



**Armidale Dumaresq
Development Control Plan 2012**

Section 2 Site Analysis and General Controls

Chapter 2.8 Noise

Contact Details

Armidale Dumaresq Council
135 Rusden Street, Armidale
New South Wales 2350
Telephone +61 2 6770 3600
Email council@armidale.nsw.gov.au

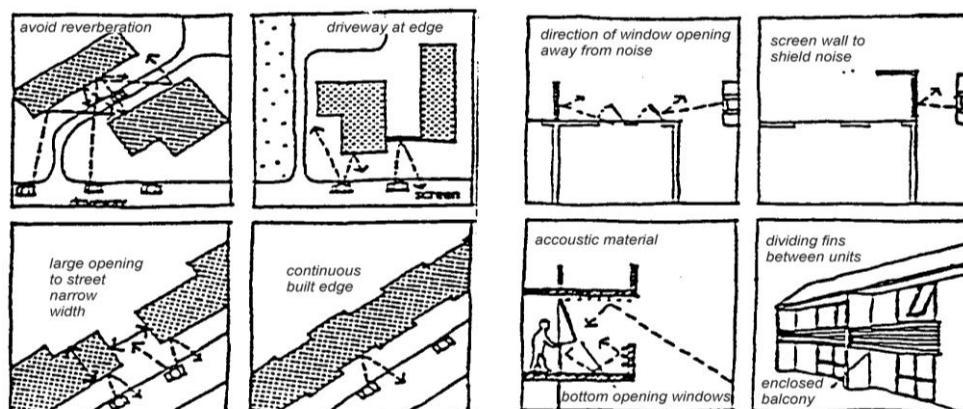
Table of Contents

Part 1	General provisions	1
	1.1 Introduction.....	1
	1.2 Objectives	1
	1.3 Land to which this chapter applies.....	1
	1.4 Addressing the guidelines of this chapter	1
Part 2	Development controls	1
	2.1 Residential development.....	1
	2.2 Noise from air conditioning units	2
	2.3 Industrial and commercial development	3
	2.4 Road and rail traffic noise.....	3
Part 3	Acoustic reporting.....	3
Part 4	Further Information	3
Table 1	Quick Reference to Acoustic Requirements	i

Part 1	General provisions
1.1	Introduction
	<p>This chapter outlines where noise may occur, within and external to a development. Amenity can be impacted upon from a range of noise sources including motor vehicles, aircraft, trains and industrial uses. This may not only be an annoyance, but also have long term health consequences. A variety of mitigation strategies exist to reduce sound levels and sustain the acoustic amenity of an area.</p> <p>The purpose of this chapter is to define the types of land uses that may generate excessive noise, and to provide information about when an acoustic assessment and mitigation measures may be required.</p>
1.2	Objectives
	<p>The objectives of this chapter are:</p> <p>O.1 To identify and guide design so that excessive noise impacts from noise-generating land uses are identified and appropriate mitigation strategies are applied.</p> <p>O.2 To ensure noise generating land uses do not unreasonably impact on the amenity of surrounding areas.</p>
1.3	Land to which this chapter applies
	<p>This chapter applies to all land in the Armidale Dumaresq local government area.</p>
1.4	Addressing the guidelines of this chapter
	<p>The guidelines for managing noise impacts on development are set out in this chapter. These are expressed in the form of objectives which need to be addressed for each development proposal. Alternative approaches may be proposed, provided these adequately address the relevant objectives and comply with legislation.</p>
Part 2	Development controls
2.1	Residential development
	<p>Subdivision or development for residential purposes adjoining classified or arterial roads, the airport, and industrial/commercial zones or uses shall include a program of appropriate noise attenuation measures to reduce the impact of traffic or other noise that will potentially affect residential properties.</p> <p>Noise attenuation measures must be prepared in accordance with Council's Environmental Noise Guidelines. The program shall predict noise levels for a ten year period and any noise attenuation measures shall address these noise levels.</p> <p>S.1 Noise barriers must be constructed as part of a subdivision where required by an acoustic study.</p> <p>S.2 Height and/or the materials used in the construction of dwellings are to be defined by the required acoustic study establishing the appropriate noise attenuation measures. Each site identified will require an s88B (<i>Conveyancing Act 1919</i>) instrument identifying the noise attenuation measures.</p> <p>S.3 The maximum facade reflection levels are to be achieved 1.0 metre from the most affected boundaries or other sensitive location, at a height of 1.5 metres above finished floor level.</p> <p>S.4 Where proposed noise attenuation measures impede on view corridors, it must be</p>

demonstrated how such view corridors can be preserved and still achieve external acoustic criteria (amenity) for residents.

