



Pymont Peninsula Place Strategy

Noise study

NSW Department of Planning, Industry and Environment

15 October 2021

→ **The Power of Commitment**



GHD Pty Ltd | ABN 39 008 488 373

133 Castlereagh Street, Level 15

Sydney, New South Wales 2000, Australia

T 61-2-9239 7100 | **F** 61-2-9239 7199 | **E** sydmail@ghd.com | **ghd.com**

Printed date	15/10/2021 6:31:00 PM
Last saved date	15 October 2021
File name	https://projectsportal.ghd.com/sites/pp15_02/dpieagileplanningadv/ProjectDocs/Pymont/12550958_REP_PPPS_Noise.docx
Author	Marco Velasco
Project manager	Chris Lombardo
Client name	NSW Department of Planning, Industry and Environment
Project name	DPIE Agile Planning Advice
Document title	Pymont Peninsula Place Strategy Noise study
Revision version	Rev 1
Project number	12550958

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	0	M Velasco	E Milton	On File	I Teda	On file	15/07/21
S4	1	M Velasco	E Milton	On File	I Teda	On file	29/09/21
S4	2	M Velasco	E Milton	On File	I Teda	On file	15/10/21

© GHD 2021

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.



Acknowledgment of Country

We acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Owners of all lands throughout Australia on which we do business, and we pay our respects to Elders, past, present and emerging.

Contents

1.	Purpose of the report	1
1.1	Purpose of this report	2
1.2	Pymont Peninsula Place Strategy	2
1.3	Structure of the report	5
1.4	Limitations	5
2.	Legislative and policy context	6
2.1	Planning and regulatory framework	7
2.2	Local/regional planning instruments	7
2.3	State Environmental Planning Policies	14
2.3.1	Legislative context	18
2.4	Relevant noise policies/guidelines/standards to assist with the assessment of noise	19
2.4.1	Noise policies and guidelines	19
2.4.2	Transport infrastructure	20
2.4.3	Residential apartments and mixed-use developments	20
2.4.4	Construction noise and vibration	21
3.	Key noise issues	23
3.1	Rail corridors, busy roads, and active frontages	24
3.1.1	Clause 87 Infrastructure SEPP (Rail Corridors)	24
3.1.2	Clause 102 Infrastructure SEPP (Road Corridors)	24
3.1.3	Active frontages	26
3.1.4	DCP road noise impact assessment requirements	26
3.1.5	Development near busy roads and corridors	26
3.2	Glebe Island and White Bay Port	28
3.2.1	Existing residences at Jacksons Landing	32
3.3	24-hour economy and late-night trading	32
3.3.1	Liquor Amendment (24-hour Economy) Bill 2020, NSW	34
3.3.2	24-hour Economy Strategy 2020	34
3.3.3	Entertainment Noise – Proposed changes for City of Sydney Council	36
3.3.4	Mixed-use developments	39
3.3.5	Late night trading areas and key sites	39
3.4	Pymont Metro Station	43
4.	Potential mitigation options	44
4.1	Strategic land use planning	45
4.2	Noise control strategies	47
5.	Conclusion	54
5.1	Overview	55
5.2	Key outcomes	55

Table index

Table 1.1	Five big moves and key actions	2
Table 1.2	Actions that may result in noise issues/potential land-use conflicts for sub-precincts within the Pyrmont Peninsula	3
Table 2.1	Sydney LEP 2012 noise related provisions/controls	9
Table 2.2	Other local/regional planning instruments noise related provisions/controls	10
Table 2.3	Sydney DCP 2012 noise related excerpts	10
Table 2.4	State Environmental Planning Policies	14
Table 2.5	Legislation relevant to the assessment and regulation of noise	18
Table 2.6	Noise policies and guidelines to assist in the assessment and regulation of noise	19
Table 2.7	Policies, standards, and guidelines – Transport infrastructure	20
Table 2.8	Acoustic privacy and quality within residential apartments and mixed-use developments	21
Table 2.9	Construction noise and vibration guidelines	21
Table 3.2	Development Near Rail Corridors and Busy Roads – Interim Guideline – relevant noise and vibration sections	26
Table 3.3	Vessel Berths and worst-case noise sources landside activities (10 years into the future)	30
Table 3.4	Port Noise Policy	31
Table 3.5	Vessel Trigger Noise Levels (external)	31
Table 3.6	Port landside precinct noise criteria	31
Table 3.7	Recommended planning control (internal noise levels)	32
Table 3.8	Examples of core night-time economies	33
Table 3.9	Relevant noise and noise regulation amendments	34
Table 3.10	Strategic pillars and noise implications	34
Table 3.11	City of Sydney's An Open and Creative City – Actions and implications	36
Table 3.12	Noise and vibration impacts from Pyrmont Metro Station	43
Table 4.1	Noise sources and nearby sensitive land uses (potential land use conflicts)	45
Table 4.2	Transport infrastructure - mitigation options	48
Table 4.3	Active frontages - mitigation options	49
Table 4.4	Industrial noise / Port noise - mitigation options	49
Table 4.5	Mixed-use developments - mitigation options	50
Table 4.6	Commercial premises/entertainment and music venues - mitigation options	52
Table 4.7	Noise control at the receiver	53
Table 4.8	[Insert Table Caption]	54

Figure index

Figure 2.1	Planning instruments that apply with the Pyrmont Peninsula	8
Figure 3.1	Roads with 20,000 vpd and 40,000 vpd within Pyrmont Peninsula	25
Figure 3.2	Residential buildings with planning controls required for developers to manage noise intrusion from the port (source: Port Noise Policy – Appendix H – Port Noise Standard – Figure 2 Locations with noise mitigation (Port Authority 2020))	29
Figure 3.3	View from Jacksons Landing to Glebe Island (source: Google Maps)	29
Figure 3.4	Glebe Island and White Bay berths and location of the nearest receivers to each berth (source: Port Noise Policy – Appendix H – Port Noise Standard – Figure 1 (Port Authority 2020))	30
Figure 3.5	Areas where small-scale cultural uses could happen without council approval source: Figure 4 from An Open and Creative City (City of Sydney 2017)	38
Figure 3.6	City of Sydney - Late night trading areas (current)	40
Figure 3.7	Pyrmont Peninsula key sites	42

Appendices

Appendix A Sydney LEP 2012 excerpts

Appendix B Sydney DCP 2012 excerpts

Appendix C Sydney DCP 2012 Active Frontages Maps (7, 8 and 15)

Appendix D City of Sydney – existing and proposed noise conditions

Appendix E Liquor Amendment (24-hour Economy) Bill 2020 – noise related excerpts

1. Purpose of the report

Summarise key actions associated with the Pymont Peninsula Place Strategy and identifies opportunities to update local planning controls

1.1 Purpose of this report

GHD has written this report to inform the Department of Planning, Industry and Environment (DPIE) of the existing planning and regulatory framework around maintaining acoustic amenity within the Pyrmont Peninsula. GHD has undertaken a review of the Pyrmont Peninsula Place Strategy (PPPS) (DPIE 2020) to identify opportunities to update the local planning instruments and controls pertaining to acoustic amenity within the Sydney Local Environmental Plan (LEP) 2012 and the Sydney Development Control Plan (DCP) 2012.

1.2 Pyrmont Peninsula Place Strategy

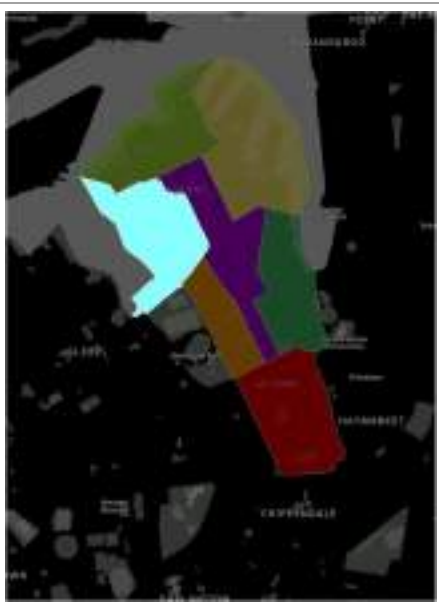
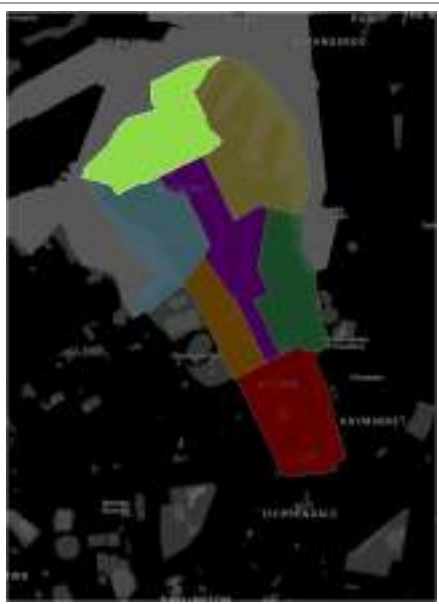

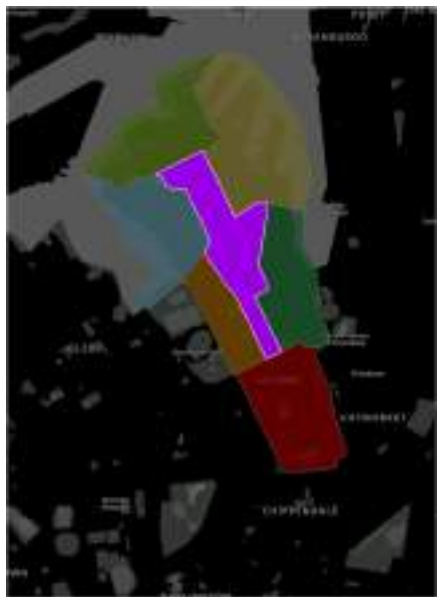
The Place Strategy sets out a planned and logical set of directions, planning responses, infrastructure, and governance opportunities to guide the next wave of investment in Pyrmont to harness public benefits while enabling investor certainty. The Strategy also sets out five big moves that articulate the ambition for the Pyrmont Peninsula to fully embrace its potential. Table 1.1 below tabulates the five big moves and the actions associated with each.

Table 1.1 *Five big moves and key actions*

Action	Description of the action
Big Move 1 – A world-class harbour foreshore walk	
Action 1	Secure the final links of the Sydney Harbour foreshore link at Blackwattle Bay and Darling Island.
Action 2	Acknowledge and celebrate Aboriginal cultural heritage by including the Pyrmont Peninsula harbour foreshore in the City of Sydney's Eora Journey, Harbour Walk project
Action 3	Acknowledge and celebrate the working harbour history of the Peninsula in new and upgraded sections of the harbour foreshore link.
Action 4	Investigate the repurposing of Glebe Island Bridge to link Pyrmont Peninsula with Bays West.
Big Move 2 – A vibration 24-hour cultural and entertainment destination	
Action 5	Investigate the opportunity for new entertainment, events, and cultural space in the Peninsula on crucial sites
Action 6	Enable a diversity of night-time experiences in line with the City of Sydney's 'An Open and Creative City' and the NSW Government's 24- Hour Economy Strategy
Big Move 3 – Connect to Metro	
Action 7	Build a Sydney Metro station in the Pyrmont Peninsula as an anchor for new development and connectivity
Big Move 4 – Low carbon, high-performance precinct	
Action 8	Investigate the delivery of multi-utility hubs and integrated models of car parking.
Big Move 5 – More and better activated public place	
Action 9	Facilitate the return of Wentworth Park to the community as a public open space.
Action 10	Investigate the temporary (pilot) or permanent use of land underneath the Western Distributor for a range of compatible uses
Action 11	Investigate the re-utilisation of land on Darling Drive through redevelopment.
Action 12	Investigate the ongoing trial of temporary COVID-19 active transport measures beyond current Government guidelines
Action 13	Prepare a plan of management for recreational water use in Blackwattle Bay.

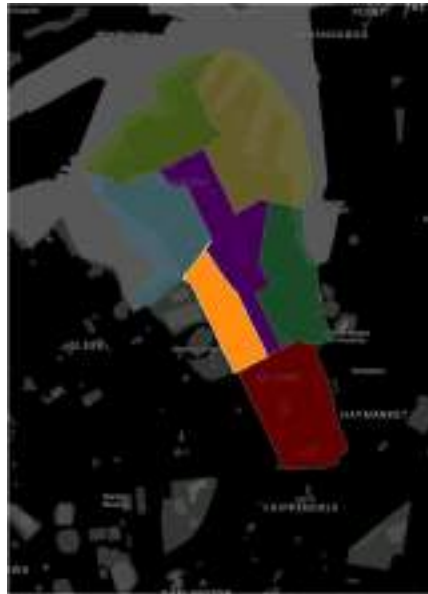
The Strategy identifies seven sub-precincts that make up the Pyrmont Peninsula. The seven sub-precincts are shown in Table 1.2, along with a summary of the actions that may result in potential noise issues or land-use conflicts and existing noise issues.

Table 1.2 *Actions that may result in noise issues/potential land-use conflicts for sub-precincts within the Pyrmont Peninsula*

<p>»Blackwattle Bay key noise issues«</p> <ul style="list-style-type: none"> – Redevelop Blackwattle Bay to support a 24-hour entertainment and cultural precinct – The new Sydney Fish Market as a crucial site – Provide residential development, including affordable housing, without compromising commercial development – Investigate a new ferry wharf – Road traffic noise from the Anzac Bridge and Western Distributor 		<p>»Pirrama key noise issues«</p> <ul style="list-style-type: none"> – Enhance public areas and active street frontages and bring more activity to Harris Street without compromising residential areas – Potential noise impacts from the intensification of landside activities and vessel noise at Glebe Island and the White Bay Cruise Terminal – Road traffic noise from the Anzac Bridge and Western Distributor 	
<p>»Darling Island key noise issues«</p> <ul style="list-style-type: none"> – New Pyrmont Metro Station as a crucial site – Promote activities under the 24-hour Economy Strategy – The Star redevelopment – Provide residential development, including affordable housing without compromising commercial development 		<p>»Pyrmont Village key noise issues«</p> <ul style="list-style-type: none"> – Road traffic noise from the Western Distributor and Harris Street – Support the mix of employment, homes, social infrastructure, entertainment, and shops along Harris Street – Investigate land under the Western Distributor between Pyrmont Bridge Road and Allen Street for community uses 	

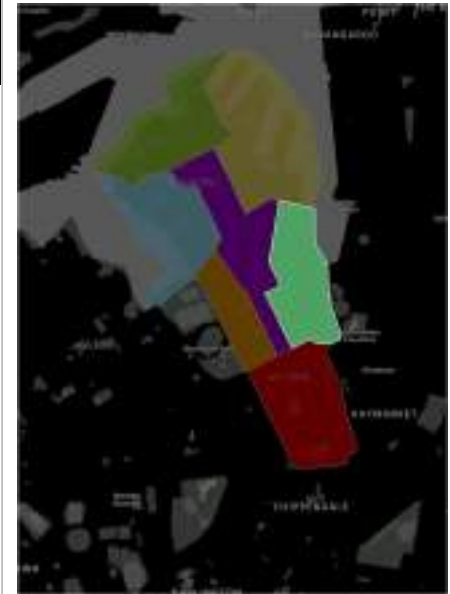
»Wentworth Park key noise issues«

- Road traffic noise from the Bridge Road and Wattle Street
- Facilitate the return of the Wentworth Park greyhound track land and the temporary pop-up school once their terms expire as newly activated, publicly accessible open space as part of a more extensive and enhanced parkland
- Ensure a genuine mix of business and residential uses to enhance the sub-precinct's character, liveability, and productivity



»Tumbalong Park key noise issues«

- Address potential impacts of 24-hour economy activities on amenity, including noise, safety, traffic, and transport, amongst others
- Harbourside Shopping Centre as a crucial site
- Providing residential development, including affordable housing, without compromising the attractiveness of Tumbalong Park for tourism, visitor and 24-hour economy uses, cultural, creative, entertainment and some commercial uses



»Ultimo Place key noise issues «

- Support knowledge-based jobs growth in Ultimo anchored by the Powerhouse Museum, TAFE NSW Ultimo Campus, UTS and ABC
- Rejuvenate Harris Street as the historic urban spine of the Peninsula
- UTS as a crucial site
- Road traffic noise along Harris Street



»Peninsula wide key noise issues«

- Address potential impacts of 24-hour economy activities on acoustic amenity
- Road traffic noise from busy roads at sensitive land uses
- Noise from active frontages at sensitive land uses
- Intensification of industrial activities/vessel noise at Glebe Island and White Bay on the residents at Pirrama
- Potential noise impacts associated with the new Pyrmont Metro station
- Potential noise impacts associated with mixed-use developments



1.3 Structure of the report

This report is structured as follows:

- **Chapter 1 – Purpose of the report:** introduces the project the purpose of the report
- **Chapter 2 – Legislative and Policy Context:** Summarises the planning and regulatory instruments relevant to acoustic amenity and noise control within the Pyrmont Peninsula. The key tasks undertaken are:
 - Review the Pyrmont Peninsula Place Strategy (PPPS), the City of Sydney Council planning controls and relevant NSW planning instruments/policies to identify key noise-related issues associated with the PPPS. This preliminary study can identify the requirement for additional noise studies to inform updates to the City of Sydney planning controls.
 - Review the applicability of local and state guidelines about noise emission and noise intrusion to the Pyrmont Peninsula and local planning instruments
- **Chapter 3 – Key noise issues:** Discuss the key existing and future land use conflicts within the Peninsula, including:
 - Sensitive land uses near rail corridors, busy roads, and active frontages (e.g., Western distributor, Anzac Bridge, Harris Street, Glebe Point Road, and the light rail)
 - Landside and vessel noise associated with the active harbour (Glebe Island and the White Bay Cruise Terminal) and the impact of intensified activities on the residents of the Pyrmont Peninsula, especially at Jacksons Landing
 - The balance between supporting the 24 Hour Economy Strategy, the intensification of mixed-use development and maintaining acoustic privacy/amenity for the residents within the Pyrmont Peninsula
 - Potential land-use conflicts and acoustic privacy issues associated with the new Pyrmont Metro Station
- **Chapter 4 – Potential mitigation options:** Discuss potential mitigation options to reduce potential land-use conflicts. Where this cannot be achieved, GHD has explored the below three mitigations strategies for feasibility and effectiveness:
 1. Controlling the noise at the source (using best management practices for industrial activities, design of venues to limit noise emission to the external environment, standard installation practices for speakers/rotating mechanical equipment etc.)
 2. Controlling the noise in transmission (noise barriers, using buildings as acoustic shielding, the use of podiums etc.)
 3. Controlling the noise at the receiver through best practice design, siting, and construction
- **Chapter 5 – Conclusion:** presents a summary of the report findings and sets out the principal conclusions for the assessment.

1.4 Limitations

This report: has been prepared by GHD for DPIE and may only be used and relied on by DPIE for the purpose agreed between GHD and DPIE as set out in section 1.3 of this report.

GHD otherwise disclaims responsibility to any person other than DPIE arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

2. Legislative and policy context

Environmental planning instruments, which include SEPPs and Local Environmental Plans (LEPs), can specify planning controls for certain areas and/or types of development. Development Control Plans (DCPs) provide detailed planning and design guidelines to support the planning controls in the LEPs developed by councils.

2.1 Planning and regulatory framework

The Environmental Planning and Assessment Act 1979 (EPA Act) and associated Regulation establishes the planning and environmental assessment system for NSW. It establishes the legislative framework for the bulk of the planning system. The EPA Act is followed closely by State Environmental Planning Policies (SEPP), which establish planning controls for specific areas or types of development. The State Government prepares the EPA Act, and SEPP and Councils prepare local Environmental Plans (LEP) and Development Control Plans (DCP) to regulate development and land use within a particular local government area.

