conservative' than in other directions, it remains conservative enough that it is implausible that a noise limit of 40 dB LAeq would be exceeded during Stage 3 in these locations during representative periods. This is because the number of trucks assumed in a 15 minute period in the modelling (recorded in Q1.2 of the Noise Joint Witness Statement) is already high compared to the scenarios set out in Table 8 of the MDA report, the assumed sound power of each truck is high, it is assumed that each truck generates noise for a long time on site, and it is assumed that 10 forklifts will operate constantly at the eastern end of the site – loading or unloading one truck.

[14] In addition, I understand that at 340 Dukes Road North where truck movements contribute the most, the predicted level of 40.2 dB LAeq is made up of 35.0 dB LAeq from trucks, and 38.5 dB LAeq from activities on the balance of the site. This means that if the predictions for 'activities on the balance of the site' are conservative (even by a minuscule amount) for the reasons listed in Q2.1 of the Noise Joint Witness Statement, one or two more truck movements (in addition to the six already modelled) would be able to occur, without resulting in a non-compliance with a 40 dB LAeq limit at 340 Dukes Road North. On the other hand, a 45 dB LAeq limit at Dukes Road North would enable 20 or more trucks in a 15 minute period, which is considerably beyond the level of activity described in the Application, and may have other effects which have not been considered (for example, when travelling on the road past 273 Dukes Road North).

Question e: Are there any practical difficulties for noise monitoring and compliance with operational noise limits if the Panel were to provide for an increase in noise levels, either ~43dB LAeq(15min) or 45dB LAeq(15min) for the properties east of the SLIP (Puddle Alley) but retain 40dB LAeq (15mins) elsewhere for properties that are more than 350m from the Industrial Zone.

[15] No, there would be no practical difficulties with that.

Question f: Is the noise mitigation for 273 Dukes Road North provided for in condition 71B, appropriate and reasonable regardless of whether the noise limit for Stage 3 at the notional boundary of 273 Dukes Road North is 40, 43 or 45dB LAeq(15min) to address increased heavy vehicles road noise at Stage 1, 2 and 3, or just Stage 2 and 3, or just Stage 3?

[16] As discussed in paragraph 5, I understand that there was a drafting error, and a limit of 45 dB LAeq is the only option being considered for operational noise received at 273 Dukes Road North during all Stages of the activity. I agree that this limit is reasonable, in this location.

[17] With regard to Condition 71B, the strongest conclusion reached by the noise experts in the Noise Joint Witness Statement was about noise from heavy vehicles associated with Stage 3 travelling on Dukes Road North (a 'moderate' noise effect). Condition 71B however does not mention this as the focus of the "Amenity Mitigation Plan" – and instead implies that

the key concern is night time noise from on the SLIP site itself. While that is important, it would be appropriate to mention heavy vehicle noise on Dukes Road North also in this Condition.

[18] The Noise Joint Witness Statement describes how the change in road traffic noise levels is expected to be *“gradual over time, except at the commencement of Stage 1 where there will be a small ‘step’ in road traffic noise levels”*. While the ‘moderate noise effect’ which is the focus of discussion, is based on operation at capacity in Stage 3, ideally mitigation would be offered before commencement of additional heavy vehicle movements associated with Stage 1, as even a small step increase is likely to exceed the “upper desirable level for road traffic noise” of 55 dB LAeq(24h) discussed in the Noise Joint Witness Statement.

[19] While the approach outlined in Condition 71B generally appears appropriate, this condition does not direct the type of acoustic mitigation that will be offered to the owner of this property or provide an objective target to be achieved (for example outline acceptable internal noise level targets). Common mitigation options are a fresh air ventilation system, combined with suitable air conditioning to ensure comfortable temperatures are maintained with windows closed, or physical screening. These could be described broadly as mitigation options to be reviewed and offered in the Amenity Mitigation Plan.



William Peter Reeve

1st of October 2026