

ATT: Mr Tony Gray
Crawford Architects
Suite 3.01, Level 3
80 Mount Street
North Sydney, NSW 2060

8 January 2020

Ref: 1021536-COR-AS-001-Acoustic
Design Statement RevA

Dear Tony,

RFT: LAHC 2019/004 16-26 Friend Street, Merrylands

Acoustic Design Statement

The Land and Housing Corporation is proposing to construct housing provision for seniors at 16-26 Friend Street, Merrylands. This Acoustic Design Statement has been prepared to accompany Development Application. The document outlines acoustic design objectives required by the Cumberland Council and relevant design standards applicable for the proposed development.

1.1 Project description

The project is located at 16-26 Friend Street, Merrylands situated in a low density residential area (suburban) bounded by Friend Street and residences to the north, passive recreational area to the west (Alderson Park, 25P Dorothy Street) and residences to the south and east of site.

The proposal comprises 29 seniors living units within 5 x 2 story buildings, with 15 spaces of on-grade carparking (including 7 disable parking spaces) and landscaping.

Site location and locality are presented in Figure 1.



Figure 1 Site locality (image courtesy of Google Maps 2020)

1.2 Design objectives

In this report, acoustic design targets are established for:

- noise impact of the surrounding community on the development, including internal noise levels;
- noise impact of the development on the surrounding community.

The proposed development location is in the local government area of Cumberland Council. Following a Pre-Development Application Advisory Panel Meeting with the council by the design team and client held on 25 September 2019, a document prepared by the council dated 2 October 2019 was issued. The document states the following requirements relating to acoustics that are applicable to the proposal:

8. *State Environmental Planning Policy (State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*

Clause 4 Land to which Policy applies

Part 3 Design requirements

Visual and Acoustic Privacy

Appropriate treatment shall be implemented to alleviate overlooking concerns and ensure that privacy is maintained between the units and adjoining properties, particularly for any elevated ground level private opening space (POS) and living room windows, and upper level balconies and living room windows.

14. *Environmental Health*

- b) *An acoustic report is to be prepared by an appropriately qualified acoustic consultant having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/or grade membership of the Australian Acoustical Society (MAAS). The report should consider noise emissions from the development including but not limited to proposed mechanical plant (air conditioners, mechanical exhaust). It should also refer to any noise that may affect the residents residing within the proposed development. The report should be prepared in accordance with the NSW Environment Protection Authority Noise Policy of Industry. The report must also consider noise management strategies for managing construction noise.*

In line with Council's design requirement, the design criteria, targets and guidance are to be derived from relevant Australian codes, standards, and guidance, including the following:

- EPA 'NSW Noise Policy for Industry' (October 2017) [NPfI];
- State Environmental Planning Policy (Infrastructure) 2007 [SEPP - infrastructure];
- State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 [SEPP – Housing for Seniors];
- Holroyd Development Control Plan 2013 [Holroyd DCP];
- National Construction Code 2019 [NCC];
- Australian/ New Zealand Standard AS/NZS 2107:2016 Acoustics - 'Recommended design sound levels and reverberation times for building interiors' [AS2107];
- EPA Interim Construction Noise Guideline (July 2009) [NCIG].

1.3 Project specific noise impact assessment items

Based on the relevant design requirements, the following items are assessable for the proposal and to be finalised during detailed design stage of the project:

Table 1 Project specific noise impact assessment items

Acoustic items	Legislative requirements	Controls
Noise ingress		
Noise intrusion from road traffic	<ul style="list-style-type: none"> SEPP – infrastructure SEPP – Housing for Seniors Holroyd DCP AS2107 	<ul style="list-style-type: none"> Selection of appropriate glazing Room layout Building orientation
Noise egress		
Mechanical plant items	<ul style="list-style-type: none"> NPfI 	<ul style="list-style-type: none"> Appropriate equipment selection In duct treatment (lining and/or attenuators)
Car parking activity		<ul style="list-style-type: none"> Noise barrier in the form of property boundary Signage and onsite management
Noise between sole occupancy units	<ul style="list-style-type: none"> NCC 2019 	<ul style="list-style-type: none"> Appropriate construction of partitions, floors and ceiling systems Isolation of services
Construction noise	<ul style="list-style-type: none"> NCIG 	<ul style="list-style-type: none"> Onsite management Scheduling of works (e.g. respite period) Construction hours Low noise equipment selection Temporary barriers Real time monitoring and alert system

I trust that the above information meets your immediate requirements.

Yours sincerely

For and on behalf of

Cundall Johnston and Partners Pty Ltd



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