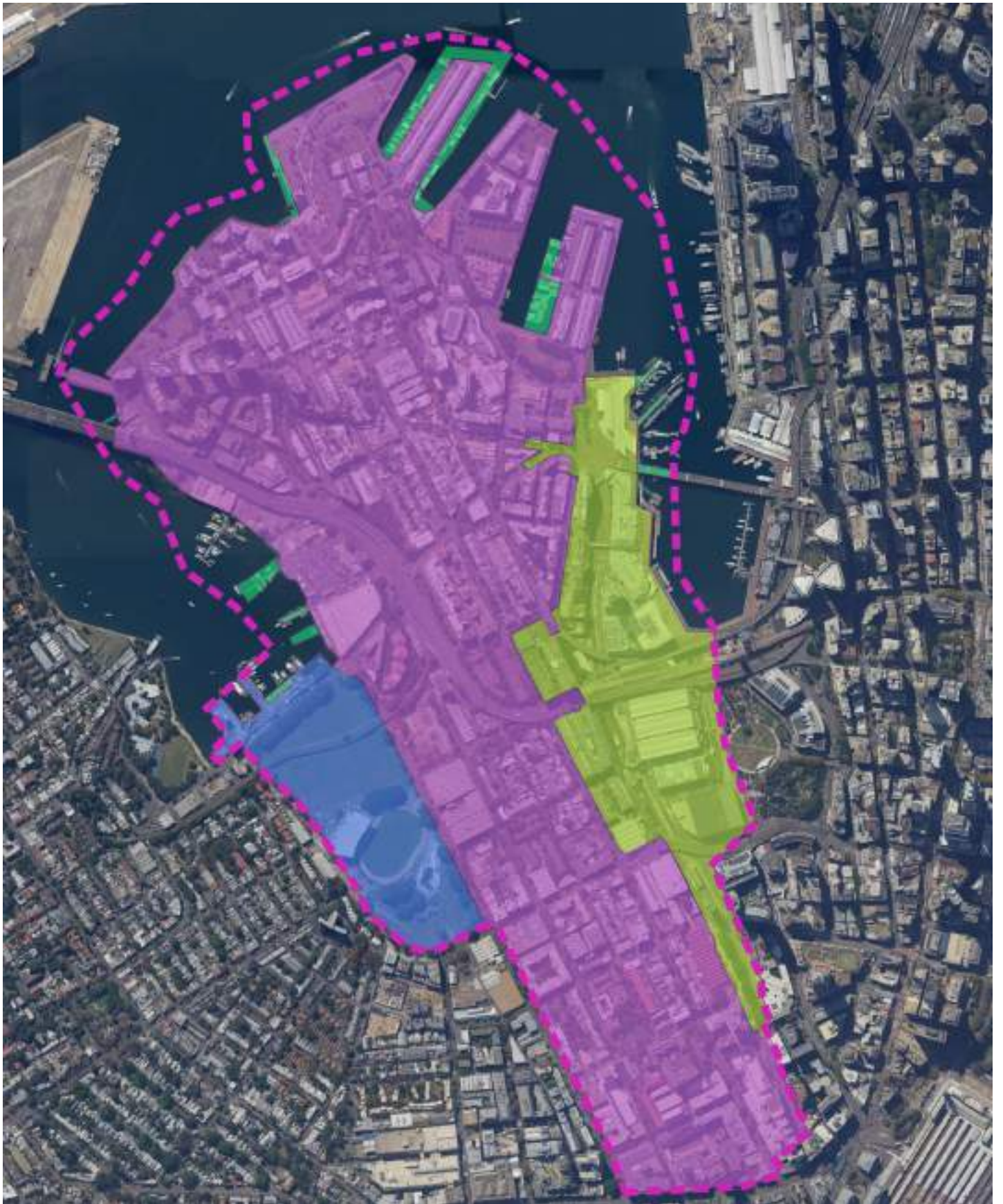
The Sydney LEP includes planning controls for land-use zoning for the entire Peninsula, except for land in the Darling Harbour area and Wentworth Park and waterfront sites. The acoustic and noise-related provisions are provided in detail within the Sydney DCP and include site-specific controls for specific areas and sites.






A summary of the applicable planning instruments that apply to the Pyrmont Peninsula is provided below:


- Local and regional planning instruments:
 - City of Sydney Local Environmental Plan 2012 and City of Sydney Development Control Plan 2012
 - Sydney Regional Environmental Plan No. 26 – City West (SREP 26)
 - Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SHC SREP)
 - Darling Harbour Development Plan No. 1
- State Environmental Planning Policies:
 - SEPP (Infrastructure) 2007 (ISEPP)
 - SEPP (State and Regional Development) 2011 (SRD SEPP)
 - SEPP (State Significant Precincts) 2005 (SSP SEPP)
 - SEPP (Exempt and Complying Development Codes) 2008 (SEPP ECDC)

2.2 Local/regional planning instruments

The local and regional planning instruments that apply to the Peninsula are presented in Table 2.1 and Table 2.2 and include any noise/acoustics related provisions. The provisions or controls in the Sydney DCP that pertain to noise emission and acoustic privacy have been summarised in Table 2.3.



 Pyrmont Peninsula Place Strategy Boundary
  SREP 26 City West Bays Precinct
 Peninsula Planning Instrument Boundaries
  SREP Sydney Harbour Catchment 2005
 Darling Harbour Development Plan No. 1 -
  Sydney LEP 2012

Paper Size ISO A4
 0 100 200 300 400 500 m

 Map Projection: Transverse Mercator
 Horizontal Datum: GDA2020
 Grid: GDA2020 MGA Zone 55



DPIE
 Pyrmont Peninsula Place Strategy - Noise assessment
 Planning Instruments Boundaries within
 the Pyrmont Peninsula

Project No. 12550958
 Revision No. -
 Date. 02/06/2021

FIGURE 2.1

Table 2.1 Sydney LEP 2012 noise related provisions/controls

Section	Reference	Description/control	Comments/applicability to PPPS
Part 5 Miscellaneous Provisions			
Part 5.20 Standards that cannot be used to refuse consent—playing and performing music [compulsory]	1 to 3	Consent authority must not reduce consent to development in relation to licensed premises based on the playing or performing of music or whether dancing occurs. Consent cannot be refused on the grounds of noise caused by the playing or performance of music, if the consent authority is satisfied that noise may be management and minimised to an acceptable level	This is a new clause included as part of the Liquor Amendment (24-hour Economy) Bill 2020 (Schedule 7). Changes relevant to noise have been summarised in Section 3.3.1 and are presented in Appendix A.
Part 6 Local Provisions – height and floor space			
6.21 Design excellence	1) D) ii)	Environmental impacts such as acoustic privacy should be addressed when the consent authority is considering whether development exhibits design excellence	Still applicable
Part 7 Local Provisions – general			
7.13A Affordable housing in Zone B7	1) d) iii)	The consent authority determining development consent on land in a Zone B7 business park should consider the acoustic amenity of residents of a residential flat building or mixed-use development that contains shop top housing	Still applicable
Division 4 Miscellaneous			
7.17 Development in areas subject to aircraft noise	(3)	The consent authority should be satisfied that development on land near Sydney Airport and in an ANEF contour of 20 or greater will meet the indoor sound levels of AS2021 <i>Acoustics—Aircraft noise intrusion—Building siting and construction</i> .	Still applicable. Note should be made that the ANEF 2039 contours do not fall within the Pyrmont Peninsula.
7.20 Development requiring or authorising preparation of a development control plan	(4)	The development control plan must provide how proposed developments address environmental impacts such as acoustic privacy and noise	Still applicable
7.26 Public art	2) d)	Development consent must not be granted to development for the purpose of public art unless the consent authority is satisfied that the development will not have a significant adverse impact of the public domain, including noise impacts	Still applicable

Table 2.2 Other local/regional planning instruments noise related provisions/controls

Document	Relevant noise related requirements	Comments/applicability to PPPS
Sydney Regional Environmental Plan No. 26 – City West (SREP 26)	No noise related requirements relevant to the Pyrmont Peninsula have been identified. However, Part 3 Bays Precinct (Role and land use activities) states that “ <i>Development should reinforce and complement the role of the Precinct as a major inner-harbour port and maritime location. Development should recognise that the port operates for 24 hours of the day and that the generation of noise, lighting and traffic movement is necessarily associated with its operation.</i> ”	No noise-related requirements. See Section 3.2 regarding noise the active harbour on residents within the Pyrmont Peninsula
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SHC SREP)	No noise related requirements relevant to the Pyrmont Peninsula have been identified.	No noise-related requirements identified.
Darling Harbour Development Plan No. 1	No noise related requirements relevant to the Pyrmont Peninsula have been identified.	No noise-related requirements identified.

Table 2.3 Sydney DCP 2012 noise related excerpts

Section	Reference	Type of control	Comments/applicability to PPPS
Section 2 Locality Statements			
2.6.3 Wentworth Park - Principles	(h)	Discourage residential uses fronting Bridge Road because of noise impacts from vehicle traffic and light rail	No new residential land uses are proposed adjacent to Bridge Road or the light rail
Section 3 General Provisions			
3.15.3	(1) (c)	Consider noise impact of late-night trading on surrounding sensitive land uses	Still applicable. See Section 3.3 – discusses the compatibility of late-night trading areas and sensitive land uses.
3.15.4	(5) (v)	Stand-alone gyms in Local centres exceeding certain trading hours will be considered if a Plan of Management is approved to address noise impacts	
3.15.5.1	Preparation	Plans of management should include information about noise emission, trading hours and noise minimisation	
Section 4 Development Types			
Section 4.2 Residential Flat, Non-residential, and mixed-use developments			
4.2.3.11 Acoustic privacy	1)	Noise impact assessment (NIA) required for DA for commercial/retail uses affecting acoustic privacy of adjacent residences	Intensification of commercial/retail activity as a result of the PPPS has the potential to result in acoustic privacy impacts for nearby sensitive land uses, such as residences with particular consideration to the 24-hour economy. A Noise Impact Assessment (NIA) should be required where commercial/retail uses have the potential to cause adverse acoustic privacy impact to nearby sensitive land uses.

Section	Reference	Type of control	Comments/applicability to PPPS
	2)	Residential developments may need to include acoustic measures to reduce impact of noise from existing or planned external sources (e.g. busy roads, adjoining industries, live music venues etc.)	<p>Intensification of planned external noise sources as a result of the PPPS has the potential to result in acoustic privacy impacts for nearby sensitive land uses.</p> <p>Consideration should be given to requiring a noise intrusion impact assessment be undertaken for new residential developments adjacent to moderate infrastructure noise such as roads that carry with between 10,000 vpd and 20,000 vpd.</p> <p>Section 3.1 (existing busy roads), Section 3.2 (existing industry at Glebe Island), Section 3.3 (entertainment venues) and Section 3.4 (Pyrmont Metro) discusses these potential acoustic impacts.</p> <p>No existing or new 'Industrial' planning zones have been identified within the Pyrmont Peninsula. As such, 'moderate industrial infrastructure' noise at nearby sensitive land uses is not considered to be a significant issue. Noise from the active harbour (Glebe Island and White Bay) is discussed in Section 3.2.</p> <p>There is an opportunity to include new planning controls (i.e. a separate planning controls to development near infrastructure) for new sensitive land uses near entertainment/music venues.</p> <p>A new noise regulation strategy is being prepared and will address entertainment noise and will include design requirements for both the venue and for encroaching residential developments. The approach for the proposed changes is shown in Appendix D. The proposed changes include:</p> <ul style="list-style-type: none"> – A shift in noise assessment criteria that considers both residential amenity and the prevailing noise environment in established entertainment hubs – The provision of a noise compliance guideline to reduce confusion and inconsistencies between the noise requirements of development consent conditions, liquor and licensing, and offensive noise complaints
	3)	Development to incorporate measures to reduce entry of noise from external noise sources into the dwelling	<p>Intensification of planned external noise sources as a result of the PPPS has the potential to result in acoustic privacy impacts for nearby sensitive land uses.</p> <p>New mixed-use or residential dwellings should consider the building design measures discussed in <i>Development near rail corridors and busy roads Interim Guideline</i> and the NSW Apartment Design Guide to reduce the entry of noise from external noise sources.</p>

Section	Reference	Type of control	Comments/applicability to PPPS
	4)	Where possible, attenuation at the source is preferred. Consent of all relevant parties is required if measures are undertaken and should last the life of the development proposal.	Any new significant developments associated with the PPPS will require a NIA be undertaken as part of the approval pathway to address potential noise impacts to sensitive receivers and to set reasonable environmental noise goals. As per the Noise Policy for Industry, controlling the noise at the source is the preferred method of mitigation as it generally benefits the greatest number of people.
	5)	Repeatable maximum $L_{Aeq(1hr)}$ noise levels for residential buildings/serviced apartments must not exceed 35 dBA for bedrooms at night and 45 dBA for main living areas all times of the day (windows/doors closed). A 10 dBA allowance is applied for open windows/doors.	Still applicable
	6)	Where natural ventilation cannot be achieved, a 3 dB allowance is applied to the levels prescribed in point 5 (windows/doors closed and A/C operating)	The intentions of the controls are still applicable (allowances for noise where natural ventilation cannot be achieved). Should new design internal noise levels be recommended, the internal noise levels where natural ventilation cannot be achieved may have to be adjusted.
	7)	The maximum noise levels prescribed in point 5, 6 and 7 included the combined noise level from external noise sources and ventilation systems operating.	Still applicable.
	8)	The ceiling/floor system separating dwellings are to have weighted standard impact sound level ($L'_{nT,w}$) less than or equal to 55 where the floor separates a habitable room and another habitable room, bathroom, toilet, laundry, kitchen, plant room, stairway, public corridor, hallway, and the like.	Still applicable. There is an opportunity also to specify a minimum Weighted Sound Reduction Index (R_w) performance requirement for internal partitions between residential dwellings and commercial premises/residential dwellings. Guidance can be taken from the Building Code of Australia for inter tenancy partitions, and Table 6 of the AAAC Guideline for Commercial Building Acoustics also provides guidance on performance requirements for internal partitions between separate tenancies
	9)	Generic architectural design advice is provided to limit the transmission of noise into sensitive areas for developments.	Still applicable
	10)	Mixed use development with two or more dwellings should provide a separate lift access and a separate entrance for exclusive use of the dwellings	Still applicable
4.2.5.3 Development on busy roads and active frontages		Provisions applying to sensitive uses on active frontage map or site with a frontage to a busy road that carries more than 20,000 vehicles per day, included residential/mixed use buildings, place of worship buildings, hospitals, educational	Still applicable. See Section 3.1 and Figure 3.1. Applicable busy roads include (more than 20,000 vpd): <ul style="list-style-type: none"> – Anzac Bridge – Western Distributor – Bridge Road

Section	Reference	Type of control	Comments/applicability to PPPS
		<p>establishments, and childcare centres.</p> <p>Where sensitive uses are proposed, Council may require an Acoustic Assessment prepared with reference to Development near Rail Corridors and Busy Roads – Interim Guidelines.</p> <p>Provisions are provided including non-residential uses required on the ground floor where the development fronts a road with more than 20,000 vpd and to be designed to minimise the impact of road noise and vibration.</p>	<ul style="list-style-type: none"> – Pyrmont Bridge Road – Harris Street – Wattle Street – Allen Street – Fig Street <p>See Appendix C for active frontages.</p> <p>Roads with a AADT of 10,000 vpd and up to 20,000 vpd should also require a noise impact assessment and should be included as a control in the DCP. A review of the following traffic volumes for roads within the Pyrmont Peninsula should be undertaken and mapped to show where road noise impact assessments are required for new sensitive land use developments:</p> <ul style="list-style-type: none"> – Roads with 10,000 vpd to 20,000 vpd (DCP requirement) – Roads with 20,000 vpd to 40,000 vpd (ISEPP non-mandatory requirement) – Roads with >40,000 vpd (ISEPP mandatory requirement)
4.2.6.2 Residential flat buildings and serviced apartments	9)	Provisions to minimise noise from the operation of waste and recycling management systems to residential units.	Still applicable
4.2.9 Non-residential development in the B4 mixed-uses zone Provision	1) a)	Non-residential development on sites within close proximity to residential uses should considered and address potential noise impacts	Still applicable
Section 4.4 Other Development Types and Uses			
4.4.1.6 Amenity, safety, and privacy (boarding houses and student accommodation)	1) b)	Provisions to separate bedrooms from significant noise sources and sound insulation to provide reasonable amenity between bedrooms and external noise sources	Still applicable
	2)	Boarding houses to be designed to minimise noise and mitigate impacts on the acoustic privacy of neighbouring properties	Still applicable
	3)	An acoustic report may be required if there is the potential for noise emission impacts at sensitive receivers	Still applicable
4.4.4.5 Control of noise impacts to childcare centres	1)	Operational Plan of Management required considering potential noise impacts	Still applicable
	2)	Repeatable max. $L_{Aeq(1hour)}$ noise levels must not exceed 40 dBA within internal spaces	Still applicable
	3)	An acoustic assessment is required along with the DA to demonstrate these provisions can be achieved	Still applicable
4.4.6.1 Sex industry premises and adult entertainment – Provisions	1)	Provisions to locate adult entertainment and sex industry premises away from sensitive land uses	Still applicable

Section	Reference	Type of control	Comments/applicability to PPPS
4.4.7 Telecommunications - Provisions	3)	Noise caused by the facility must not result in the transmission of "offensive noise" as defined by the POEO Act 1997	Still applicable
4.4.8.1 Visitor accommodation - General	6)	A Plan of Management and Noise Management Plan must be submitted with the DA	Still applicable
4.4.8.4 Additional provisions for backpacker accommodation	4) b)	Where outdoor facilities are proposed, the design and location should consider noise impacts to surrounding properties	Still applicable
4.4.8.5 Additional provisions for serviced apartments	10)	A Plan of Management must be submitted with every application and describe how to minimise the impact of noise from the premises to adjoining properties	Still applicable
Section 5 Specific Areas			
This section applies to specific sites with the Sydney LGA including Ashmore, Central Sydney, Epsom Park, Green Square, Lachlan, North Rosebery, Rosebery Estate, Southern Employment Lands and Danks Street South.			None of the areas are within the Pyrmont Peninsula.
Section 6 Specific Sites			
6.2.11.2 Setbacks for 97-101 Pyrmont Bridge Road, Pyrmont	1) to 3)	Setback distances from Wattle Street, Wattle Crescent and Pyrmont Bridge Road to reduce impacts of traffic noise. Note all setbacks have been set to '0' metres. This is potentially a typographical error.	Still applicable. Controls currently read as a setback of '0 metres' from the road. There is an opportunity to review this setback distance and amend it to a more appropriate distance.
6.3.8 Murray Street, Pyrmont - Provisions	1) to 3)	Building envelope provisions that minimise acoustic amenity impacts	Still applicable
Schedule 3 Late Night Trading			
3.2 Plan of management requirements	d)	Identify all noise and vibration sources, provide detail of all attenuation measures, provide a statement of compliance with the relevant guidelines and details of how management will address noise complaints.	Still applicable. See Section 3.3. The actions associated with the 24-hour economy strategy and the proposed noise condition options in <i>An Open and Creative City: Planning for culture and the night-time economy</i> should be reflected and considered – See Section 3.3.

