



33 & 35-37 FITZROY STREET, ST KILDA

Noise Impact Assessment

For

THE ERDIGROUP C/- CONSTRUCTION ASSIGNMENTS

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Project 33 & 35-37 Fitzroy Street, St Kilda
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1 Introduction

Enfield Acoustics has been engaged by The Erdigroup (Applicant) c/- Construction Assignments to assess potential noise impacts from and to the proposed use of the Subject Land of 33 & 35-37 Fitzroy Street, St Kilda.

The existing building on 35-37 Fitzroy Street currently operates as a 4-storey hotel and our instructions are that the Applicant is seeking approval from City of Port Phillip (Council) for the following:

- 1) Extension of the current hotel to the south, onto 33 Fitzroy Street; and
- 2) Construction of two new levels (Level 5 & 6) above the Subject Land, including a hotel bar and outdoor terrace on Level 5 adjacent to Fitzroy Street.

The Subject Land outdoor terrace is not proposed to be used for live entertainment, however any amplified music noise would need to comply with State Environment Protection Policy No. N-2.

This document also addresses other noise related clauses within the Planning Scheme and whether they are triggered.

To this end, Enfield Acoustics has assessed:

- 1) Whether proximate live music and entertainment venues trigger Clause 53.06;
- 2) Potential music and patron noise impacts from the proposed outdoor terrace to nearby sensitive uses; and
- 3) Other relevant planning clauses.

2 Policy Requirements

2.1 State Environment Protection Policy

The Subject Land is not proposed to be used for live entertainment, however any amplified music noise would need to comply with *State Environment Protection Policy (Control of Music Noise from Public Premises) No. N-2* (SEPP N-2).

The applicable noise limits for indoor venues are determined by the following:

- for the day/evening period, the LA_{90} (background) + 5dB(A)
- for the night period, LO_{CT90} (background) + 8dB

The assessment period relevant to the Subject Land is the more stringent 'Night' period as music is expected to operate past the typical hours of SEPP N-2's 'Day' period (Refer Appendix B). To this end, our assessment considers the most sensitive period.

Patron noise, while not referred to in SEPP N-2, typically forms part of the assessment with the following noise targets:

- for the night period, L_{A90} (background) + 5dB

The above patron noise criterion has been accepted in the planning scheme in other jurisdictions (refer to Yarra Scheme SUZ6).

2.2 Planning Scheme

2.2.1 Clause 53-06, not triggered

Clause 53.06 is not triggered when considering noise emissions from nearby live entertainment venues as the proposal is to expand the existing hotel use and the use is not a residential use.

However, given the Subject Lands proximity to nearby live entertainment venues, the Applicant may wish to consider amenity impacts in accordance with their brand standards. Our recommendation is that a suitably qualified acoustic consultant is engaged to determine the appropriate glazing and façade construction during design development phases such that SEPP N-2 noise limits are complied with internally, however this is not relevant to the required planning controls.

2.2.2 Clause 55.07, not triggered

Clause 55.07 Standard B40 does not apply to the Application.

3 Site Inspection and Noise Limits

3.1 Clause 53.06 (Noise Emissions from the Outdoor Terrace)

Enfield Acoustics visited the Subject Land and surrounding premises on 10 June 2020 to survey nearby surrounding uses and measure ambient background noise levels.

The Subject Land is situated on Fitzroy Street, close to various live music and entertainment venues. It is typical for such areas to have high foot traffic and elevated ambient noise levels, especially during weekends where entertainment venues are likely to be heavily occupied.

Nearby residential uses that are adjacent to the Subject Land were identified as follows (Refer Appendix A):

- 1) 4-storey residential apartments located to the north on 14-16 Fitzroy Street; and
- 2) Residential dwellings located to the south on 12-14 Jackson Street.

Background noise levels were recorded between 12am and 1am to confirm SEPP N-2 noise limits of nearby sensitive uses to the Subject Land. Results of the attended background noise monitoring and resulting SEPP N-2 noise limits and patron noise targets are tabled below:

Measurement	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
14-16 Fitzroy Street							
L _{A90} background noise level, between 12am and 1am	51	49	44	38	36	33	26
L _{OCT10} SEPP N-2 'Night' Noise Limit	59	57	52	46	44	41	34
Patron Noise Targets*	47dB(A), L _{Aeq} 65dB(A), L _{max}						
12-14 Jackston Street							
L _{A90} background noise level, between 12am and 1am	46	45	41	36	32	26	19
L _{OCT10} SEPP N-2 'Night' Noise Limit	54	53	49	44	40	34	27
Patron Noise Targets*	43dB(A), L _{Aeq} 65dB(A), L _{max}						
Notes:	*Noise limit (external to dwelling) taken as nighttime background noise + 5 dB(A), typically accepted as reasonable patron noise target						

Our office was unable to observe any meaningful noise emissions from of nearby entertainment premises and foot traffic due to broad operational restrictions that are currently in place (Covid-19). As such, we note that these limits and targets are conservative as the measurements were taken on a weekday night and in absence of activities that would represent what would typically occur on a weekend night on Fitzroy Street.