- S.5 Habitable rooms of dwellings adjacent to high levels of external noise must be designed to limit internal noise levels to a maximum of 45dBA in accordance with relevant *Australian Standards* for acoustics control, (including AS3671 - Road Traffic).
- S.6 Architectural treatments are to be designed in accordance with AS3671 - Traffic Noise Intrusion Building Siting and Construction, the indoor sound criteria of AS2107 - Recommended Design Sound Levels and Reverberation Times for Building Interiors. The traffic noise measurement used in conjunction with AS3671 - should be those currently recommended for use by the NSW Office of Environment and Heritage Road Noise Policy.
- S.7 The materials proposed for use to mitigate noise shall be guaranteed to provide a minimum of twenty (20) years of life and will be maintained by the landowner for normal wear and tear. Alternatively, other arrangements may be considered for the maintenance of the noise barriers.
- S.8 A traffic noise assessment survey and a traffic noise mitigation program (undertaken by a suitably qualified acoustic consultant in accordance with the RMS and OEH measurement methodology), shall accompany the development application.
- S.9 Noise attenuation fencing or barriers are preferred to be 1.8m however; additional heights may be acceptable where these are located adjacent to a major road. All attenuation fences or barriers must have appropriate landscaping and water irrigation as approved by Council. Stand alone fencing, i.e. not adjacent to private land shall be of more durable material, e.g. concrete with cast patterns/symbols and painted with anti graffiti coating. An s88B (*Conveyancing Act 1919*) Instrument is to be created where a noise attenuation barrier is adjacent to private land ensuring the integrity of the barrier is maintained by the private landowner.
- S.10 Acoustic barriers and other measures shall be augmented by suitable landscape measures (including automated irrigation) to be shown on a detailed landscape plan which shall be submitted to Council with the development application. An indication of the overall height of the acoustic barrier should be given relative to a known point. An acoustic engineer shall endorse the acoustic barrier at construction certificate stage.



Some ideas for achieving acoustic privacy

2.2 Noise from air conditioning units

- S.11 An air conditioning condenser or a heat pump installed as part of a development must be located (or provided with appropriate noise attenuation measures) such that its operation is not audible inside any habitable room of any adjoining/nearby dwelling.

2.3 Industrial and commercial development

- S.12 Noise from industrial and commercial development must be assessed in accordance with Council's *POL 235 Environmental Noise Guidelines* in Table 1 below to determine if an acoustic assessment is required.
- S.13 Electrical, mechanical or hydraulic equipment or plants adjacent to residential premises must not generate a noise level greater than 5dBA above ambient L_{A90} sound level at the property boundary at any time of the day.

2.4 Road and rail traffic noise

Noise from road and rail developments must be assessed in accordance with Council's *POL 235 Environmental Noise Guidelines* in Table 1 below to determine if an acoustic assessment is required. For proposed development near rail corridors, reference to the requirements of 'Development Near Rail Corridors and Busy Roads – Interim Guidelines' prepared by the NSW Government Department of Planning must also be considered as part of any acoustic assessment.

- S.14 Traffic noise in residential streets should not exceed 55 dB L_{A10} at the facade of dwellings.

Part 3 Acoustic reporting

Applicants will be required to submit an acoustic report for development where indicated in Table 1 below. This may include:

- a) the provision of noise barriers, mounding, landscaping, additional setbacks or a combination of all these measures;
- b) architectural treatment of buildings will only be considered where it has been demonstrated that noise barriers or mounding is not reasonable or feasible;
- c) the noise attenuation measure will only be approved following a review of its visual impact and the resultant proposals to create quality urban design, e.g. materials and artistic design to minimise graffiti.

Note: The acceptance of such measures will be at Council's discretion and will be considered on a case by case basis. For a list of requirements to be included in the Acoustic Assessment refer to Council's *POL 235 Environmental Noise Guidelines*.