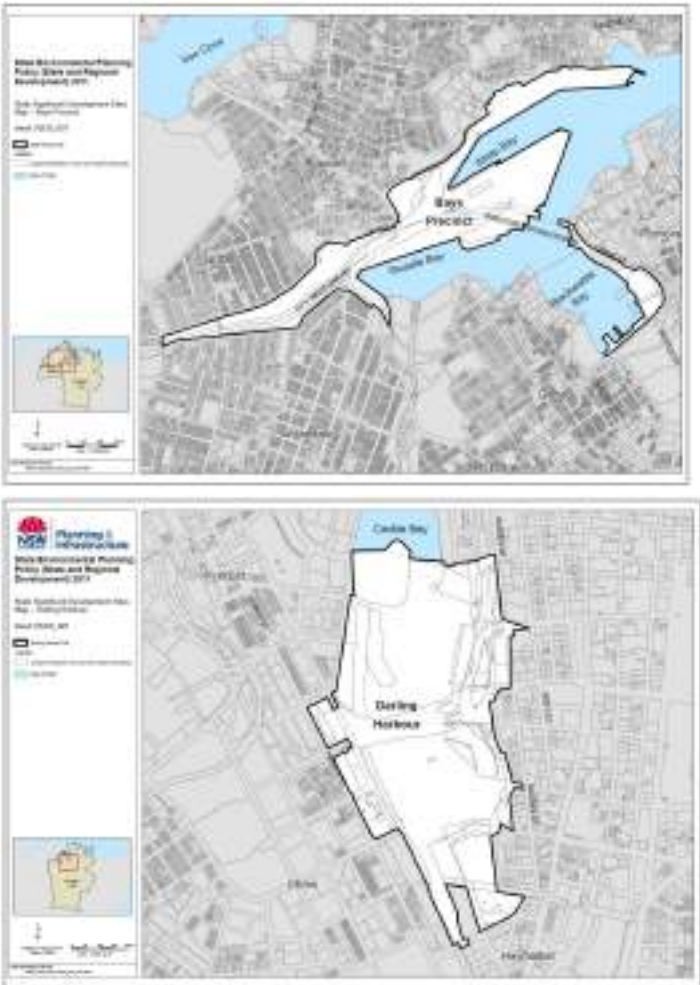
2.3 State Environmental Planning Policies

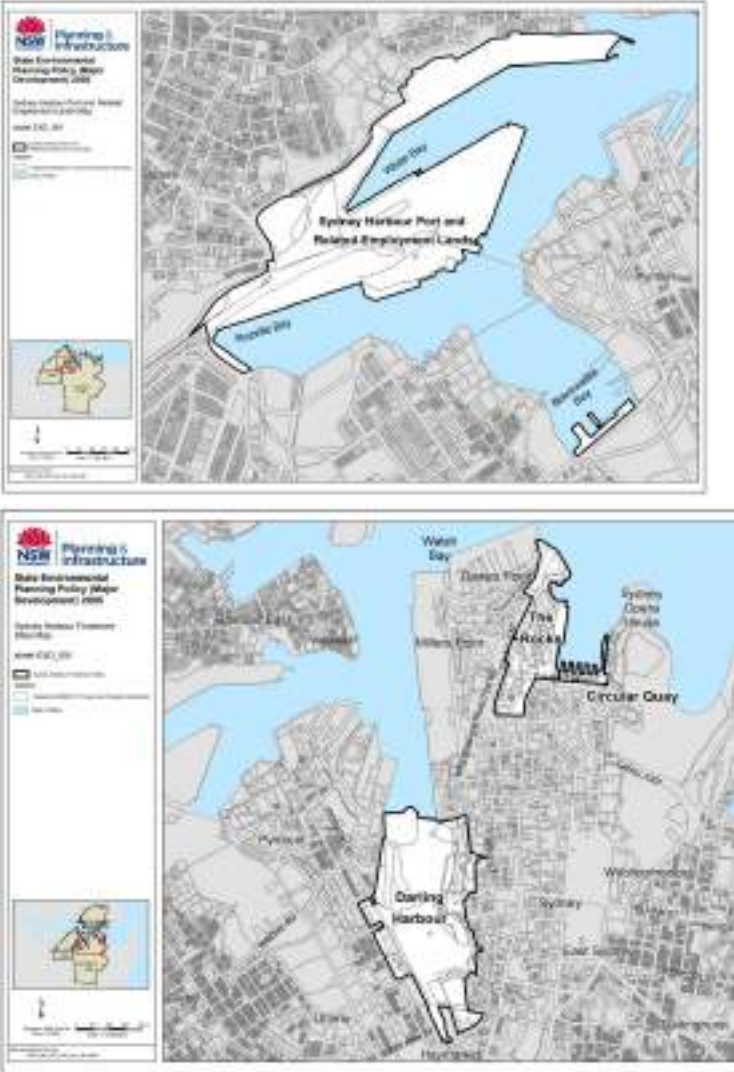
State Environment Planning Policies (SEPPs) address matters of state and regional environmental planning significance. The relevant SEPP instruments that apply to the Peninsula are presented in Table 2.4 along with the noise/acoustics related provisions and controls.

Table 2.4 State Environmental Planning Policies

Document	Relevant noise related requirements	Comments/applicability to PPPS
State Environmental Planning Policy (Infrastructure) 2007	The State Environmental Planning Policy (Infrastructure) 2007 (ISEPP), which provides a consistent planning regime for infrastructure and the provision of services across NSW. The Infrastructure SEPP provides that if the consent authority considers that land that is in or adjacent to a rail corridor or a busy road that carries more than 40,000 vehicles a day and is likely to be adversely affected by noise or vibration, the consent authority must	Still applicable. Applicable busy roads (above 20,000 vpd) include: <ul style="list-style-type: none"> – Anzac Bridge – Western Distributor – Bridge Road

Document	Relevant noise related requirements	Comments/applicability to PPPS
	<p>not consent to a residential development unless it is satisfied that appropriate measures will be taken to ensure that the following noise levels are not exceeded:</p> <p>(a) in any bedroom in the building — LAeq 35 dB(A), at any time between 10.00 pm and 7.00 am</p> <p>(b) anywhere else in the building (other than a garage, kitchen, bathroom, or hallway) — LAeq 40 dB(A) at any time.</p> <p>The prescription of internal noise level limits means that the building must be constructed to a standard that provides for sufficient reduction of the external noise so that the internal levels are achieved. The Infrastructure SEPP is an example of how planning measures can assist in preventing noise problems.</p>	<ul style="list-style-type: none"> – Pyrmont Bridge Road – Harris Street – Wattle Street – Allen Street – Fig Street
SEPP (Exempt and Complying Development Codes) 2008	<p>An exempt development is minor building works that do not require a development application. Provided the proposed works are low impact and meet all relevant development standards, a planning or building approval may not be needed.</p> <p>Complying development is a combined planning and construction approval for straightforward development that can be determined through a fast-track assessment by a council or private certifier. Complying development applies to homes, businesses, and industry.</p>	<p>This SEPP includes numerous noise-related requirements for developments to classify as exempt or complying development. These conditions are applicable for NSW, including Pyrmont Peninsula.</p> <p>Changes have been made as part of the Liquor Amendment (24-hour Economy) Bill 2020 (Section 4.5). Changes relevant to noise have been summarised in Section 3.3.1 and are presented in Appendix E</p>

Document	Relevant noise related requirements	Comments/applicability to PPPS
<p>State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)</p>	<p>No noise related requirements relevant to the Pyrmont Peninsula have been identified.</p> 	<p>No noise-related requirements. See Section 3.2 regarding noise from the active harbour on residents within the Pyrmont Peninsula</p>

Document	Relevant noise related requirements	Comments/applicability to PPPS
<p>State Environmental Planning Policy (State Significant Precincts) 2005 (SSP SEPP)</p>	<p>No noise related requirements relevant to the Pyrmont Peninsula have been identified.</p> 	<p>No noise-related requirements. See Section 3.2 regarding noise from the active harbour on residents within the Pyrmont Peninsula</p>

2.3.1 Legislative context

The relevant legislation applicable to the assessment and regulation of noise within the Pyrmont Peninsula is summarised in Table 2.5.

Table 2.5 *Legislation relevant to the assessment and regulation of noise*

Document	Purpose of the legislative requirement relevant to planning/noise	Comments/applicability to PPPS
Local Government Act 1993	This Act principally deals with the governance of councils in New South Wales. It provides the legal framework for the system of local government in NSW.	Changes have been made as part of the Liquor Amendment (24-hour Economy) Bill 2020 (Section 4.7). Changes relevant to noise have been summarised in Section 3.3.1 and are presented in Appendix E
Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (Noise Control) Regulation 2017	<p>The POEO Act 1997 and the POEO (Noise Control) Regulation 2017 (Noise Control Regulation) provide the main legal framework and basis for managing noise in NSW. It also makes certain agencies the appropriate regulatory authority (ARA) responsible for various premises/activities. This includes local councils, the EPA, Marine Parks Authority and Transport for NSW. The POEO Act also defines 'noise' and 'offensive noise'.</p> <p>The POEO Act has a subjective test for offensive noise, and defines it as any noise that because of its nature, level, character, quality, or time:</p> <ul style="list-style-type: none"> – could be considered as harmful or likely to be harmful to a person outside the premises or – interferes unreasonably with or is likely to interfere unreasonably with the comfort or repose of a person who is outside the premises. <p>The POEO Regulation controls noise from motor vehicles and marine vessels and sets community standards on acceptable noise intrusion in homes from such appliances as intruder alarms, music amplifiers, air conditioners and powered garden tools.</p>	Still applicable for managing noise in NSW. It should be noted that the City is proposing an objective noise criteria for Council environmental health officers to use for entertainment venues. See Section 3.3.3
Environmental Planning and Assessment (EP&A) Act 1979 Environmental Planning and Assessment Regulation 2000	<p>The EP&A Act sets out the laws under which planning in NSW takes place. Under Part 3 of the EP&A Act, environmental planning instruments are made to guide and control development and land use.</p> <p>The EP&A Act is relevantly about planning matters and ensuring that "environmental impact" associated with new developments or the intensification of existing developments are properly considered and are reasonable before granting development consent to development.</p> <p>The EP&A Regulation supports the day-to-day requirements of the NSW planning system. It contains key operational provisions including those relating to development contributions and planning agreements.</p>	<p>Still applicable.</p> <p>Changes have been made as part of the Liquor Amendment (24-hour Economy) Bill 2020 (Section 4.3, Section 4.4, and Schedule 6).</p> <p>Changes relevant to noise have been summarised in Section 3.3.1 and are presented in Appendix E</p>

Document	Purpose of the legislative requirement relevant to planning/noise	Comments/applicability to PPPS
Liquor Act 2007 and Liquor Regulation 2018	<p>Section 79 of the Liquor Act 2007 provides an informal mechanism for complaints to be made (by residents, Police, local consent authorities and others) where the amenity of local neighbourhoods is unduly disturbed by the conduct of licensed premises and registered clubs (or their patrons). The Director is responsible for resolving such complaints and may impose temporary or permanent conditions on the licence.</p> <p>The Liquor Regulation prescribes matters necessary for the effective operation of the <i>Liquor Act 2007</i></p>	<p>Still applicable. Note that The Environmental Planning and Assessment Act 1979 (EP&A Act), Protection of the Environment Operations Act 1997 (POEO Act), and Liquor Act 2007 all deal with entertainment noise.</p> <p>It should be noted that the City is proposing an objective criteria for Council environmental health officers to use for entertainment venues. See Section 3.3.3.</p> <p>Changes have been made as part of the Liquor Amendment (24-hour Economy) Bill 2020 (Schedules 1 to 4). Changes relevant to noise have been summarised in Section 3.3.1 and are presented in Appendix E</p>

2.4 Relevant noise policies/guidelines/standards to assist with the assessment of noise

2.4.1 Noise policies and guidelines

The noise policies and guidelines summarised in Table 2.6 can be used by the EPA when undertaking their regulatory responsibilities under the POEO Act, DPIE when assessing major development proposals under the EP&A Act and local councils for assistance with their planning/regulatory responsibilities.

Table 2.6 Noise policies and guidelines to assist in the assessment and regulation of noise

Document	Purpose of the policy/guideline	Comments/applicability to PPPS
Noise Policy for Industry (EPA 2017)	<p>The EPA's Noise Policy for Industry (NPfI) was designed to ensure that potential noise impacts associated with industrial projects are managed effectively. This policy sets out the requirements for the assessment and management of noise from industry in NSW. It aims to ensure that noise is kept to acceptable levels in balance with the social and economic value of industry in NSW.</p>	<p>Still applicable for new and existing industry within the Pyrmont Peninsula.</p> <p>The NPfI is commonly adopted for other noise sources such as mechanical plant and noisy commercial land uses.</p>
Glebe Island and White Bay Port Noise Policy	<p>The policy is designed to facilitate improved noise outcomes and port operations within the context and constraints of SREP-26, other planning controls and environmental legislation. It aims ensure that vessel noise and port landside precinct noise is managed in a consistent, transparent, and fair manner.</p> <p>The policy also aims to address inconsistencies in approvals and Environmental Protection Licenses (EPLs) by ensuring that all vessels visiting the port of Glebe Island and White Bay are required to meet the same noise standard. The Policy is an application of the Noise Policy for Industry where all new and upgraded operations need to be assessed to identify potential noise impacts and feasible and reasonable mitigation applied. It includes a mechanism to reduce port noise within the context of planning controls for Bays West.</p> <p>The Policy also includes recommended planning controls for new residential development encroaching on the port (similar to the ISEPP).</p>	Still applicable and to be updated

Document	Purpose of the policy/guideline	Comments/applicability to PPPS
Noise Guide for Local Government	<p>This noise guide provides practical advice for Council officers on planning, assessment, managing and preventing local noise problems including:</p> <ul style="list-style-type: none"> – Legal framework for noise control – The assessment of 'offensive noise' – Noise management principles – Regulating noise impacts 	Still applicable. This is likely to be superseded by a newer version shortly.

2.4.2 Transport infrastructure

The policies, standards, and guidelines summarised in Table 2.7 can be used as planning tools to assist in assessing and regulating noise from transport infrastructure (heavy and light rail, roads, and aircraft).

Table 2.7 Policies, standards, and guidelines – Transport infrastructure

Document	Purpose of the policy/guideline/standard	Comments/applicability to PPPS
NSW Rail Infrastructure Noise Guideline (EPA 2013)	The purpose of this guideline is to ensure noise and vibration impacts associated with particular rail development projects are evaluated in a consistent and transparent manner. It applies to heavy and light rail infrastructure projects including the construction of new rail lines and upgrades to existing lines.	Still applicable. See Section 3.4
NSW Road Noise Policy (DECCW 2011)	<p>The Road Noise Policy aims to identify the strategies that address the issue of road traffic noise from:</p> <ul style="list-style-type: none"> – existing roads – new road projects – road redevelopment projects – new traffic-generating developments. 	Still applicable
Development near Rail Corridors and Busy Roads Interim Guideline (DoP 2008)	The Development near Rail Corridors and Busy Roads Interim Guideline (DNRCBRIG) (DoP 2008) provides guidance for the planning, design, and assessment of development in or adjacent to rail corridors and busy roads to support the Infrastructure SEPP (ISEPP).	Still applicable. See Section 3.1.5
AS2021:2015 Acoustics Aircraft Noise Intrusion – Building Siting and Construction	This Standard provides guidance on the siting and construction of buildings in the vicinity of airports to minimise aircraft noise intrusion. The assessment of potential aircraft noise exposure at a given site is based on the Australian Noise Exposure Forecast (ANEF) system	Still applicable. It should be noted that the ANEF 2039 contours do not fall within the Pyrmont Peninsula
Australian Noise Exposure Forecast (ANEF) Sydney Airport 2039	ANEF charts are contour maps that show a forecast of aircraft noise levels that are expected to exist in the future. ANEFs are primarily used by state, territory, and local government planning agencies for land use zoning purposes.	Still applicable. It should be noted that the ANEF 2039 contours do not fall within the Pyrmont Peninsula

2.4.3 Residential apartments and mixed-use developments

Acoustic privacy and acoustic quality within residential apartments and mixed-use developments should be maintained through proper design to minimise intertenancy noise transfer and limit noise levels from mechanical plant or external noise sources. Table 2.8 summarises relevant guidelines that can assist in maintaining acoustic privacy and acoustic quality within residential apartments.

Table 2.8 *Acoustic privacy and quality within residential apartments and mixed-use developments*

Document	Purpose of the code/guideline/standard	Comments / applicability to PPPS
Building Code of Australia	The Building Code of Australia (BCA) regulates minimum acceptable construction standards for buildings and sets minimum standards for privacy. Part F of the BCA sets minimum requirements for party walls and floors between apartments and for ducts or bulkheads enclosing hydraulic waste pipes. However, it does not deal with other issues such as noise intrusion from outside or noise generated by building services.	Still applicable. New dwellings, boarding houses, guest houses, hostels and the like are to be designed to meet the acoustic privacy requirements of the BCA. It should be noted that the City of Sydney DCP Section 4.2.3.11 Acoustic privacy has floor impact noise requirements that are more stringent than the requirements outlined in the BCA.
AS2107:2016 Acoustics Recommended design sound levels and reverberation times for building interiors	This Standard recommends design criteria for conditions affecting the acoustic environment within occupied space, specifically in background noise and reverberation times.	Still applicable to assist in designing building interiors concerning design sound levels and reverberation times.
NSW Apartment Design Guide (DoP&E 2015)	The Apartment Design Guide provides consistent planning and design standards for apartments across the State. It provides design criteria and general guidance about how development proposals can achieve the nine design quality principles identified in SEPP 65 (State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development), including principle 6: Amenity (including acoustic privacy)	Still applicable in maintaining acoustic privacy when designing apartments.

2.4.4 Construction noise and vibration

Development within the Pyrmont Peninsula will require construction work that can adversely affect the acoustic amenity of nearby sensitive receivers. Table 2.9 summarises the guidelines used to assess and regulate noise and vibration from construction activities.

Table 2.9 *Construction noise and vibration guidelines*

Document	Purpose of the code/guideline	Comments/applicability to PPPS
City of Sydney Construction Hours/ Noise within the CBD – Code of Practice (Sydney Council 1992)	This Code provides comprehensive guidelines to permit construction work during all hours of the day, seven days per week subject to compliance with noise criteria and to allow construction to be planned and undertaken without affecting the amenity of residents, commercial operators, tourists, and other city users. This code is being updated to reflect changes in NSW legislation, construction work methods and how noise is managed and assessed.	The area relevant to this Code does not apply to the Pyrmont Peninsula.
Interim Construction Noise Guideline (DECCW 2009)	The EPA sets noise limits in environment protection licences to minimise noise from construction. The Interim construction noise guideline (2009) guides the EPA in setting appropriate conditions in licences, and also helps councils to decide whether to approve proposed local construction projects.	Currently still applicable. However, the Draft Construction Noise Guideline has been released for public consultation.
Draft Construction Noise Guideline (EPA 2020)	Following a review of the Interim construction noise guideline, the EPA has prepared a Draft construction noise guideline to modernise and improve the guidelines. The DCNG has been released for public consultations, and the feedback is currently under review. Once the consultation process is complete, this feedback will produce a final guideline to replace the Interim Construction Noise Guideline.	A Construction Noise Guideline (EPA) will be produced once feedback has been reviewed regarding the DCNG.

Document	Purpose of the code/guideline	Comments/applicability to PPPS
Construction Noise and Vibration Strategy (TfNSW 2019)	This Construction Noise and Vibration Strategy (CNVS) outlines the approach to be taken to mitigate and manage construction noise and vibration from Infrastructure and Place projects such as station upgrades, light rail infrastructure, bus priority infrastructure, heavy rail infrastructure and ferry fleet and infrastructure upgrades.	Still applicable for TfNSW "Infrastructure and Place" projects.
Construction Noise and Vibration Guideline (TfNSW 2016)	This guideline outlines the approach Roads and Maritime Service (now TfNSW) takes to assessing and mitigating construction noise. For this guideline, construction noise and vibration also includes noise and vibration from minor works maintenance activities.	Still applicable for TfNSW roads and maritime services (RMS) projects.
Assessing Vibration: A technical guideline (DEC 2006)	This guideline presents preferred and maximum vibration values for use in assessing human responses to vibration and provides recommendations for measurement and evaluation techniques	Still applicable to give guidance in vibration values for human comfort.

3. Key noise issues

A discussion of the existing and future land use conflicts within the Peninsula with relation to noise

3.1 Rail corridors, busy roads, and active frontages

3.1.1 Clause 87 Infrastructure SEPP (Rail Corridors)

The construction of noise-sensitive developments such as residential dwellings, churches, hospitals, and schools on land in or immediately adjacent to a rail corridor triggers the requirement to consider noise mitigation measures under the ISEPP where specific internal noise levels are needed for internal areas should be achieved.

Figure 3.1 shows the light rail corridor that runs through Pyrmont Peninsula (Glebe, Wentworth Park, the Fish Market, Johns Street Square, The Star, Pyrmont Bay, Convention, the Exhibition Centre etc.). New sensitive developments fronting the light rail corridor should consider acoustic treatments to the building to ensure compliance with the ISEPP internal noise levels.

3.1.2 Clause 102 Infrastructure SEPP (Road Corridors)

3.1.2.1 Mandatory requirements

Construction of noise-sensitive developments such as residential dwellings, churches, hospitals, and schools on land adjacent to the road corridor may trigger the need to consider noise mitigation measures under the ISEPP. Dwellings must meet specific internal noise levels for habitable rooms such as bedrooms and other living areas.

Road corridors where mandatory requirements under the ISEPP apply are shown in red in Figure 3.1 and may comprise of:

- Freeways
- Tollways
- Transitways
- Roads carrying an Annual Average Traffic Volume (AADT) of more than 40,000 vehicles.

(source: <https://roads-waterways.transport.nsw.gov.au/documents/about/environment/noise-reduction/traffic-volume-maps-sepp/traffic-volume-maps-map-16.pdf>).

