

6 November 2019

Your Reference: Lot 237, 64 Raceview Avenue, Hendra PO: PB19-049/060

Our Reference: 0234 R01 0.docx

Shane Windsor
Planbuild Homes
PO Box 1646
Kedron Qld 4031

Dear Shane,

RE: Compliance with Noise from Airport Operations ANEF from Brisbane Airport

1. Introduction

This report is to address the noise attenuation requirements for the above property, for compliance with the internal noise levels as referenced by Australian Standard AS 2021-2015 *Acoustics – Aircraft noise intrusion – Building siting and construction*. This standard addresses the noise from take-off and landing and not ground movements or taxiing. We have addressed future airport operations from the new runway. We have assessed Boeing 777 aircraft on takeoff as these are the noisiest aircraft utilising the airport.

The assessment has been based on the following information:

1. Australian Standard AS 2021-2015 *Acoustics – Aircraft noise intrusion – Building siting and construction* (AS 2021);
2. Drawings by Planbuild Homes for above property, Ref: PB19-049 Sheets 02-07, Issue B, dated 4/11/2019;

2. Internal Assessment Criteria

The affected property lies within the overlays of the ANEF 25. The ANEF 25 boundary is not fixed due to aircraft flight path variance. Table 3.3 of AS 2021 provides the indoor design sound levels for aircraft noise reduction. The relevant section relating to houses is below:

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Table 1: From AS 2021, Table 3.3 Indoor Design Sound Level For Determination of Aircraft Noise Reduction

Building Type	Activity	Indoor Design Sound Level*, dB(A)
<i>Houses, home units, flats, caravan parks</i>	Sleeping areas, dedicated lounges	50
	Other habitable spaces	55
	Bathrooms, toilets, laundries	60

3. Predicted Noise Levels

Predicted noise levels are L 80 dB(A) based on the following:

Type of Aircraft	Boing 777-300 Departures
Take off or Landing	Take Off
DS	900 m
DL	5,200 m
DT	9,500 m
Height Difference	0 m
Noise level from Table 3.19(B) AS 2021:2015	72 dB(A)

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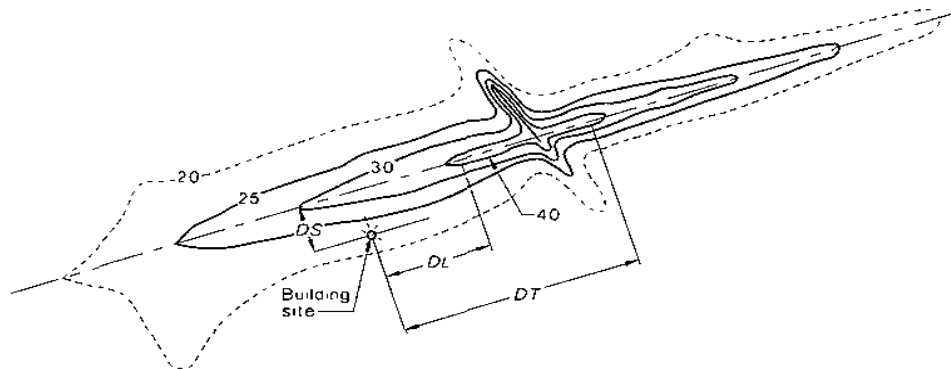


FIGURE 3.1 DETERMINATION OF DS , DL AND DT FOR STRAIGHT FLIGHT PATHS

4. Assessment

Based on floor plans and elevations, glazing and building treatments were determined using the methodology within the standard. The following recommendations are made:

Glazing

Table 2: Predicted Road Traffic Noise Impacts at Building Facades.

Assessment Location (Rooms)	Performance specification (R_w)	Indicative Glazing
Family/Dining/Kitchen/Pantry	NA	No Requirements
Rumpus	NA	No Requirements
Office	NA	No Requirements
Study inc Stairwell	NA	No Requirements
Bedroom 1, inc WIR and ensuite	28	4 mm float
Bedrooms 2, 3, 4 and 5	28	4 mm float
Bathrooms, toilet	NA	No Requirements
Ensuite, WIR	NA	No Requirements

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1. Note: performance specification must be met for the whole glazing system, including the frame. The glazier is to certify that their system will meet the performance specification. It is not adequate that they certify the indicative glazing is met. Indicative glazing is supplied for information only.

5. Conclusion

We have reviewed all the building elements including the walls and roof and concluded that if the recommendations are followed the house will meet the noise attenuation requirements.

We hope that this information proves satisfactory.

Yours Faithfully

Alan Subkey

Director