A noise attenuation compliance report / certificate may be required as per Council's *POL 235 Environmental Noise Guidelines* prior to the issue of a final occupation certificate for the development/s.

Part 4 Further Information

Armidale Dumaresq Council, *POL 235 Environmental Noise Guidelines*
 Living and Working in Rural Areas Handbook 2007
 Protection of the Environment Operations Act 1997
 State Environmental Planning Policy (Infrastructure)
 Environmental Protection Authority, *NSW Industrial Noise Policy*
 Environmental Protection Authority, *Road Noise Policy*
 NSW Department of Planning, *Development near Rail Corridors and Busy Roads – Interim Guideline*
 NSW Department of Planning and Infrastructure, *Rail infrastructure noise guideline*
 Roads and Traffic Authority, *Reducing Traffic Noise – a Guide for Home Owners, Designers and Builders*

AS 3671 Road Traffic Noise Intrusion

AS 1055 Acoustics – Description and Measurement of Environmental Noise

AS 2107 Acoustics – Recommended design sound levels and reverberation times for building interiors

AS 2021 Acoustics – Aircraft Noise Intrusion – Building Siting and Construction

Type of Development or Noise Source	Classification	Form of assessment to be submitted with DA
Industrial, Commercial or Residential		
Industrial	Low Noise Risk	Letter of Certification ¹
	High Noise Risk	Acoustic Report
Commercial	Offices in existing office complexes, shops in existing Shopping Centres	Nil, except as requested by Council
	Low Noise Risk	Letter of Certification ¹
	High Noise Risk	Acoustic Report
Residential	Less than 10 dwellings or main road access	Nil, except as requested by Council
	11 or more dwellings with access via a local road.	Acoustic report
Community Noise		
Air conditioners - Domestic		Nil, except as requested by Council
Amplified Music		Nil, other than Commercial Operations (see above)
Barking Dogs		Nil, other than Commercial Operations (see above)
Birds - Domestic or Caged		Nil, except as requested by Council
Child Care Centres		Nil, other than Commercial Operations (see above)
Churches and Religious Development		Acoustic Report
Community and Multi-Purpose Halls		Acoustic Report
Home Business / Industry	Low Noise Risk	Letter of Certification ¹
	High Noise Risk	Acoustic Report
Lawnmowers		Nil, except as requested by Council
Learn to swim schools on residential premises		Acoustic Report
Schools	Low Noise Risk	Letter of Certification ¹
	High Noise Risk	Acoustic Report
Swimming Pool Pumps		Nil, except as requested by Council
Tennis Courts	Low Noise Risk	Letter of Certification ¹
	High Noise Risk	Acoustic Report
Outdoor Activities		
Open Air Concerts		Nil, except as requested by Council
Recreational Facilities		Acoustic Report
Recreational Vehicles		Acoustic Report
Shooting Ranges		Acoustic Report

¹ The letter of certification prepared by a suitably qualified acoustic consultant should state that the development will be Low Noise Risk as defined above and that it will comply with the criteria below.

Low Noise Risk

- The development will only affect the properties immediately adjacent;
- The intrusive noise level (LAeq) clearly exceeds the background (LA90) by less than 5 dBA at any residential boundary or by less than 10 dBA at any commercial boundary; and
- Is not identified in List 1 below.

High Noise Risk

The area affected by the development extends beyond the immediate adjoining properties;
or

The intrusive noise level (LAeq) exceeds the background noise level by more than 5 dBA; or

- Is identified in List 1 below.

List 1

- External mechanical plant or any plant or equipment ducted to outside; or
- External forklift operations ; or
- Regular use of powered equipment on site (including handheld power tools, compressors, hoists etc but excluding standard office equipment); or
- Operates beyond Monday-Saturday 7am-6pm; or
- More than one heavy rigid truck delivery/pickup per day where loading / unloading is undertaken outside of any building (ie open yard area); or
- More than six light/medium rigid truck delivery/pickups per day; or
- More than eighteen vehicle movements on site per hour where adjoining premises are noise sensitive (ie residential); or
- External amplified music or PA/paging systems (note that internal systems will still need to comply);or
- More than 7 children receiving care (excludes home based childcare) or for existing centres increase by more than 7 children.