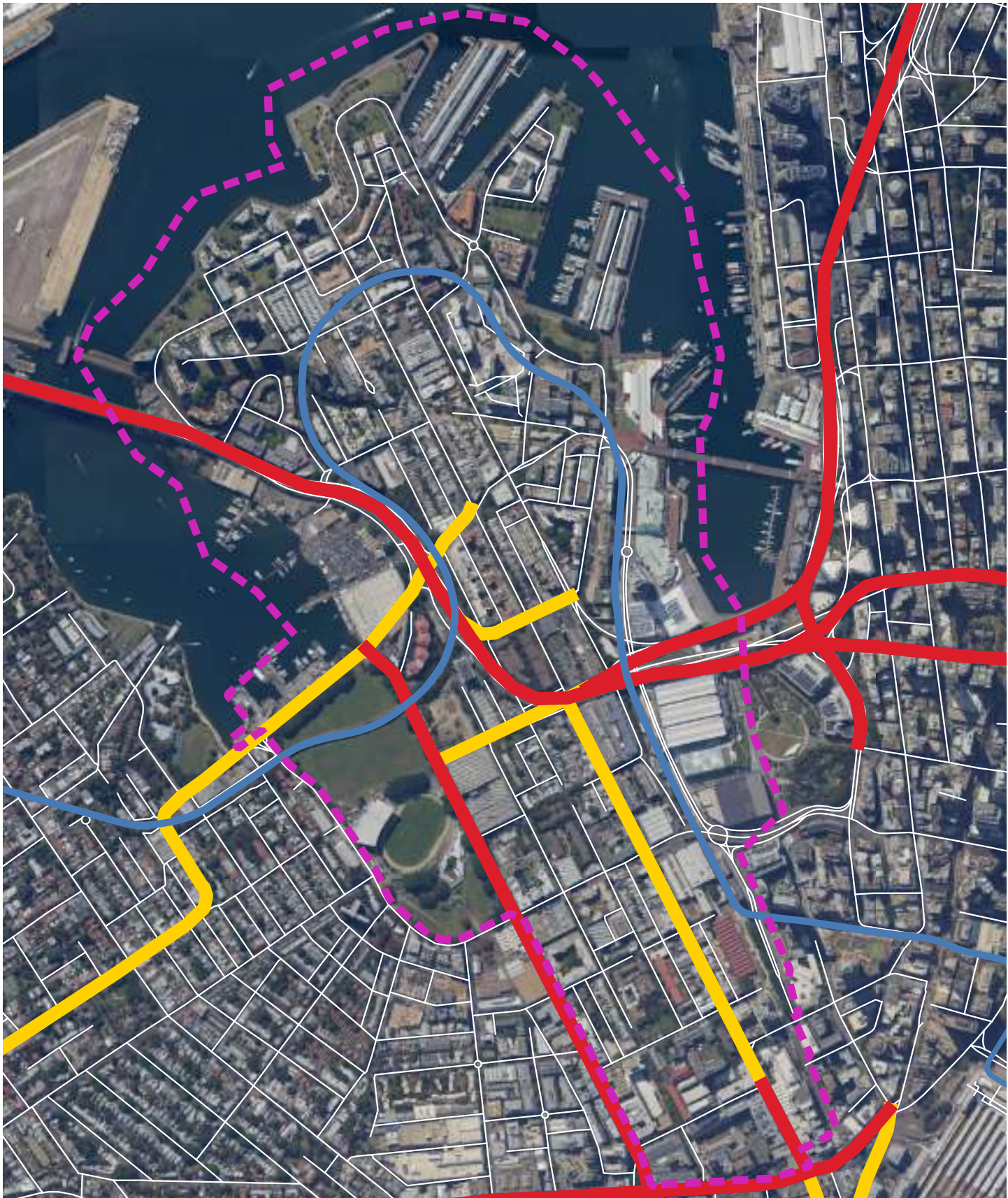
New sensitive developments fronting these roads should consider acoustic treatments to the building to ensure compliance with the ISEPP internal noise levels.

3.1.2.2 Non-mandatory recommendations

Figure 3.1 highlights road corridors carrying between 20,000 and 40,000 annual average daily traffic (AADT) and are shown in amber. There are no general mandatory requirements for these road corridors to assess and include mitigation against road traffic noise for new residential and other noise-sensitive developments.

(source: <https://roads-waterways.transport.nsw.gov.au/documents/about/environment/noise-reduction/traffic-volume-maps-sepp/traffic-volume-maps-map-16.pdf>)

However, it is expected that in most situations, road traffic noise will adversely impact these locations. New developments along road corridors carrying between 20,000 and 40,000 AADT are expected to assess road traffic noise levels and include noise mitigation measures.



Legend

- PPSP Boundary
- Light Rail Corridor
- Mandatory under ISEPP (Freeways, tollways, transitways and >40,000 AADT)
- Recommended (> 20,000 and < 40,000 AADT)

Paper Size ISO A4

0 0.1 0.2 0.3 0.4 0.5 km

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 55



DPIE

Pyrmont Peninsula Place Strategy - Noise assessment

**Busy Roads and Rail Corridors within
Pyrmont Peninsula**

Project No. 12550958
Revision No. -
Date. 02/06/2021

FIGURE 3.1

Document Path: \\ghdnet\GHD\AU\Sydney\Projects\2112550958\Tech\Pyrmont\Noise\01_GIS\QGIS\Figure2_1.qgz
Print Date: 02/06/2021
Data Source: Google Earth Imagery 2021. Created By: mvelasco
©2021. While GHD has taken care to ensure the accuracy of this product, GHD and DATA CUSTODIAN(S), make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. GHD and DATA CUSTODIAN(S) cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unsuitable in any way and for any reason.

3.1.3 Active frontages

Active frontages to streets are encouraged so activities within buildings can positively contribute to the public domain. Such uses include retail, customer service areas, cafes and restaurants, and other uses that involve pedestrian interest and interaction. Outdoor dining areas may also contribute to active street frontages in appropriate circumstances.

It is also essential to ensure the acoustic amenity of noise-sensitive land uses along active frontages is maintained. Section 4.2.5.3 Acoustic Privacy in the City of Sydney DCP states that Council may require an acoustic assessment for noise-sensitive developments adjacent active frontages with consideration to the *Development near Rail Corridors and Busy Roads – Interim Guideline*.

The Sydney active frontages maps relevant to the Pyrmont Peninsula (maps 7, 8 and 15) are shown in Appendix C. DPIE should consult with Sydney Council to determine whether any changes to the active frontage maps is required as a result of the Strategy.

3.1.4 DCP road noise impact assessment requirements

Section 4.2.5.3 Acoustic Privacy in the City of Sydney DCP states that Council may require an acoustic assessment for noise-sensitive developments adjacent to busy roads that carry more than 20,000 vehicles per day considering the *Development near Rail Corridors and Busy Roads – Interim Guideline*.

For roads with volumes between AADT 10,000 vpd and 20,000 vpd, there is potential for the DCP internal noise levels to be exceeded without proper building and façade design to reduce the entry of noise into habitable rooms. As such, a review of the roads within the Pyrmont Peninsula with traffic volumes between AADT 10,000 vpd and 20,000 vpd should be undertaken and included in a map (along with the ISEPP non-mandatory and mandatory requirements) to show where road noise impact assessments are required for new sensitive land use developments adjacent to these roads.

3.1.5 Development near busy roads and corridors

The *Development near rail corridors and busy roads Interim Guideline* is a document prepared by the Department of Planning to reduce the health impacts of rail and road noise on sensitive adjacent developments. The Infrastructure SEPP refers to the guidelines that must be considered where development is proposed in, or adjacent to, specific roads and railway corridors under clauses 87 and 102.

The Sydney DCP 2012 includes “provisions applying to sensitive uses on active frontage map or site with a frontage to a busy road that carries more than 20,000 vehicles per day, included residential/mixed-use buildings, place of worship buildings, hospitals, educational establishments and childcare centres.” Note should be made that this also applies to roads that carry between 10,000 and 20,000 vehicles per day.

The sections relevant to noise and vibration are summarised in Table 3.1.

Table 3.1 *Development Near Rail Corridors and Busy Roads – Interim Guideline – relevant noise and vibration sections*

Section	Title	Relevance of the section
1	Introduction	Provides an overview of why the Guidelines are relevant and to which development they specifically apply
2	Linkages with the government's strategic land use planning initiatives	Contains general guidance for council strategic planning and for government or nongovernment proponents investigating potential development locations
3	Noise and vibration	When considering whether an acoustic assessment is required and whether noise and vibration mitigation measures are needed
Appendix B	Acoustic planning measures	Demonstrates the level of noise reduction that acoustically planned dwellings can achieve
Appendix C	Acoustic treatment of residences	Explains the 'deemed to comply' dwelling construction for each category of noise treatment

Section	Title	Relevance of the section
Appendix D	Acoustic consultant reports: a methodology for testing and compliance reporting	Outlines what needs to be included in an acoustic assessment and an acoustic assessment report

Section 3.8 of the Guideline provides generic advice for avoiding airborne noise and vibration impacts by good design, including:

- Assess potential noise and vibration impacts during the master planning/concept planning stage
- Increasing separation between buildings and road/rail noise sources
- Building location, design orientation and room layout
- Locating habitable areas as far away from road/rail noise sources, where possible
- Less sensitive rooms (laundries, bathrooms, corridors etc.) should be placed on the noisy side of the building
- Using non-sensitive or less noise-sensitive buildings as noise shields
- Using ground-level podiums to increase acoustic shielding
- Using balconies with solid balustrades to reduce noise entering the interior of the building
- Where space allows, use noise barriers to reduce traffic noise
- Building treatments (walls, windows, doors, roofs)
- Design to minimise adverse vibration and ground-borne noise impacts

Residential apartment developments also need to meet the requirements set out in SEPP 65, which includes a suite of nine design quality principles, including Principle 6: Amenity. The NSW Apartment Design Guide (Department of Planning and Environment, 2005) details how residential development proposals can meet these principles (including acoustic amenity) through good design and planning practice.

SEPP 65 development in locations adjacent to rail corridors and busy roads must have regard to the *Development near rail corridors and busy roads Interim Guideline*.

3.2 Glebe Island and White Bay Port

White Bay and Glebe Island Port (the Port) has operated an active port since the 19th century and has been a source of noise in the surrounding area since that time. The active harbour has progressively been developed to provide wharves and improve land access for the transportation of goods to and from the port. The Glebe Island and White Bay berths, with higher background noise levels nearer to ANZAC Bridge, are now used to import bulk goods (sugar, tallow, salt, cement, and gypsum).

Existing uses of the Port include

- Landside and vessel noise associated with the import of bulk goods. This usually requires the overnight berthing of ships to provide sufficient time to load or unload cargo.
- Cruise terminal vessels and operations

Figure 3.2 shows residential buildings with planning controls that required developers to manage noise intrusion from the Port.

Potential future use of Glebe Island and White Bay includes a Multi-User Facility (MUF) and the Hanson concrete batching plant (HCBP). Both the MUF and the HCBP are located directly adjacent to each other and opposite the Pirrama sub-precinct in Pyrmont and are currently being considered through approval processes (as of June 2021). If these projects were approved, the operation of these facilities would have noise management precinct commitments in their lease contracts. Figure 3.3 shows the view from Jacksons Landing to Glebe Island, where the MUF and HCBP are proposed.

To prevent operations of current and future facilities adversely impacting the acoustic amenity of the sensitive receivers located in Pyrmont the following principles are addressed in the Port Noise Policy (Port Authority 2020):

- Efforts to reduce noise at the source by simplifying the way noise from the port is assessed and managed
- Implement planning controls for new sensitive developments that may encroach on the port to be designed to meet design internal noise levels.

The Port Noise Policy (Port Authority 2020) aims to address these noise issues by setting specific criteria to be met at the nearest receivers, and by providing noise maps to be utilised as planning tools to manage how internal design noise levels can be met for future sensitive developments. The vessel berths and the location of the nearest sensitive receivers to each berth are shown in Figure 3.4.

Table 3.2 describes the potential landside noise sources associated with each berth and considers possible future operations. This has been sourced from Table 10 of the *Port Noise Policy Appendix I – Port noise maps* (Port Authority 2020).

The structure and the critical points of the Port Noise Policy are summarised in the following tables:

- Table 3.3 Port Noise Policy purpose and key points
- Table 3.4 Trigger noise levels for vessels at berth
- Table 3.5 Noise criteria for port landside activities
- Table 3.6 Recommended planning controls (internal noise level criteria) for new residential development encroaching on the port (Future noise levels from the port are shown in Appendix I of the Port Noise Policy)

There are opportunities to update the relevant planning controls for new noise-sensitive developments that may encroach on the port with reference to the planning controls recommended in the Port Noise Policy (see Table 3.6). These internal noise levels would be a similar approach adopted in the DCP for Busy Roads and Active Frontages (DCP Section 4.2.5.3).



Figure 3.2 Residential buildings with planning controls required for developers to manage noise intrusion from the port (source: Port Noise Policy – Appendix H – Port Noise Standard – Figure 2 Locations with noise mitigation (Port Authority 2020))



Figure 3.3 View from Jacksons Landing to Glebe Island (source: Google Maps)



Figure 3.4 Glebe Island and White Bay berths and location of the nearest receivers to each berth
(source: Port Noise Policy – Appendix H – Port Noise Standard – Figure 1 (Port Authority 2020))

Table 3.2 Vessel Berths and worst-case noise sources landside activities (10 years into the future)

Berth	Area	Landside noise sources	Nearest residences
1	Glebe Island	Hanson Batching Plant with all operations (subject to approval)	Bowman Street residences and Jackson's Landing residences at Pyrmont
2	Glebe Island	Multi-User Facility with all operations including two conveyors handling aggregate (subject to approval)	Jacksons Landing residences at Pyrmont
3	White Bay	Truck movements and onshore handling of materials	Residences at Buchanan Street and Rosebery Place, Balmain
4	White Bay	Cruise with all operations and Tallow operations after cruise vessel leaves	Residences at Donnelly Street, Balmain
5	White Bay	Cruise with all operations	Residences at Grafton Street, Balmain
6	White Bay	Bailey's Marine Fuel Australia with all operations	Residences at Grafton Street, Balmain
7	Glebe Island	Sugar with all operations including the conveyor and Gypsum Resources Australia (GRA) with all operations excluding the conveyor and hoppers	Residences at Buchanan Street and Batty Street, Balmain
8	Glebe Island	Cement Australia with all operations	Residences at Buchanan Street and Batty Street, Balmain

Table 3.3 Port Noise Policy

Document	Purpose	Key points
Port Noise Policy	Outlines overarching principles relating to noise from vessels and, for landside activities, managing a noise precinct. This includes the context for noise assessments for new port users and surrounding residential and commercial development.	Outlines why the policy was developed. Provides a summary of noise criteria for vessels and landside activities by following the appendices. Summary of how port noise will be managed.
Vessel Noise Guideline (Appendix F)	Outlines the approach to assessing and managing noise from vessels, including preparing noise maps of current and projected future noise levels.	Describes the process to set target noise levels for vessels and the steps for completing a vessel noise assessment.
Landside Precinct Noise Guideline (Appendix G)	Details the process of assessing noise from landside activities, setting user contribution criteria, monitoring compliance, and identifying noise mitigation actions.	Shows how to set noise criteria for landside activities and how to complete a landside noise assessment.
Vessel Noise Operating Protocol (published online)	Details operating protocols applicable to each berth to manage vessels that exceed prescribed noise levels and includes specific actions to address exceedances.	Defines the steps to be taken if a vessel is noisier than the trigger level.
Noise Standard (Appendix H)	Documents the allocation of contributions by individual port users to the whole-of-precinct noise criteria for landside activities and defines the trigger noise level for vessels at berth.	Lists the vessel trigger levels and landside criteria for every berth and operator at the port.
Noise Maps (Appendix I)	Graphically outlines the port noise emission profile of Glebe Island and White Bay for landside and vessel noise and may be used to inform land-use planning for new developments encroaching on the port and illustrate the expected noise environment surrounding the port.	Contains noise maps for all noise from the port. The vessel noise maps compare how annual noise levels vary around the port and over different years. The tables show the noise levels from each ship while it is at the berth. Additional maps show noise levels from landside activities and total worst-case noise levels for ships plus landside noise.

Table 3.4 Vessel Trigger Noise Levels (external)

Environmental trigger applied to vessels at berth	Assessment Location	Day ($L_{Aeq, 15hr}$) ¹ (7 am to 10 pm)	Night ($L_{Aeq, 1hr}$) (10 pm to 7 am)	Night (L_{Amax}) (10 pm to 7 am)
Glebe Island 1 and 2	All sensitive receivers near the port	60 dBA	55 dBA	65 dBA
Glebe Island 7 and 8		60 dBA	55 dBA	65 dBA
White Bay 3		60 dBA	55 dBA	65 dBA
White Bay 4 (non-cruise)		60 dBA	55 dBA	65 dBA

Table 3.5 Port landside precinct noise criteria

Category	Assessment Location	Day ($L_{Aeq, 11hr}$) (7 am to 6 pm)	Evening ($L_{Aeq, 4hr}$) (6 pm to 10 pm)	Night ($L_{Aeq, 9hr}$) (10 pm to 7 am)
External environmental criteria applied to the Noise Management Precinct	All residential land near the port	65 dBA	55 dBA	50 dBA
Internal environmental criteria applied to the Noise Management Precinct	Other noise sensitive receivers	Refer to the NSW EPA's NPfl, Table 2.2		

Table 3.6 Recommended planning control (internal noise levels)

Category	Assessment Location	Day (L _{Aeq} , 1hr) (7am to 10pm)	Night (L _{Aeq} , 1hr) (10pm to 7am)
Planning control applied to cumulative landside and vessel noise	New residential developments near the port	40 dBA	35 dBA

3.2.1 Existing residences at Jacksons Landing

The Department of Planning, Industry and Environment (DPIE) undertook a review of the Review of Environmental Factors (REF) and Response to Submissions (RtS) report prepared for the MUF at Glebe Island. Operational noise from vessels was identified as a key concern within the REF and the RtS assessments. The RtS assessed the noise level of berthed vessels servicing the proposed MUF and the adjacent proposed Hanson concrete batching plant. In a letter from the Minister of Planning and Public Spaces to the Minister of Transport and Roads, the Minister stated that:

“the Port Authority should continue to develop its ship noise guideline and the overall management and monitoring of port related noise impacts. These issues will need to be appropriately managed by the Port Authority as they arise”

and

“Based on the expected future noise levels, it was concluded that further noise mitigation for existing residential buildings at Jacksons Landing was not required, as planning and approval for these buildings required the inclusion of noise mitigation to manage noise levels from the port at a time when noise levels were much higher than the current existing noise levels and the future expected noise levels”.

The former Department of Urban Affairs and Planning’s (DUAP) development application (DA) 76/97 (dated 23/4/1998) for development in Lend Lease (Pyrmont) site – Waterfront East (Regatta Wharf) refers to the Lendlease Master Plan 1997 (Jacksons Landing) noise criteria as follows:

“The Development shall address the noise impacts from traffic and operations of the port. Prior to lodgement of the Building Application a report shall be submitted to City West Planning indicating compliance with the noise attenuation measures required to satisfy the criteria indicated in the Lend Lease Master Plan 1997. This criteria being: (a) That the building will be acoustically treated, such that the mean logarithmic L_{Aeq} (1h) level will not exceed 35 dB(A) in sleeping areas at night time and 40 dB(A) in other internal areas (not including garages, kitchens, bathrooms and hallways) during day time (night time meaning between 10pm and 6am on the following day)”.

As such the Jacksons Landing residential buildings should have been designed to achieve the internal noise criteria based on historic higher noise levels where those levels have reduced. This enforces the precedence that future developments can be designed to meet the proposed design internal noise levels.

3.3 24-hour economy and late-night trading

A 24-hour economy makes up one of the 5 big moves for the PPPS. It is aimed at reactivating the area throughout the hours of the night considered outside the standard working day, including revitalising live music venues, and promoting licensed premises. This presents the challenge of appropriately managing noise emissions from these operators to ensure the acoustic amenity of noise-sensitive land uses is protected. Establishing a fair and equitable approach for maintaining acoustic amenity for sensitive land uses and promoting commercial activity for operators is paramount to achieving the outcomes of the 24-hour Economy Strategy.

There is an opportunity to update the overlapping noise requirements applicable for music, entertainment, and licensed venues to support the 24-hour Economy Strategy through a clarification of the noise assessment and regulatory process in the City of Sydney planning controls. Note should be made that the *24-hour Economy Strategy* (NSW Treasury 2020) is a separate document to the Pyrmont Peninsula Place Strategy and is summarised in Section 3.3.2.

Examples of core and supporting night-time economy business are presented in Table 3.7 below along with the (current) relevant legislation applicable to the regulation of noise.

Table 3.7 *Examples of core night-time economies*

Type of business	Examples of businesses	Relevant noise legislation and assessment requirements (Current)
Core night-time economy businesses - Entertainment, food, and drink businesses		
Entertainment	<ul style="list-style-type: none">– Performing arts, music, and culture– Live sports and recreation activities– Cinema– Night clubs– Casinos and gambling activities– Galleries and cultural institutions	<ul style="list-style-type: none">– Environmental Planning and Assessment Act 1979 - City of Sydney standard noise conditions – General and entertainment noise requirements (objective/numerical assessment)– Liquor Act 1997 - Office of Liquor and Gaming NSW standard noise conditions (objective/numerical assessment)– POEO Act 1997 including NGLG offensive noise checklist (subjective assessment)
Food activities	<ul style="list-style-type: none">– Cafes– Restaurants– Food trucks– Food markets– Food delivery services	
Drink activities	<ul style="list-style-type: none">– Pubs, taverns, clubs, and bars– Hotels– Liquor retailing– Wine tasting	
Supporting night-time businesses		
Health	<ul style="list-style-type: none">– Pharmacies– Medical centres– Gyms	<ul style="list-style-type: none">– Environmental Planning and Assessment Act 1979 - City of Sydney standard noise conditions<ul style="list-style-type: none">• Entertainment• Commercial plant/industrial development• Noise limiters• Additional noise conditions for licensed premises or entertainment venues• Common property music practice room – acoustic requirements– POEO Act 1997 including offensive noise checklist (subjective assessment)
Groceries	<ul style="list-style-type: none">– Supermarkets– Convenience stores– Fresh food stores	
Hospitality	<ul style="list-style-type: none">– Accommodation– Retail Business types– Clothing– Book shops– Homewares– Department stores	
Services	<ul style="list-style-type: none">– Dry cleaning– Beauticians and spas	

3.3.1 Liquor Amendment (24-hour Economy) Bill 2020, NSW

The *Liquor Amendment (24-hour Economy) Bill 2020* (NSW Legislation, 2020) provides the following relevant amendments to NSW legislation about the assessment and regulation of noise, provided below in Table 3.8. The full description of each amendment is provided in Appendix E.