Given that the outdoor terrace is opposite the apartments on 14-16 Fitzroy Street, SEPP N-2 and patron noise compliance at that location would inherently result in compliance at all other sensitive uses, including 12-14 Jackson Street which receives significant amount of shielding from the Subject Land building.

4 Assessment

4.1 Music Noise Sensitivity Analysis

It is proposed that amplified music will be played within the outdoor terrace. Our office has conducted a sensitivity analysis to determine the maximum permissible noise levels within the outdoor terrace that would likely result in SEPP N-2 compliance. Computational acoustic 3D modelling was performed to calculate noise levels at the nearest sensitive receiver.

Our assessment is that music noise, if played at the following levels would likely result in SEPP N-2 compliance at the nearest sensitive use:

SEPP N-2 (Night)	dB(A)	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
L _{OCT10} noise levels, measured within the outdoor terrace	83	98	93	85	79	77	71	68

The above results in overall allowable noise emissions from the outdoor terrace of approximately 83dB(A). In our experience, environments with amplified program music typically generate noise levels in the range of 75dB(A) to 85dB(A), so the proposal would be consistent with allowable thresholds and comply with SEPP N-2.

4.2 Patron Noise Sensitivity Analysis

Similar to the methodology for music noise assessment, we have modelled an upper threshold for likely patron numbers within the outdoor terrace and assumed that a 1.2-1.8m high ballustrade will be constructed along the balcony edges.

The following inputs were used in the noise model:

Noise Source	Sound Power Level, Leq	Sound Power Level, Lmax
150 Patrons on Outdoor Terrace	97dB(A)	105dB(A)

The patron figure above is a sensitivity analysis which infers that actual use of the outdoor terrace will not cause adverse impacts. At the most exposed sensitive uses, noise modelling indicates that noise levels would be:

- Less than 40dB(A) L_{eq}
- Less than 48dB(A) L_{max}

On this basis, the proposal does not present any material risk of adverse impacts from patron noise and we are satisfied that no further controls are required.

5 Conclusion

Enfield Acoustics has assessed noise emissions to and from the proposed extension of 33 & 35-37 Fitzroy Street, St Kilda and is satisfied planning can be approved, noting:

1. Clause 53.06 of the Scheme is not triggered;
2. Clause 55.07 (Standard B40) of the Scheme is not triggered; and
3. Noise emissions from patrons and moderate levels of amplified music from the proposed outdoor terrace is not expected to result in adverse impacts at existing dwellings proximate the Subject Land. A sensitivity analysis indicates that relatively high figures for music and patrons would still comply with best practice noise limits and thresholds at the nearest sensitive uses. We are satisfied that the risk of adverse impacts is low from this Application.

We recommend the following condition be applied:

- 1) Music noise emissions from the outdoor terrace shall comply with State Environment Protection Policy No. N-2.

Appendix A: Noise Testing Locations



Appendix B: Extract of SEPP N-2 Hours

STATE ENVIRONMENT PROTECTION POLICY (CONTROL OF MUSIC NOISE FROM PUBLIC PREMISES) NO. N-2 –
CONSOLIDATED VERSION

SCHEDULE A
OPERATING PERIODS FOR INDOOR VENUES

The table below defines the times for the day/evening and night operating periods for indoor venues. The times vary according to the number of operations per week and the day of the week on which an operation occurs. The operating periods for the day preceding a public holiday shall be the same as for a Saturday.

NUMBER OF OPERATIONS PER WEEK	DAY	HOUR																								
		A.M.												P.M.												
		12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
One	Friday	[Night]												[Day/Evening]												
	Saturday	[Night]												[Day/Evening]												
	Sunday	[Night]												[Day/Evening]												
	Other	[Night]												[Day/Evening]												
Two or three	Thursday	[Night]												[Day/Evening]												
	Friday	[Night]												[Day/Evening]												
	Saturday	[Night]												[Day/Evening]												
	Sunday	[Night]												[Day/Evening]												
	Other	[Night]												[Day/Evening]												
More than three	Saturday	[Night]												[Day/Evening]												
	Sunday	[Night]												[Day/Evening]												
	Other	[Night]												[Day/Evening]												

Operating Periods [Night] [Day/Evening]