Table 3.8 Relevant noise and noise regulation amendments

Amendment	Summation
Liquor Regulation 2018	<i>Sound</i> and <i>noise</i> are taken to have the same meaning
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008	Low impact performance of live music or arts is development specified, if not conducted in a residential zone
Local Government Act 1993 No 30	The council may establish a 'special entertainment precinct' in their LGA, which shifts the regulation of amplified music to the Council. The Council must establish a plan for the regulation of noise from amplified music.
Amendment of Environmental Planning and Assessment Act 1979 No 203	The council may modify live entertainment conditions to consent that they no longer apply. However, do not relate to situations involving noise
Amendment of Standard Instrument (Local Environmental Plans) Order 2006	Consent cannot be refused on the grounds of noise caused by the playing or performance of music if the consent authority is satisfied that noise may be managed and minimised to an acceptable level
Liquor Act 2007 and regulation	Live entertainment conditions cease. Noise abatement, however, can still be imposed under a complaint or disturbed neighbourhood order

3.3.2 24-hour Economy Strategy 2020

The *Sydney 24 Hour Economic Strategy* (NSW Treasury, 2020) is a document prepared by the NSW Treasury to provide a framework to establish a 24-hour economy across planned 24-hour hubs throughout Sydney and NSW. It seeks to achieve this goal across five strategic pillars, coordinated through the appointment of a 24-hour Economy Coordinator General. Table 3.9 presents these five strategic pillars with their relevant actions and their implications for the Pyrmont noise planning controls.

Table 3.9 Strategic pillars and noise implications

Strategic pillar	Action	Implication to Pyrmont noise planning controls
1 – Integrated planning & place-making	ACTION 1: Appoint a Coordinator General for Greater Sydney's 24-hour Economy. This role will be the central coordinator for the Strategy, working with NSW Government and with Councils, industry, and community groups to implement the Strategy. A secretariat will be made available to support the Coordinator General	Advice from Coordinator General, and subsequent actions from relevant organisations and governing bodies, should be checked for consistency across planning controls
	ACTION 7: Building on the success of the Department of Planning, Industry and Environment's Streets as Shared Spaces Program, a pilot program will be developed and tested in selected parts of Greater Sydney to convert sidewalks and roadside parking spaces into pedestrianised zones for outdoor dining, small art installations and 'parklets' or mini-parks to activate streetscapes for a vibrant night-time offering.	With the introduction of expanded trade areas encroaching onto sidewalks and roadside parking spaces, updating the active frontages map should be considered
	ACTION 8: The Government will investigate opportunities to make it easier for low-impact and small-scale activities, such as live music, visual arts displays, dancing, poetry and spoken word performances, to be carried out in existing retail and commercial spaces as exempt or complying development under the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 ('Codes SEPP').	Considering which low-impact (noise-generating) activities can be undertaken as an exempt or complying development and including maps of where these activities can be undertaken without Council approval.

Strategic pillar	Action	Implication to Pyrmont noise planning controls
2 – Diversification of night	ACTION 12: To enable their participation in the 24-hour Economy Acceleration Program, Councils should undertake activity mix studies into their existing, planned, or potential 24-hour economy hubs. These studies will support the identification of what the Councils already have on offer and consider a mix of retail, food, drink, entertainment, and general service offerings that fill gaps in the community need whilst also making the most of under-utilised venues and public spaces.	Consideration to updating the late-night trading areas to account for where these hubs are planned. 'Agent of change' principle should be implemented for new residential developments (see Table 3.10)
	ACTION 14: As part of Councils' 24-hour economy activity mix studies (ACTION 12, page 38), the Government will assist in the definition of 'low impact businesses' that could be encouraged to grow and extend their hours of operation. These may include small-scale arts and culture businesses or events or traditional retail activity that can anchor for increasing foot traffic.	<i>Late trading for businesses</i> (City of Sydney Council, 2020) provides a guide for businesses that want to extend their trading hours.
	ACTION 16: Councils will be provided with policy support, including policy guidance and toolkits, to support the lifting of unnecessary restrictions on live music in their Development Applications and to adopt pro-live music regulations in their relevant planning documents. In particular, consideration should be given to family-friendly events in venues and public spaces. This would include identifying ways to standardise live performance conditions and premises licensing to encourage a seven-day live music scene in 24-hour hubs (subject to Councils demonstrating community support).	Consideration should be given for Council to standardise live music regulations and apply the 'agent of change' principle for a more equitable approach for regulating noise/sound from venues. Consideration should also be given to shifting from 'noise' to 'sound' when referring to music venues in the Sydney DCP.
	ACTION 20: The Government will work with Councils to develop 'Global DAs' — one-time development applications to enable pop-up food, beverage and small-scale cultural activations to take place in several different public spaces within a Local Government Area. Global DAs could be piloted under the 24-hour Economy Acceleration Program.	Consider the provision of maps where Global DAs may occur and communicate with residences with benefits of these activities. No significant noise impacts are anticipated for one-time DAs.
3 – Industry and cultural development	<i>No relevant actions</i>	-
4 – Mobility and improved connectivity	ACTION 30: The Government will identify existing 24-hour economy public transport corridors (e.g., bus and train lines connecting 24-hour economy hubs and consumer 'catchment areas') and highlight gaps and pain points, including frequency of services, cost, location of stations or lighting infrastructure.	The 24-hour Economy may increase traffic flows on public roads during the night period and subsequently increase road traffic noise levels during the night. 24-hour economy hubs should be designed to utilise roads with existing high traffic volumes and avoid local roads.
5 – Changing the narrative	<i>No relevant actions</i>	-

3.3.3 Entertainment Noise – Proposed changes for City of Sydney Council

The City of Sydney has prepared a discussion paper around proposed actions around the City of Sydney's planning and regulations for a night-time economy, *An Open and Creative City: Planning for culture and the night-time economy* (City of Sydney, 2017). This discussion paper provides potential actions across the following main aspects for commercial and entertainment operators:

- A relaxation of operational approval requirements for small scale premises and venues already operating in areas identified as having an established retail character
- A shift in noise assessment criteria that considers both residential amenity and the prevailing noise environment in established entertainment hubs
- The provision of a noise compliance guideline to reduce confusion and inconsistencies between the noise requirements of development consent conditions, liquor and licensing, and offensive noise complaints

Table 3.10 below summarises the identified actions relevant to noise control for the Peninsula and their implications on the City of Sydney planning controls.

Entertainment noise within the Pyrmont Peninsula will ultimately be addressed under a new noise regulation strategy currently being prepared by City of Sydney. Site specific noise controls may be needed to achieve a balance between achievable noise conditions for commercial operators whilst ensuring an appropriate level of residential amenity. This has been achieved in other Sydney precincts such as Barangaroo South and Darling Square.

Table 3.10 City of Sydney's *An Open and Creative City* – Actions and implications

Chapter	Action	The implication to CoS noise planning controls
04 – A diverse evening economy	ACTION 1: Allow shops and local businesses in areas with an established retail character to extend their opening hours without a new development consent from 7 am to 10 pm, seven days per week	Shops and retail business in proximity to residential areas may be subject to an acoustic report, where one is required
	ACTION 2: Provide grants for businesses to program retail experiences in the evening	
05 – More small-scale cultural uses	ACTION 3: Allow minimal impact small-scale cultural uses without development consent. Occurring in areas with less residential development, such as in Central Sydney or industrial and business only zones. These are shown in Figure 3.5 (Figure 4 in discussion paper)	Include maps of where these activities could occur within the CoS planning controls. This applies to much of the area within Sydney LEP 2012. These activities should be communicated with residents to help set realistic expectations of acoustic amenity.
	ACTION 4: Establish new planning controls specifically for cultural uses that may have some impacts and need development consent to provide better guidance and greater certainty	
	ACTION 5: Identify opportunities to reduce or remove notification periods for development applications for small-scale cultural uses	
06 – Entertainment noise	ACTION 6: Fair management of noise impacts by applying the 'agent of change' principle; planning approach requires new development (the 'agent of change') to consider existing land uses. It asks for further development to manage noise impacts through the design and construction of the building or the operations in the building. This could be applied to new live music venues and new noise-sensitive uses such as residential accommodation and hospitals affected by noise from an existing live music venue.	New residential developments within 100 metres of an entertainment venue would be required to assess the noise from the venue, and design the development and implement noise control measures to manage noise intrusion A new live music venue or an existing venue intensifying its use would be required to protect existing noise-sensitive development from the noise it will make.

Chapter	Action	The implication to CoS noise planning controls
	ACTION 7: Planning controls for new venues and for new noise-sensitive development	<p>Proposal to implement a set of updated noise assessment controls and measurement procedures, aimed at achieving the objectives of the 'agent of change' principle.</p> <p>Planning controls for Sydney should reflect these changes. These controls are provided in Appendix D</p>
	ACTION 8: New noise compliance guidelines to provide greater certainty and consistency	<p>A noise compliance guideline will be prepared to provide objective criteria that an officer can use when responding to a noise complaint. This will include consideration towards noise limits around a venue's consent conditions or 'venue design criteria' (see Appendix D) and away from the subjective and inconsistent offensive noise test.</p> <p>Consent conditions in Pyrmont Peninsula may be relied upon in this guideline when an officer responds to a noise complaint from a venue.</p>

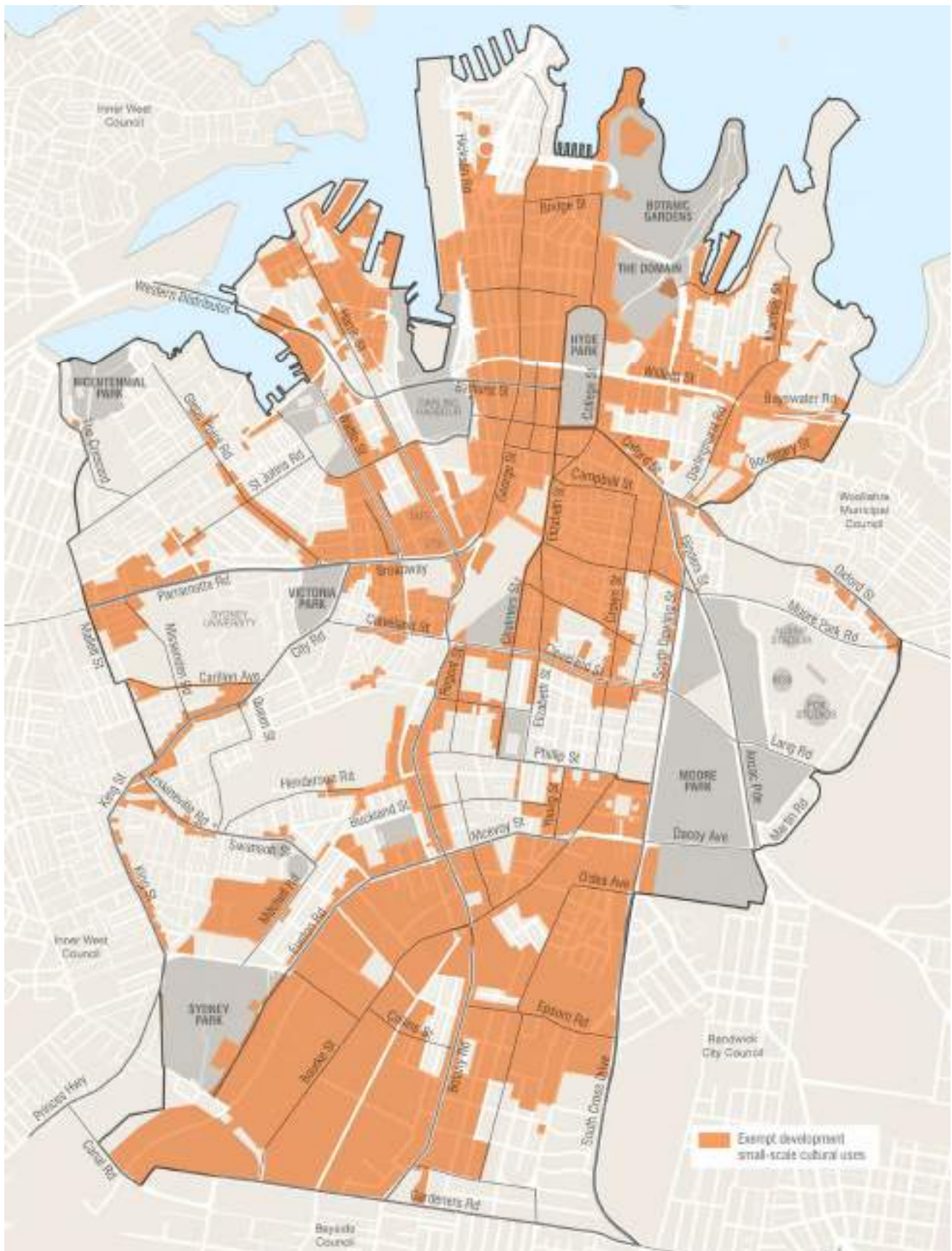


Figure 3.5 Areas where small-scale cultural uses could happen without council approval
 source: Figure 4 from *An Open and Creative City* (City of Sydney 2017)

3.3.4 Mixed-use developments

The Strategy will result in the intensification of mixed-use developments within the Pyrmont Peninsula. Mixed-use developments are often characterised by commercial operators situated near, below, or adjacent to residential accommodation within the same lot or structure. This can lead to impacts on acoustic privacy for noise-sensitive tenancies as physical separation is often not possible due to their configuration.

Various operators may exist in these developments, ranging from entertainment venues and licensed premises, fitness studios/gyms, laundromats, retail outlets, and community centres. Each use presents various sources of noise and vibration, which can be experienced by nearby sensitive land uses and can potentially lead to complaints. Common noise issues within mixed-use developments include:

- Transport infrastructure noise (road/heavy rail/light rail)
- Pedestrians and active frontages
- Patrons from ground floor retail/licensed venues/food premises
- Music from ground floor retail/licensed venues/food premises
- Music from ground floor fitness studio/gym
- Vibration from dropped weights or speakers from ground floor fitness studios/gyms
- Music from ground floor commercial tenancies

New mixed-use developments within Pyrmont should refer to the Sydney planning controls to ensure acoustic privacy can be maintained for the occupants within the building. Section 4 provides various strategies for noise mitigation to appropriately noise impacts from mixed-use developments and potential opportunities to update the relevant planning controls.

3.3.5 Late night trading areas and key sites



3.3.5.1 Late night trading areas

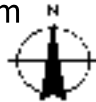

The City of Sydney Late Night Trading Premises DCP 2007 applies to areas within the Pyrmont Peninsula. These areas are excluded from the Sydney DCP 2012, and the boundaries of these areas may change from time to time. The current late-night trading areas are shown in Figure 3.6 below and should be updated to support the actions outlined within the Strategy.

Potential land conflicts may arise due to the proximity of entertainment/music/licensed venues and existing, or new sensitive land uses. Proposed changes to the assessment and regulation of entertainment noise are discussed in Section 3.3.3. Section 4.2 provides further discussion of how these potential land-use conflicts can be mitigated and noise impacts avoided.



Legend

 Late night trading areas
  PPPS Boundary

<p>Paper Size ISO A4</p> <p>0 100 200 300 400 500 m</p> <p>Map Projection: Transverse Mercator Horizontal Datum: GDA2020 Grid: GDA2020 MGA Zone 55</p>  	<p>DPIE</p> <p>Pyrmont Peninsula Place Strategy - Noise assessment</p> <p>Late Night Trading Areas (current)</p>	<p>Project No. 12550958 Revision No. - Date. 03/06/2021</p> <p>FIGURE 3.6</p>
--	---	--

Document Path: \\ghdnet\GHD\AU\Sydney\Projects\2112550958\Tech\Pyrmont\Noise\01_GIS\QGIS\Figure2_1.qgz
 Print Date: 03/06/2021
 ©2021. While GHD has taken care to ensure the accuracy of this product, GHD and DATA CUSTODIAN(S), make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. GHD and DATA CUSTODIAN(S) cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unsuitable in any way and for any reason.
 Data Source: Google Earth Imagery 2021.
 Created By: mvelasco

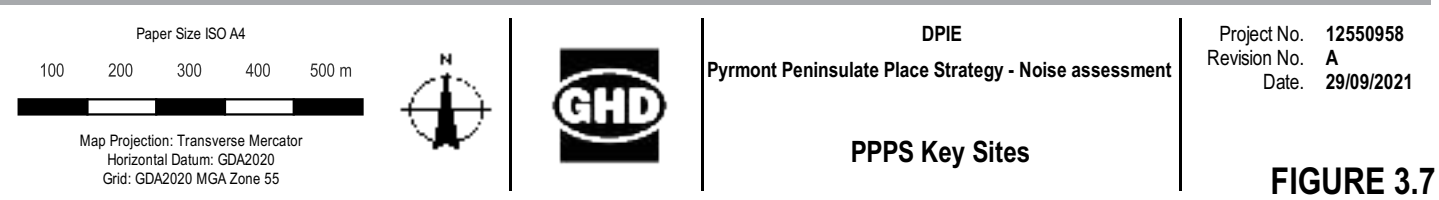
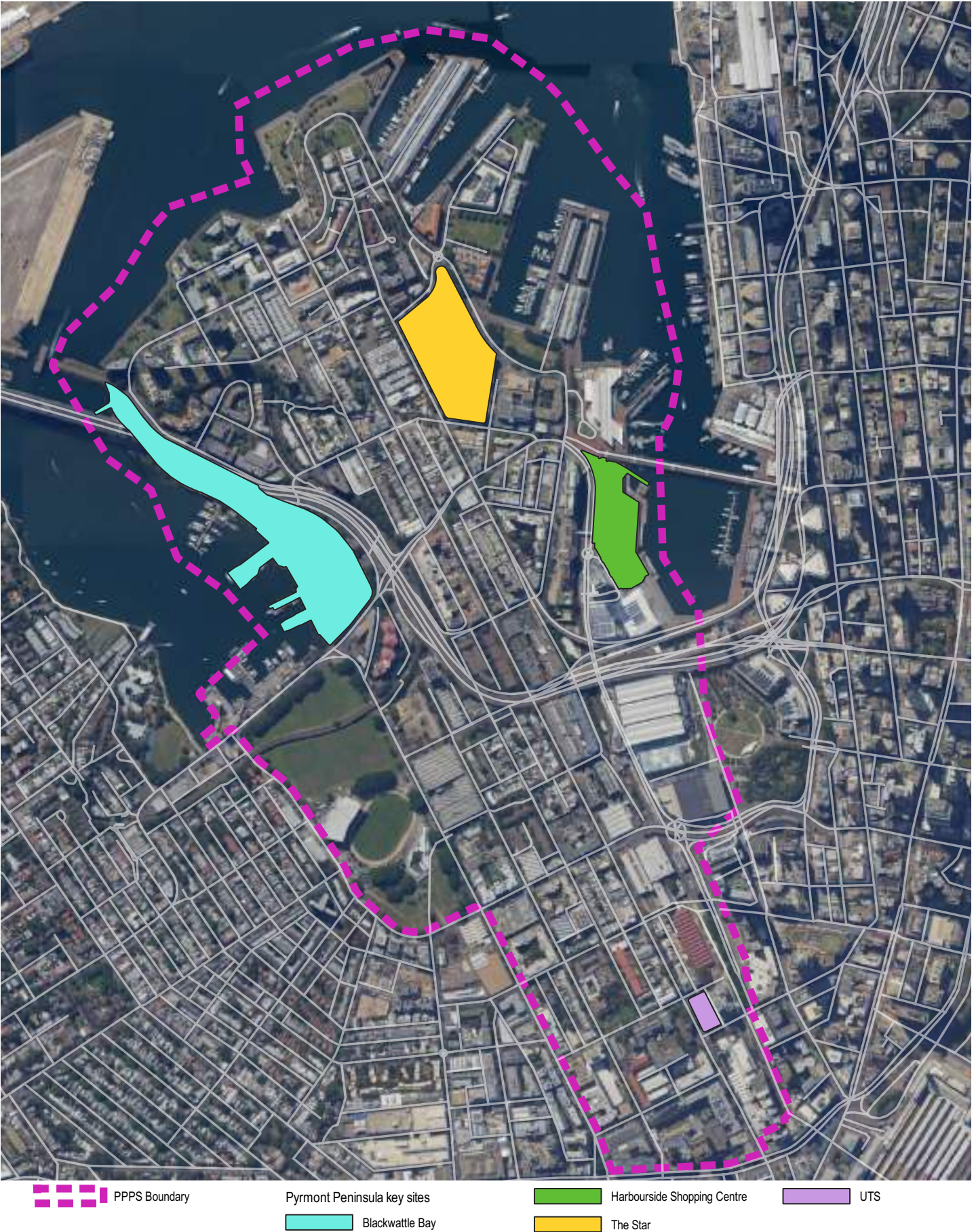
3.3.5.2 Key sites

The PPPS has identified four key sites with the capacity to deliver increased economic growth and activity for the Peninsula. As a result of this increased activity, there is potential for noise impacts from these key sites onto noise sensitive land uses. Each is at various stages of approval and noise assessment.

These developments are either State Significant Developments (SSD) or State Significant Precincts (SSP), and the noise impact of these developments have been or will be considered as part of the approval process:

- Sydney Fish Market
- Blackwattle Bay SSP
- Harbourside Shopping Centre SSD
- Star City Casino Upgrade SSD
- UTS redevelopment area

Similar to the late-night trading areas, potential land conflicts may arise due to the proximity of entertainment/music/licensed venues and existing, or new sensitive land uses. Proposed changes to the assessment and regulation of entertainment noise are discussed in Section 3.3.3. Section 4.2 provides further discussion of how these potential land-use conflicts can be mitigated and noise impacts avoided.



Document Path: \\ghdnet\ghd\AU\Sydney\GIS\Admin\Temp\12550958_DPIE\PyrmontNoise\01_GIS\GIS\Figure3_7.qgz
Print Date: 29/09/2021

Data Source: Google Earth Imagery 2021.
Created By: thompson2

©2021. While GHD has taken care to ensure the accuracy of this product, GHD and DATA CUSTODIAN(S), make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. GHD and DATA CUSTODIAN(S) cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unsuitable in any way and for any reason.

3.4 Pyrmont Metro Station

The proposed Pyrmont Metro Station is an integral component of the Strategy and is to be situated between Pyrmont Bridge Road and Union Street in Pyrmont, close to The Star. The final design and configuration of the Pyrmont Metro station has not been determined and will be required to go through the appropriate approval pathway. A high-level assessment of the potential noise and vibration impacts associated with the station and the relevant guidelines of how these impacts are assessed and regulated are provided in Table 3.11.

Table 3.11 Noise and vibration impacts from Pyrmont Metro Station

Noise and vibration impact for Pyrmont	Relevant noise and vibration regulations
Noise emission to sensitive land uses, including: <ul style="list-style-type: none"> – mechanical plant servicing the Metro station – commercial activity associated with the Metro station 	Noise emission is regulated through the following documentation: <ul style="list-style-type: none"> – City of Sydney DCP and LEP – NSW EPA <i>Noise Policy for Industry</i> – POEO Act 1997 – Protection of the Environment Operations (Noise Control) Regulation 2017
Noise and vibration intrusion to sensitive land uses within Metro station, including: <ul style="list-style-type: none"> – structure-borne noise through base building construction – airborne noise through external facades. This will likely include noise both attributed to and outside the Metro station – vibration transmission through base building construction. This may include vibration sources both attributed to and outside the Metro station 	Noise and vibration intrusion is regulated through the following documentation: <ul style="list-style-type: none"> – City of Sydney planning controls – Building Code of Australia (BCA) – SEPP (Infrastructure) 2007 – <i>Development Near Rail Corridors & Busy Roads – Interim Guideline 2008</i>
Construction noise and vibration to sensitive land uses, considering: <ul style="list-style-type: none"> – Construction timeframes – Equipment – Construction methodology – Construction footprint – Location of nearest sensitive land uses 	Construction noise and the vibration is regulated through the following documentation: <ul style="list-style-type: none"> – City of Sydney Construction Hours/ Noise within the CBD – Code of Practice – Interim Construction Noise Guideline (DECCW 2009) – Draft Construction Noise Guideline (EPA 2020) – Construction Noise and Vibration Strategy (TfNSW 2016) – Assessing Vibration: A technical guideline (DEC 2006)

4. Potential mitigation options

A summary of potential mitigation options to reduce future impacts to the acoustic amenity of sensitive land uses

4.1 Strategic land use planning

Land use planning offers the greatest potential for minimising conflict between noise generating areas (transport infrastructure, industrial areas/active harbour and 24-hour hubs) and sensitive land uses, followed closely by developing appropriately designed and noise insulated buildings. In-principle strategies are provided below to avoid potential land-use conflicts in the planning phases:

- Identifying and locating noise-generating land uses in a manner that that reduces the potential for land-use conflicts with adjoining sensitive land uses. If these conflicts are unavoidable by spatial separation, apply suitable noise controls in the planning instruments to ensure acoustic amenity can be maintained
- Implement communication methods to inform members of the public encroaching on existing and planned noise generating areas. This can help set realistic expectations of noise amenity within noise-generating areas
- Consider existing noise-generating areas when changing adjacent land use zones to a more sensitive use to ensure that the planning decision does not unduly impact on the existing land uses in the area
- Use controls in land-use planning instruments to promote compatibility between existing/planned noise-generating activities (e.g., industrial, ports, entertainment venues) and new residential developments. Include planning control requirements for new residential developments near existing industrial/port/entertainment precincts to ensure new developments are designed to meet design internal noise levels. Planning authorities use development planning/approval processes to avoid impacts on the community from noise by ensuring that noise generating developments have reasonable environmental performance requirements that are practically/socially/economically viable. Planning authorities can also use the development planning and approval process to ensure new residential developments near existing/planned noise-generating land uses are designed to meet design internal noise levels.

Table 4.1 below summarises the identified significant noise sources (existing and future) within the Pyrmont Peninsula and the existing adjacent sensitive land uses where there is potential for land use conflicts.

Table 4.1 Noise sources and nearby sensitive land uses (potential land use conflicts)

Noise source type	Noise sources within Pyrmont Peninsula	Existing sensitive land use areas
Transport infrastructure	<ul style="list-style-type: none"> – Applicable busy roads include (more than 20,000 vpd): <ul style="list-style-type: none"> • Anzac Bridge • Western Distributor • Bridge Road • Pyrmont Bridge Road • Harris Street • Wattle Street • Allen Street • Fig Street – Light rail infrastructure 	<ul style="list-style-type: none"> – Residential dwelling and apartments (including within mixed use development) – Schools and educational institutes <ul style="list-style-type: none"> • Fort St Public School (Wattle Street) • Ultimo Public School (Wattle Street) • TAFE NSW (Harris Street) • UTS (Wattle St, Harris Street, Broadway) • JMC Academy (Harris Street) – Places of worship <ul style="list-style-type: none"> • Harbour City Harvest Church (Western Distributor) • Gereja Indonesia - Bethany Sydney (Harris Street)
Active harbour industrial noise	Landside and vessel noise associated with Glebe Island and White Bay, with particular consideration to the Multi-User Facility and the Hanson Concrete Batching Plant	<ul style="list-style-type: none"> – Residential buildings within Pirrama Place, including the Jackson's Landing residential development (existing high noise levels due to Anzac Bridge/Western Distributor and the active harbour)

Noise source type	Noise sources within Pyrmont Peninsula	Existing sensitive land use areas
Intensification of commercial/retail/entertainment noise at the PPPS key sites and Pyrmont Metro Station (UTS redevelopment is not anticipated to be a significant noise generating development)	The new Sydney Fish Market and Blackwattle Bay	<ul style="list-style-type: none"> Residential buildings on Pyrmont Bridge Road and Wattle Crescent (existing high noise levels from road traffic). Residential dwellings along the eastern side of the Western Distributor and Anzac Bridge (existing high noise levels from road traffic)
	Star City Casino Upgrade	<ul style="list-style-type: none"> Residential land uses with the following planning zones: <ul style="list-style-type: none"> North – B3, B4 and R1 planning zones West – B3, B2 and R1 planning zones South – B4 planning zone East – B3 and B4 planning zones St Bede's Catholic Church
	Harbourside Shopping Centre	<ul style="list-style-type: none"> Residential land uses with the following planning zones: <ul style="list-style-type: none"> B4 Planning zones to the west and northwest R1 and B2 planning zones to west (either side of Harris Street) Ibis Sydney Darling Harbour Novotel Sydney Darling Harbour Sofitel Sydney Darling Harbour <p>These areas generally have existing high noise levels due to urban hum and active frontages.</p>
	Pyrmont Metro Station	<ul style="list-style-type: none"> Residential land uses with the following planning zones: <ul style="list-style-type: none"> North – B3 planning zone West – B4 planning zone South – B4 planning zone East – B4 planning zone Ibis Sydney Darling Harbour <p>These areas generally have existing high noise levels due to urban hum and active frontages.</p>

Where possible, spatial separation between existing and planned noise generators and sensitive land uses should be maximised. However, where potential land-use conflicts are unavoidable by spatial separation alone, suitable noise controls in the planning instruments should be applied to ensure acoustic amenity can be maintained, including:

- The development planning/approval processes to avoid impacts on the community from noise by ensuring that noise generating developments have reasonable environmental performance requirements that are practically/socially/economically viable
- Planning authorities can also use the development planning and approval process to ensure new residential developments near existing/planned noise-generating land uses are designed to meet design internal noise levels.

This is especially important for entertainment noise venues near residential land uses or mixed-use developments where spatial separation cannot be achieved. The entertainment noise conditions for the Barangaroo and Darling Square Noise Masterplans are examples of how potential land use conflicts can be managed successfully in the planning/approval process.

4.2 Noise control strategies

Where strategic land-use planning cannot avoid land uses conflicts between noise generating sources and sensitive land uses, measures for reducing noise impacts follow three main control strategies:

- reducing noise at the source
- reducing noise in transmission to the receiver
- reducing noise at the receiver

Examples of noise control strategies, feasibility/effectiveness of the controls, and potential actions to be considered are provided for land use controls, controlling the noise at the source, controlling noise in the transmission, and controlling noise at the receiver.

Noise control strategies are provided below to mitigate noise from transport infrastructure (Table 4.2), active frontages (Table 4.3), industrial/port noise (Table 4.4), mixed-use developments (Table 4.5) and commercial premises, including entertainment/music venues (Table 4.6).

Controlling noise at the receiver from the noise sources identified above following similar building design principles. A summary of potential mitigation options is presented in Table 4.7.

Table 4.2 *Transport infrastructure - mitigation options*

Noise control examples	Feasibility / Effectiveness	Potential actions
Relevant guidelines/noise control framework		
<ul style="list-style-type: none"> – NSW Rail Infrastructure Noise Guideline (EPA 2013) – NSW Road Noise Policy (DECCW 2011) – Development near Rail Corridors and Busy Roads Interim Guideline (DoP 2008) – State Environmental Planning Policy (Infrastructure) 2007 – City of Sydney DCP planning controls 		
Land use controls		
<ul style="list-style-type: none"> – Increasing separation distances between transport infrastructure noise sources and sensitive land uses. – Setback distances from busy roads/rail corridors can also be recommended – Sensitive land uses encroaching on existing/planned noise-generating land uses may require an acoustic report to demonstrate how internal noise levels can be met through building design 	<ul style="list-style-type: none"> – Very effective where feasible. – For reference, noise levels reduce by 3 dBA for every doubling of distance from a line source (i.e., road and rail infrastructure) 	<ul style="list-style-type: none"> – Provide a map of the roads with traffic volumes above 20,000 vpd and 40,000 vpd along with rail corridors where the Infrastructure SEPP would apply. Roads that carry between 10,000 and 20,000 vpd should also be included within this map to show where road noise impact assessments are required for new developments to comply with the DCP requirements. – A new planning control for new residential developments adjacent to infrastructure (road, rail, port noise) achieve $L_{Aeq(1hr)}$ 40 dBA during the day and $L_{Aeq(1hr)}$ 35 dBA during the night (consistent with Port Noise Policy) as a cumulative assessment. – Consideration of designating areas where new residential development may need an acoustic report to ensure the building is designed to achieve internal noise levels
Controlling the noise at the source		
<ul style="list-style-type: none"> – Generally, vehicles on the road are being designed to be quieter. – Quieter vehicles on roads (electric vehicles/buses/trucks), low-noise pavement surfaces for roads, design of rail tracks to reduce noise etc. 	<ul style="list-style-type: none"> – Generally not feasible to be implemented at a local government level. – Effective, where feasible. – Noise mitigation at the road/rail infrastructure source is designed as part of the planning/design process. 	<ul style="list-style-type: none"> – Encourage the use of low noise public transport vehicles, electric vehicles, and active transport
Controlling the noise in transmission		
<ul style="list-style-type: none"> – Noise barriers – Noise mounds – Using topography as acoustic shielding 	<ul style="list-style-type: none"> – The feasibility of these noise controls are very site-specific and may be subject to other physical/practical constraints. 	<ul style="list-style-type: none"> – None

Noise control examples	Feasibility / Effectiveness	Potential actions
<ul style="list-style-type: none"> Using less noise-sensitive buildings as acoustic shielding 	<ul style="list-style-type: none"> Generally not effective for multi-storey residential developments Most effective if they are near the source or the receiver, and effectiveness is dependent on the height above ground 	

Table 4.3 Active frontages - mitigation options

Noise control examples	Feasibility / Effectiveness	Potential actions
Relevant guidelines/noise control framework		
<ul style="list-style-type: none"> City of Sydney DCP planning controls 		
Land use controls		
<ul style="list-style-type: none"> Increasing separation distances between active frontages and sensitive land uses Discourage active frontages in residential areas with low background noise levels (e.g., local roads) 	<ul style="list-style-type: none"> Effective in business/commercial zones. Not feasible/effective with mixed-use developments where a mix of commercial and residential land uses are encouraged 	<ul style="list-style-type: none"> Update the City of Sydney active frontages map to reflect changes identified in the PPPS. A new planning control for new residential developments adjacent to active frontages to achieve $L_{Aeq}(1hr)$ 40 dBA during the day and $L_{Aeq}(1hr)$ 35 dBA during the night (consistent with the design internal noise levels for infrastructure noise).
Controlling the noise at the source		
<ul style="list-style-type: none"> Generally not possible 	<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Not applicable
Controlling the noise in transmission		
<ul style="list-style-type: none"> Use of ground-level podiums to increase acoustic shielding Use of solid awnings with no gaps above active frontages to increase acoustic shielding to residential tenancies above 	<ul style="list-style-type: none"> The feasibility of these noise controls may be site-specific and may be subject to other physical/practical constraints. 	<ul style="list-style-type: none"> Provide reference to the NSW Apartment design guide in the DCP, where relevant

Table 4.4 Industrial noise / Port noise - mitigation options

Noise control examples	Feasibility / Effectiveness	Potential actions
Relevant guidelines/noise control framework		
<ul style="list-style-type: none"> POEO Act 1997 Noise Policy for Industry (EPA 2017) Port Noise Policy (Port Authority 2020) City of Sydney DCP planning controls 		

Noise control examples	Feasibility / Effectiveness	Potential actions
Relevant guidelines/noise control framework		
Land use controls		
<ul style="list-style-type: none"> Increasing separation distances between industrial/port noise sources and sensitive land uses Consideration of the proximity of sensitive land uses to noise sources in master planning/concept phase 	<ul style="list-style-type: none"> Effective, where feasible. For reference, noise levels reduce by 6 dBA for every doubling of distance from a point source (e.g., stationary plant-like pump, motor, exhaust stack etc.) 	<ul style="list-style-type: none"> Reference the Noise Policy for Industry (EPA 2017) and Port Noise Policy (Port Authority 2020) in the City of Sydney DCP planning controls as a framework to assess industrial noise/port noise. A new planning control for new residential developments adjacent to infrastructure (road, rail, port noise) achieve $L_{Aeq(1hr)}$ 40 dBA during the day and $L_{Aeq(1hr)}$ 35 dBA during the night (consistent with Port Noise Policy) as a cumulative assessment.
Controlling the noise at the source		
<ul style="list-style-type: none"> Implementing Best Management Practices (BMP) and Best Available Technology Economically Achievable (BATEA) to reduce noise levels at the source 	<ul style="list-style-type: none"> Very effective where feasible. E.g., mufflers/silencers/attenuators can provide up to 25 dBA of noise reduction for plant, and acoustic enclosures can provide up to 50 dBA reduction when noisy housing equipment. 	<ul style="list-style-type: none"> Encourage the use of BMP and BATEA to minimise existing and future noise levels from industrial/port sites
Controlling the noise in transmission		
<ul style="list-style-type: none"> Noise barriers Noise mounds Using topography as acoustic shielding Using less noise-sensitive buildings as acoustic shielding 	<ul style="list-style-type: none"> The feasibility of these noise controls are very site-specific and may be subject to other physical/practical constraints. Generally not effective for multi-storey residential developments Most effective if they are near the source or the receiver, and effectiveness is dependent on the height above ground 	<ul style="list-style-type: none"> None

Table 4.5 *Mixed-use developments - mitigation options*

Noise control examples	Feasibility / Effectiveness	Potential actions
Relevant guidelines/noise control framework		
<ul style="list-style-type: none"> POEO Act 1997 City of Sydney DCP planning controls 		
Land use controls		

Noise control examples	Feasibility / Effectiveness	Potential actions
<ul style="list-style-type: none"> Increasing separation distances between noise generating commercial premises and sensitive land uses Separation within the building should be encouraged, where possible. Less-sensitive and low-noise generating commercial tenancies can provide a buffer between noise-generating commercial tenancies (licensed venues, gyms etc.) and residential units, where possible 	<ul style="list-style-type: none"> Land use separation distances are generally not feasible/effective with mixed-use developments where a mix of commercial and residential land uses are encouraged Separation within the building is very effective where feasible. Assuming there are no structure-borne noise paths, a separating tenancy will generally provide 60 dB or more of sound reduction. 	<ul style="list-style-type: none"> Reference the Noise Policy for Industry (EPA 2017) and Port Noise Policy (Port Authority 2020) in the City of Sydney DCP planning controls as a framework to assess industrial noise/port noise. A new planning control for new residential developments adjacent to infrastructure (road, rail, port noise) achieve $L_{Aeq(1hr)}$ 40 dBA during the day and $L_{Aeq(1hr)}$ 35 dBA during the night (consistent with Port Noise Policy) as a cumulative assessment.
Controlling the noise at the source		
<ul style="list-style-type: none"> Speakers installed within commercial premises to be sufficiently isolated from the structure of the building Minimum sound transmission performance requirements for internal partitions separating commercial and residential tenancies. High-noise generating venues (entertainment venues/gyms) may be required to install internal noise limiters to self-monitor and limit noise levels Rotating mechanical plant should be sufficiently isolated from the structure of the building. Commercial uses that may cause vibration impacts on the floor require appropriate flooring/underlay systems to reduce impacts on the floor. Introduction of absorptive materials within the internal areas of high noise generating rooms to reduce the build-up of reverberation. 	<ul style="list-style-type: none"> All listed noise control measures are feasible and effective when implemented correctly. 	<ul style="list-style-type: none"> Encourage the implementation of additional noise control measures for mixed-use developments

Noise control examples	Feasibility / Effectiveness	Potential actions
Controlling the noise in transmission		
<ul style="list-style-type: none"> – Use of ground-level podiums to increase acoustic shielding – Use of solid awnings with no gaps above outdoor dining areas/commercial tenancy entrances to increase acoustic shielding to residential tenancies above 	<ul style="list-style-type: none"> – The feasibility of these noise controls may be site-specific and may be subject to other physical/practical constraints. 	<ul style="list-style-type: none"> – Provide reference to the NSW Apartment design guide in the DCP, where relevant

Table 4.6 Commercial premises/entertainment and music venues - mitigation options

Noise control examples	Feasibility / Effectiveness	Potential actions
Relevant guidelines/noise control framework		
<ul style="list-style-type: none"> – POEO Act 1997 – Liquor Act 1997 – Noise Policy for Industry (EPA 2017) – City of Sydney DCP planning controls 		
Land use controls		
<ul style="list-style-type: none"> – Increasing separation distances between noise generating commercial premises/licensed venues/entertainment venues and sensitive land uses. – Encourage noise-generating commercial premises in areas with the current high noise level to reduce noise impacts or in areas zoned for business/ commercial/ industrial land uses. 	<ul style="list-style-type: none"> – Not always feasible to avoid land-use conflicts. – Effective where feasible. 	<ul style="list-style-type: none"> – Commercial premises (mechanical plant and general operation) should be designed to comply with City of Sydney's standard noise conditions (See Appendix D) – Entertainment noise to be assessed against a separate noise criteria for venues and new residential developments adjacent to venues (as part of City of Sydney's new noise regulation strategy). This approach is presented in Appendix D.
Controlling the noise at the source		
<ul style="list-style-type: none"> – Entertainment venues should consider using an air-lock room at the venue entrance so that a secondary door separates the main venue area and the external environment should allow a patron to enter or leave the venue during the late-night period. – Plant rooms / external mechanical plant should be adequately designed/selected to comply with the relevant environmental noise regulations. 	<ul style="list-style-type: none"> – Air-lock rooms are not always feasible to construct 	<ul style="list-style-type: none"> – Encourage the implementation of the noise control measures for commercial premises – Development of site-specific noise controls, providing achievable noise limits whilst ensuring residential amenity in accordance with the new noise regulation strategy being prepared by City of Sydney. This may include the requirement for noise limiters within the venue (where appropriate) and compliance noise measurements to be undertaken near the entry door of the venue.

Noise control examples	Feasibility / Effectiveness	Potential actions
Relevant guidelines/noise control framework		
Controlling the noise in transmission		
<ul style="list-style-type: none"> – Noise barriers – Using less noise-sensitive buildings as acoustic shielding 	<ul style="list-style-type: none"> – Using the less noise-sensitive building as acoustic shielding is adequate where it is feasible/applicable. – Noise barriers can be practical to reduce noise levels from outdoor dining areas to the external environment. Noise reduction from a noise barrier is generally between 5 and 10 dB. 	<ul style="list-style-type: none"> – None. Requirement for control of noise in transmission will be dependent on site-specific noise /physical conditions

Table 4.7 Noise control at the receiver

Noise source	Noise control examples	Feasibility / Effectiveness	Potential actions
Transport infrastructure (Road and rail)	<ul style="list-style-type: none"> – Building location, design orientation and room layout – Locating habitable areas as far away from road/rail noise sources, where possible 	<ul style="list-style-type: none"> – The feasibility of these noise controls may be site-specific and may be subject to other physical/practical constraints. – All noise controls are effective, if implemented correctly 	<ul style="list-style-type: none"> – Building design principles to mitigate noise at the receiver detailed within the Development near Rail Corridors and Busy Roads and NSW Apartment Design Guide should be considered when preparing planning controls related to noise intrusion, where appropriate
Active frontages	<ul style="list-style-type: none"> – Less sensitive rooms (laundries, bathrooms, corridors etc.) should be placed on the noisy side of the building 		<ul style="list-style-type: none"> – Building design principles to mitigate noise at the receiver detailed within the Development near Rail Corridors and Busy Roads and NSW Apartment Design Guide should be considered when preparing planning controls related to noise intrusion, where appropriate – The Development near Rail Corridors and Busy Roads does not directly apply for noise from industrial/active frontage/commercial/entertainment land uses. However, the building design principles used to mitigate the noise at the receiver can still be implemented to reduce noise levels from the external environment to the internal habitable areas. Note should be made that the internal noise levels from these guidelines are based on 15/9 hour noise levels as opposed to the repeatable maximum 1 hour noise levels (day and night) to be specified in the DCP – Where appropriate, development of site specific noise controls in accordance with the new noise regulation strategy, providing achievable noise limits whilst ensuring residential amenity (e.g. Barangaroo and Darling Square Masterplans)
Industrial noise (including Port Noise)	<ul style="list-style-type: none"> – Using non-sensitive or less noise-sensitive buildings as noise shields 		
Commercial premises within mixed-use developments	<ul style="list-style-type: none"> – Using ground-level podiums to increase acoustic shielding – Using balconies with solid balustrades to reduce noise entering the interior of the building – Where space allows, use noise barriers to reduce traffic noise – Building treatments (walls, windows, doors, roofs) – Design to minimise adverse vibration and ground-borne noise impacts 		
Commercial premises, including licensed venues and entertainment venues (except mixed-use developments)			

Table 4.8 [Insert Table Caption]

5. Conclusion

A summary of the report findings and sets out the principal conclusions for the assessment.

5.1 Overview

A review of the Pyrmont Peninsula Place Strategy was undertaken to identify potential land-use conflicts and noise impacts to existing and future sensitive land uses within the Pyrmont Peninsula.

The following key noise issues were identified, along with a discussion of potential mitigation options that can be implemented or potential opportunities:

- Sensitive land uses near rail corridors, busy roads, and active frontages (e.g., Western distributor, Anzac Bridge, Harris Street, Glebe Point Road, and the light rail)
- Landside and vessel noise associated with the active harbour (Glebe Island and the White Bay Cruise Terminal) and the impact of intensified activities on the residents of the Pyrmont Peninsula, especially at Jacksons Landing
- The balance between supporting the 24 Hour Economy Strategy, the intensification of mixed-use development and maintaining acoustic privacy/amenity for the residents within the Pyrmont Peninsula
- Potential land-use conflicts and acoustic privacy issues associated with the new Pyrmont Metro Station

A review of the legislative and policy context within the Pyrmont Peninsula was conducted to understand the existing planning controls for the assessment and regulation of noise. Potential opportunities to update existing planning controls were identified to reflect the outcomes of the Strategy along with options to avoid noise impacts to existing and future sensitive receivers.

5.2 Key outcomes

An equitable approach to addressing potential acoustic amenity impacts as a result of the Strategy, the following controls should be considered:

- Strategic land-use planning
- Controlling the noise at the source
- Controlling the noise in transmission
- Controlling the noise at the receiver

To achieve this, potential opportunities to update the existing City of Sydney planning controls have been identified, including:

- Provide a map of the roads with traffic volumes above 20,000 vpd and 40,000 vpd along with rail corridors where the Infrastructure SEPP would apply. This map should include roads that carry between 10,000 vpd and 20,000 vpd to show where road noise impact assessments are required to comply with the DCP requirements.
- Include new planning controls for new sensitive land uses near infrastructure (Glebe Island and related vessel berths, busy roads, rail corridors) and active frontages to require a noise intrusion impact assessment be undertaken before approval to show how acoustic privacy can be maintained for occupants.
- Consideration of designating areas where new residential development may need an acoustic report to ensure the building is designed to achieve design internal noise levels
- Update the City of Sydney active frontages map to reflect changes identified in the PPPS
- Reference the Noise Policy for Industry (EPA 2017) and Port Noise Policy (Port Authority 2020) in the City of Sydney DCP planning controls as a framework to assess industrial noise/port noise.
- Update the noise assessment/regulation criteria for entertainment/music venues by applying the 'agent of change' principle to support the 24-hour Economy Strategy. This would include implementing a new noise regulation strategy to provide a streamlined and objective approach to the assessment/regulation of sound from venues
- Development of site specific noise controls, providing achievable noise limits whilst ensuring residential amenity. Barangaroo South and Darling Square Noise Masterplans are examples of how this balance can be achieved.
- Encourage the use of low noise public transport vehicles

- Encourage the use of BMP and BATEA to minimise existing and future noise levels from industrial/port sites
- Encourage the implementation of additional noise control measures for mixed-use developments
- Encourage the implementation of the additional noise control measures for commercial premises
- Building design principles to mitigate noise at the receiver detailed within the Development near Rail Corridors and Busy Roads and NSW Apartment Design Guide should be considered when preparing planning controls to reduce the entry of noise into the internal spaces of sensitive land uses, where appropriate. The Development near Rail Corridors and Busy Roads does not directly apply for noise from industrial/active frontage/commercial/entertainment land uses. However, the design principles used to mitigate the noise at the receiver can still be implemented to reduce noise levels from the external environment to the internal habitable areas.
- Any changes to the planning controls should also consider the legislative changes as a result of the Liquor Amendment (24-hour Economy) Bill 2020, NSW. Special consideration should be given to 'special entertainment precincts' where the regulation of noise is shifted to Council's responsibility
- Specify a minimum Weighted Sound Reduction Index (Rw) performance requirement for internal partitions between residential dwellings and commercial premises/residential dwellings.

Appendix A

Sydney LEP 2012 excerpts

1. Sydney Local Environmental Plan 2012

Part 5 Miscellaneous provisions

5.20 Standards that cannot be used to refuse consent—playing and performing music

1. (1) The consent authority must not refuse consent to development in relation to licensed premises on the following grounds—
 - a. (a) the playing or performance of music, including the following—
 - i. (i) the genre of music played or performed, or
 - ii. (ii) whether the music played or performed is live or amplified, or
 - iii. (iii) whether the music played or performed is original music, or
 - iv. (iv) the number of musicians or live entertainment acts playing or performing, or
 - v. (v) the type of instruments played,
 - b. (b) whether dancing occurs,
 - c. (c) the presence or use of a dance floor or another area ordinarily used for dancing,
 - d. (d) the direction in which a stage for players or performers faces,
 - e. (e) the decorations to be used, including, for example, mirror balls, or lighting used by players
 - f. or performers.
2. (2) The consent authority must not refuse consent to development in relation to licensed premises on the grounds of noise caused by the playing or performance of music, if the consent authority is satisfied the noise may be managed and minimised to an acceptable level.
3. In this clause—

licensed premises has the same meaning as in the [Liquor Act 2007](#)

Part 6 Local provisions – height and floor space

Division 4 Design excellence

6.21 Design excellence

4. In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters—
 - d. how the proposed development addresses the following matters—
 - vii. environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,

Part 7 Local provisions – general

Division 3 Affordable housing

7.13A Affordable housing in Zone B7

1. Despite any other provision of this Plan, development for the purposes of a residential flat building or a mixed use development that contains shop top housing may be carried out with development consent on land in Zone B7 Business Park if the consent authority is satisfied that—
 - d. the development is compatible with the existing uses and approved uses of land in the vicinity of the development having regard to the following matters—
 - iii. the impact that those uses are likely to have on the health, wellbeing and amenity of residents of the development by reason of noise, dust, lighting, truck movements, operating hours or otherwise

Division 4 Miscellaneous

7.17 Development in areas subject to aircraft noise

1. The objectives of this clause are as follows—
 - a. to prevent certain noise sensitive developments from being located near the Sydney (Kingsford-Smith) Airport and its flight paths,
 - b. to assist in minimising the impact of aircraft noise from that airport and its flight paths by requiring appropriate noise attenuation measures in noise sensitive buildings,
 - c. to ensure that land use and development in the vicinity of that airport do not hinder or have any other adverse impacts on the ongoing, safe and efficient operation of that airport.
2. This clause applies to development that—
 - a. is on land that—
 - i. is near the Sydney (Kingsford-Smith) Airport, and
 - ii. is in an ANEF contour of 20 or greater, and
 - b. the consent authority considers is likely to be adversely affected by aircraft noise.
3. Before determining a development application for development to which this clause applies, the consent authority—
 - a. must consider whether the development will result in an increase in the number of dwellings or people affected by aircraft noise, and
 - b. must consider the location of the development in relation to the criteria set out in Table 2.1 (Building Site Acceptability Based on ANEF Zones) in AS 2021—2000, and
 - c. must be satisfied the development will meet the indoor design sound levels shown in Table 3.3 (Indoor Design Sound Levels for Determination of Aircraft Noise Reduction) in AS 2021—2000.
4. In this clause—

ANEF contour means a noise exposure contour shown as an ANEF contour on the *Noise Exposure Forecast Contour Map* for the Sydney (Kingsford-Smith) Airport prepared by the Department of the Commonwealth responsible for airports.

AS 2021—2000 means *AS 2021—2000, Acoustics—Aircraft noise intrusion—Building siting and construction*.

7.20 Development requiring or authorising preparation of a development control plan

1. This clause applies to any of the following development—
 - a. development for the purposes of a new building,
 - b. development that increases the gross floor area of an existing building.
4. The development control plan must provide for all of the following—
 - c. how proposed development addresses the following matters—
 - vii. environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity

7.26 Public art

2. Development consent must not be granted to development for the purpose of public art in any zone in which public art is permitted with development consent unless the consent authority is satisfied that the development—
 - d. will not have a significant adverse impact on the amenity of the public domain, including by overshadowing, wind or noise impacts

2. State Environmental Planning Policy (Infrastructure) 2007

Subdivision 2 Development in or adjacent to rail corridors and interim rail corridors—notification and other requirements

87 Impact of rail noise or vibration on non-rail development

1. This clause applies to development for any of the following purposes that is on land in or adjacent to a rail corridor and that the consent authority considers is likely to be adversely affected by rail noise or vibration—
 - a. residential accommodation,
 - b. a place of public worship,
 - c. a hospital,
 - d. an educational establishment or centre-based child care facility.
2. Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Secretary for the purposes of this clause and published in the Gazette.
3. If the development is for the purposes of residential accommodation, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded—
 - a. in any bedroom in the residential accommodation—35 dB(A) at any time between 10.00 pm and 7.00 am,
 - b. anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

101 Development with frontage to classified road

1. The objectives of this clause are—
 - a. to ensure that new development does not compromise the effective and ongoing operation and function of classified roads, and
 - b. to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads.

2. The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that—
 - a. where practicable and safe, vehicular access to the land is provided by a road other than the classified road, and
 - b. the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of—
 - i. the design of the vehicular access to the land, or
 - ii. the emission of smoke or dust from the development, or
 - iii. the nature, volume or frequency of vehicles using the classified road to gain access to the land, and
 - c. the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.

102 Impact of road noise or vibration on non-road development

1. This clause applies to development for any of the following purposes that is on land in or adjacent to the road corridor for a freeway, a tollway or a transitway or any other road with an annual average daily traffic volume of more than 20,000 vehicles (based on the traffic volume data published on the website of TfNSW) and that the consent authority considers is likely to be adversely affected by road noise or vibration—
 - a. residential accommodation,
 - b. a place of public worship,
 - c. a hospital,
 - d. an educational establishment or centre-based child care facility.
2. Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Secretary for the purposes of this clause and published in the Gazette.
3. If the development is for the purposes of residential accommodation, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded—
 - a. in any bedroom in the residential accommodation—35 dB(A) at any time between 10 pm and 7 am,
 - b. anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.
4. In this clause, *freeway*, *tollway* and *transitway* have the same meanings as they have in the Roads Act 1993.

3. Darling Harbour Development Plan No 1

No noise related requirements relevant to the Pyrmont Peninsula have been identified.

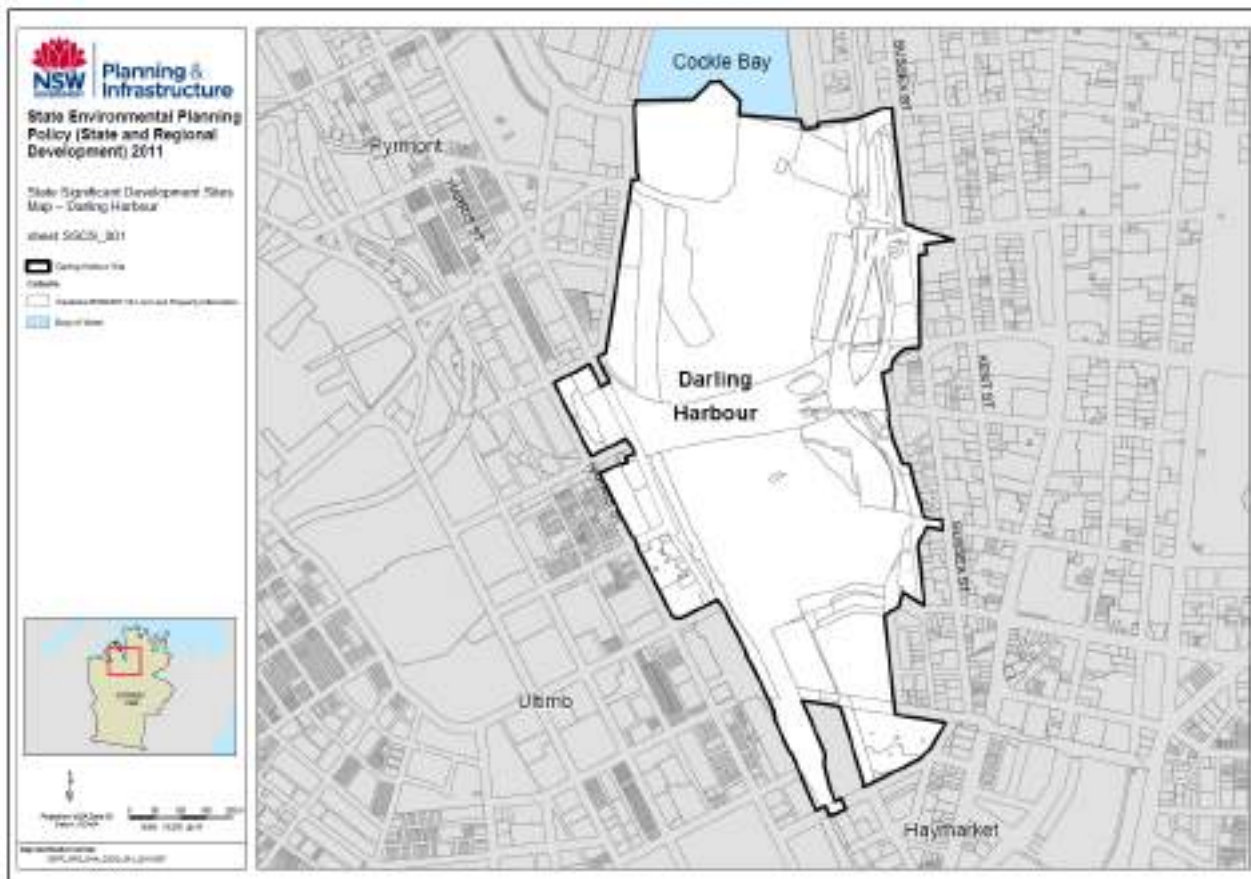
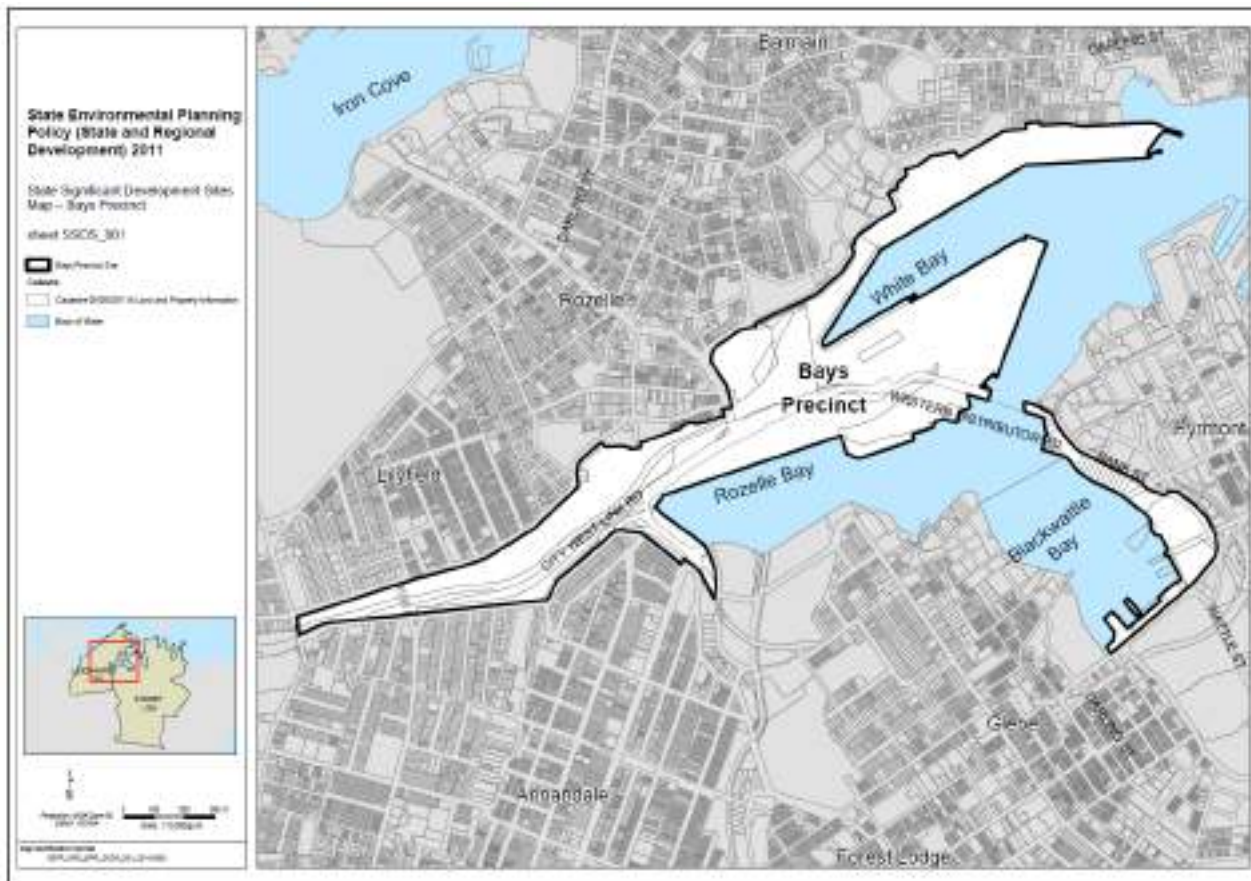
4. State Environmental Planning Policy (State and Regional Development) 2011

2 Development on specified sites

Development that has a capital investment value of more than \$10 million on land identified as being within any of the following sites on the State Significant Development Sites Map—

- a. Bays Precinct Site,

b. Darling Harbour Site,



21 Sydney Metro West Project

1. Development for the purposes of the Sydney Metro West Project, being—
 - a. the construction and operation of new passenger rail infrastructure between Westmead and the central business district of Sydney, including—
 - i. (i) tunnels, stations (including surrounding areas) and associated rail facilities, and
 - ii. (ii) stabling and maintenance facilities (including associated underground and overground connections to tunnels), and
 - b. the modification of existing rail infrastructure (including stations and surrounding areas), and
 - c. ancillary development.
2. The development is to be carried out on—
 - a. land in the following local government areas—
 - i. Burwood,
 - ii. City of Canada Bay,
 - iii. Cumberland,
 - iv. Inner West,
 - v. City of Parramatta,
 - vi. Strathfield,
 - vii. City of Sydney, and
 - b. the parts of Sydney Harbour and the Parramatta River that adjoin the local government areas described in paragraph (a).
3. The development does not include the following—
 - a. surveys, test drilling, test excavations, geotechnical or contamination investigations or other tests, surveys, sampling or investigation for the purposes of the design or assessment of the Sydney Metro West Project,
 - b. the relocation or upgrade of existing roads, intersections or parking areas that—
 - i. is carried out on land identified as being within the Bays Precinct Site on the State Significant Development Sites Map, and
 - ii. is the subject of a determination under Division 5.1 of the Act.

M4–M5 Link project Development for the purposes of the M4–M5 Link project—

- a. being a new multi-lane road link connecting the M4 East project at Haberfield with the New M5 project at the St Peters interchange (including twin multi-lane tunnels between Haberfield and St Peters, with connections to an interchange at Lilyfield and Rozelle which includes stub tunnels, ramps and related infrastructure for a potential future Western Harbour Tunnel and a tunnel connection to the Iron Cove Bridge), together with associated works to upgrade the surrounding road network, and
- b. to be carried out on land in Haberfield, Leichhardt, Lilyfield, Rozelle, Five Dock, Drummoyne, Annandale, Pyrmont, Petersham, Stanmore, Enmore, Erskineville, Croydon, Ashfield, Chippendale, Surry Hills, Camperdown, Newtown, St Peters and Alexandria.

5. State Environmental Planning Policy (State Significant Precincts) 2005

Part 2 State significant precincts

12A Sydney Harbour Foreshore Sites—consent authority

(1) This clause applies to development on land identified as a Sydney Harbour Foreshore Site on the Sydney Harbour Foreshore Sites Map that is not State significant development.

(2) Despite clauses 22(1) and 28(1) of Schedule 6 to the Act, the consent authority for development to which this clause applies is the Council of the City of Sydney.

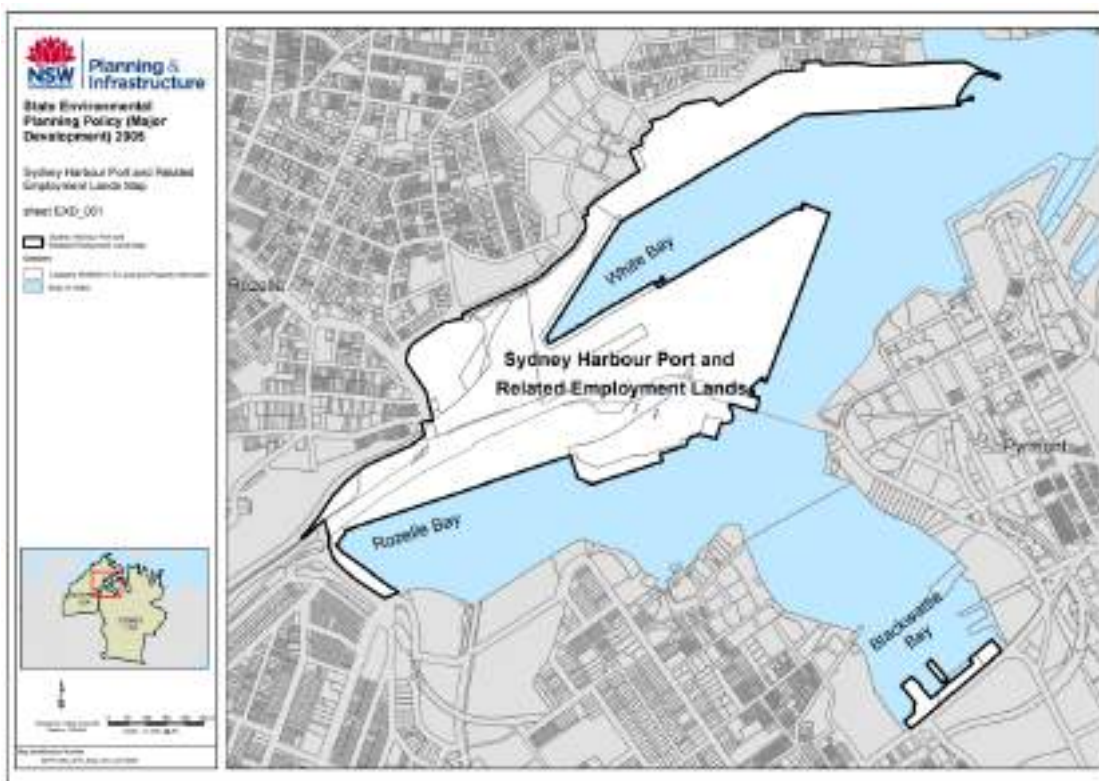
Note 1. The Sydney Harbour Foreshore Sites include land that was part of the Darling Harbour Development Area and land that was part of the Sydney Cove Development Area.

Note 2. The Council of the City of Sydney is the consent authority for development on land in the Sydney Harbour Foreshore Sites that is in Walsh Bay (under *Sydney Regional Environmental Plan No 16—Walsh Bay*) and the Bank Street Precinct, Circular Quay and the Sydney Casino (under *Sydney Local Environmental Plan 2005*).

Schedule 6 Minister consent authority for Part 4 development

4 Port and related employment lands

Sydney Harbour Development within the area identified as Glebe Island, White Bay, Rozelle Bay and Blackwattle Bay on the Sydney Harbour Port and Related Employment Lands Map, being development with a capital investment value of not more than \$10 million that is carried out by a person other than a public authority.

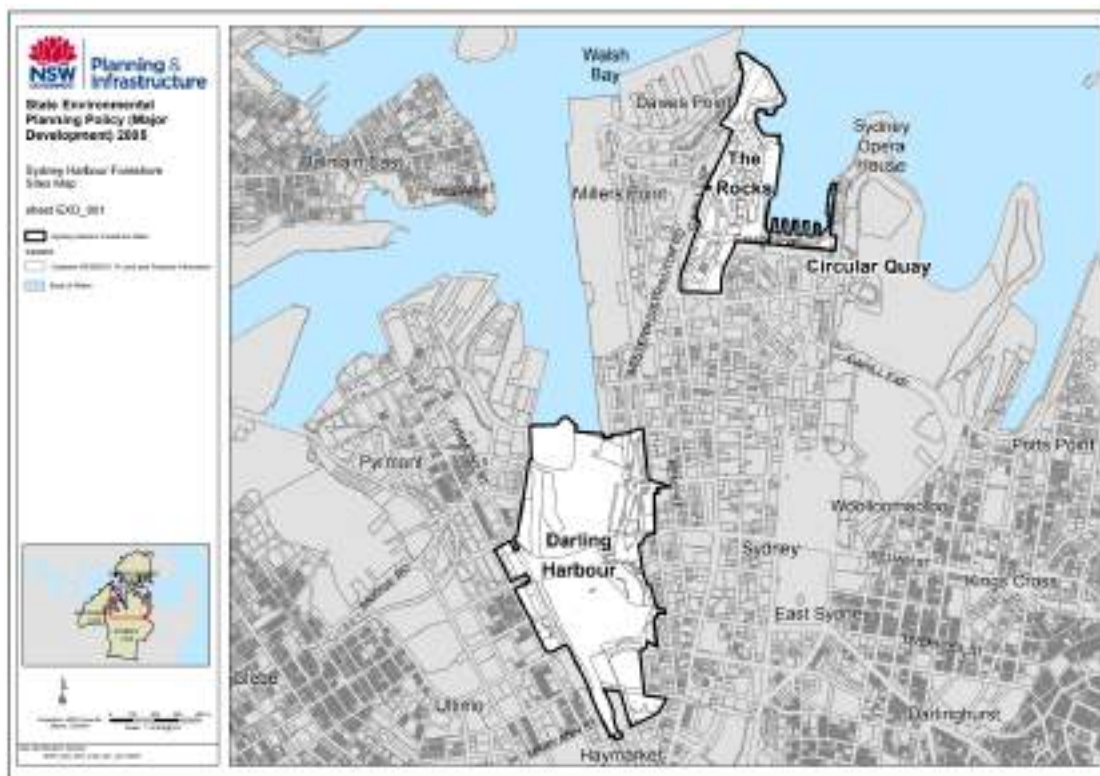


Schedule 7 Development that does not require consent under Part 4

1 Port and related employment lands development by public authority

The following development carried out in the following areas by a public authority—

(b) development within the area identified as Glebe Island, White Bay, Rozelle Bay and Blackwattle Bay on the Sydney Harbour Port and Related Employment Lands Map, being development with a capital investment value of not more than \$10 million



6. Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

No noise related requirements relevant to the Pyrmont Peninsula have been identified.

7. State Environmental Planning Policy (Major Projects) Amendment (Sydney Harbour Foreshore) 2009

Part Sydney Harbour Foreshore Sites

2 Temporary uses in the public domain

Temporary uses in the public domain, including a community event (such as a gathering, ceremony, cultural celebration, sporting event or exhibition) open to the general public, a commercial event (such as a product launch and sampling) and trading for retail or other commercial purposes (such as providing a temporary dining and drinking area), subject to the following requirements:

(I) the noise level from the use, when measured at the boundary of the nearest residential property, must not exceed:

- (i) L_{Amax} 70 dB(A) and LC_{max} 90 dB(C) on Friday and Saturday, and
- (ii) L_{Amax} 65 dB(A) and LC_{max} 85 dB(C) on any other day.

8. Sydney Regional Environmental Plan No. 26 – City West (SREP 26)

Part 2 City West

11 Planning principles of regional significance for City West

Environmental Issues

Development in City West is to ensure a high level of environmental quality by addressing issues of air quality, noise levels, wind conditions, access to light and sunshine, privacy, soil conditions and water quality.

Part 3 Bays Precinct

Role and land use activities

Development should reinforce and complement the role of the Precinct as a major inner-harbour port and maritime location. Development should recognise that the port operates for 24 hours of the day and that the generation of noise, lighting and traffic movement is necessarily associated with its operation.

Division 3 Planning principles for Precincts

15 Planning principles of regional significance for Precincts

Before granting consent to a development application relating to land within a Precinct, the consent authority must take into consideration the aim of this plan that development within the Precinct should be consistent with the planning principles set out for the Precinct in the Table to this clause.

Part 1 Ultimo-Pyrmont Precinct

Urban Design

Higher buildings may be accommodated—

- if they will not compromise the environmental amenity and general scale of development in their locality.

Division 4 Zoning

18 Residential-Business Zone

Consent is to be granted to development within this zone only if the consent authority is satisfied that carrying out the proposed development will be consistent with the planning principles for the relevant precinct and for City West, particularly residential provision and amenity.

Residential development within this zone is not to be located or designed so that the amenity of the development is adversely affected, by an adjoining or nearby use, to a level that is considered inappropriate by the consent authority due to excessive noise or odour or any similar environmental impact.

Residential development (other than for the purpose of dwellings for employees of a business use located on the same site) is prohibited on land within this zone that is identified by the words “Non-Residential Development” on Map 6.

Appendix B

Sydney DCP 2012 excerpts

Section 2 Locality Statements

2.6.3 Wentworth Park

Principles

(h) Discourage residential uses fronting Bridge Road because of the noise impacts from vehicle traffic and the light rail.

Section 3 General Provisions

Section 3.15 Late Night Trading Management

3.15.3 Matters for consideration

1) Appropriate trading hours for late night trading premises will be determined by taking into account a number of issues, where relevant, which include, but are not limited to:

c) the likely impact on the amenity of surrounding sensitive land uses, including noise, and the ability to manage the impacts.

3.15.4 Trading hours and trial periods

(5) Council will consider proposals for stand-alone gyms in Local Centres to exceed the trading hours in Table 3.7 if:

(v) a Plan of Management is approved which addresses noise impacts described in Schedule 3, 3.2(d).

3.15.5 Plans of management requirements

3.15.5.1 Preparation

Plans of Management are to include information about the operational and contextual aspects of a premises, for example locality description, security numbers, noise emission and trading hours, as well as details about what actions will be taken to ensure that premises will be responsibly managed, for example, crowd control procedures, noise minimisation and waste management.

Section 4 Development Types

Section 4.2 Residential Flat, Non-residential and Mixed Use Developments

Section 4.2.3 Amenity

4.2.3.11 Acoustic privacy

1. A Noise Impact Assessment prepared by a suitably qualified acoustic consultant may be required when submitting a development application for commercial and retail uses which may affect the acoustic privacy of the adjacent residential use.
2. Where necessary, a residential development is to include acoustic measures to reduce the impact of noise from existing or planned external sources (for example busy roads, adjoining industries, live

music venues and public parks and plazas in which people may congregate or host live music or events).

3. Development is to incorporate measures that reduce the entry of noise from external sources into dwellings.
4. Where possible, the attenuation of noise at its source is preferred. Where this option is adopted, the applicant will need to demonstrate that the measures to be undertaken:
 - a. have the consent of relevant parties associated with that noise source; and
 - b. last for the life of the development proposal.
5. The repeatable maximum LAeq (1 hour) for residential buildings and serviced apartments must not exceed the following levels:
 - a. for closed windows and doors:
 - i. 35dB for bedrooms (10pm-7am); and
 - ii. 45dB for main living areas (24 hours).
 - b. for open windows and doors:
 - i. 45dB for bedrooms (10pm-7am); and
 - ii. 55dB for main living areas (24 hours).
6. Where natural ventilation of a room cannot be achieved, the repeatable maximum LAeq (1hour) level in a dwelling when doors and windows are shut and air conditioning is operating must not exceed:
 - a. (a) 38dB for bedrooms (10pm-7am); and
 - b. (b) 48dB for main living areas (24 hours).
7. These levels are to include the combined measured level of noise from both external sources and the ventilation system operating normally.
8. To limit the transmission of noise to and between dwellings, all floors are to have a weighted standardised impact sound level ($L'_{nT,w}$) less than or equal to 55 where the floor separates a habitable room and another habitable room, bathroom, toilet, laundry, kitchen, plant room, stairway, public corridor, hallway and the like.
9. The overall design and layout of dwellings, where appropriate, is to include:
 - a. a limit on window size and number where oriented towards an intrusive noise source;
 - b. seals at entry doors to reduce noise transmission from common corridors or outside the building;
 - c. minimisation of the number of shared walls with other dwelling units;
 - d. storage, circulation areas, and non habitable rooms to buffer noise from external sources;
 - e. double or acoustic glazing; and
 - f. operable acoustic screens to balconies.
10. Mixed-use development which includes two or more dwellings is to provide separate lift access and a separate entrance for use exclusively for the dwellings.

4.2.5 Types of development

4.2.5.3 Development on busy roads and active frontages

The following provisions apply to, sensitive uses on sites that are to have an active frontage as shown on the Active frontages map, or sites with a frontage to a busy road that carries more than 20,000 vehicles a day. Sensitive uses include:

- buildings for residential use (including mixed use buildings);
- places of public worship;
- hospitals; and
- educational establishments or childcare centres

Noise and air quality mitigation measures are required for new developments along road corridors carrying more than 20,000 Annual Average Daily Traffic. A copy of the 'Traffic volume maps on noise assessment for buildings on land adjacent to busy roads' can be accessed on the Roads and Maritime Services website www.rta.nsw.gov.au.

These provisions also provide a design solution to achieve acceptable amenity for residential uses that may be affected by noise from busy roads and active uses.

Applicants proposing development on busy roads should also refer to *State Environment Planning Policy (Infrastructure) 2007* and the NSW Government's *Development near Rail Corridors and Busy Roads – Interim Guidelines* which includes design guidelines and requirements to manage the impacts from road and rail noise and vibration.

Objectives

- a. Mitigate the impacts of noise for sensitive uses located along busy road corridors.
- b. Ensure visual privacy for residential dwellings when viewed from the adjacent public domain.
- c. Ensure acoustic amenity for sensitive uses by attenuating noise from external sources.
- d. Ensure reasonable internal daylight levels within sensitive uses.

Provisions

1. Where sensitive uses are proposed, council may require an Acoustic Assessment prepared with reference to NSW Government's *Development near Rail Corridors and Busy Roads – Interim Guidelines*.
2. Where sensitive uses are proposed, development is to be appropriately designed to minimise the impact of road noise and vibration.
3. Where development fronts roads with more than 40,000 vehicles per day, non-residential uses are required on the ground floor and first floor.
4. Where development fronts roads with more than 20,000 vehicles per day, non-residential uses are required on the ground floor.
5. Non-residential uses require a minimum ceiling height of:
 - a. 3.6m where located on the ground floor; and
 - b. 3.3m where located on the first floor or above.
6. Non-residential uses on the ground floor and first floor require a minimum internal depth from the street frontage of 10m measured from the glass line.
7. Where a development has residential uses with habitable rooms that front a busy road with more than 20,000 vehicles per day or is located on an active frontage and has a floor level within 10m of the ground level, it must be designed to have a street frontage that has:
 - a. a minimum 65% of the elevational area, including the balustrade, as solid masonry; and
 - b. a sun room behind the street frontage with a minimum clear depth of 1.2m; and
 - c. fully retractable privacy screens at the street frontage alignment; and
 - d. fully retractable glazed screens directly behind the privacy screens which create a full acoustic seal and reasonable acoustic amenity in habitable rooms when closed.

4.2.6.2 Residential flat buildings and serviced apartments

9. Minimise noise from the operation of the waste and recycling management system to residential units by:
 - a. locating chutes away from habitable rooms, and
 - b. provide acoustic insulation to the waste service facilities or residential units adjacent to or above chutes, waste storage facilities, chute discharge, waste compaction equipment and waste collection vehicle access points.

4.2.6.2 Residential flat buildings and serviced apartments

Objectives

(c) Ensure that any impacts generated by non-residential development such as operating hours, noise, privacy, vehicular and pedestrian traffic are adequately managed to preserve the quality of life for residents in the area.

Provision

(1) In granting development consent for non-residential development on sites within proximity to residential uses within the B4 Mixed Uses zone, the consent authority will have regard to the potential impacts on the amenity of existing residential uses. The following matters must be considered and addressed:

- (a) noise impacts;
- (b) operating hours;
- (c) privacy;
- (d) vehicular and pedestrian traffic;
- (e) vibration

4.4 Other Development Types and Uses

4.4.1 Boarding houses and student accommodation

4.4.1.6 Amenity, safety and privacy

1. Boarding houses are to maintain a high level of resident amenity, safety and privacy by ensuring:
 - a. communal spaces, including laundry, bathroom, kitchen and living areas are located in safe and accessible locations;
 - b. bedrooms are located so that they are separate from significant noise sources and incorporate adequate sound insulation to provide reasonable amenity between bedrooms and external noise sources;
2. Boarding houses are to be designed to minimise and mitigate any impacts on the visual and acoustic privacy of neighbouring buildings by locating:
 - a. the main entry point at the front of the site, away from side boundary areas near adjoining properties;
 - b. communal areas and bedroom windows away from the main living area or bedroom windows of any adjacent buildings;
 - c. screen fencing, plantings, and acoustic barriers in appropriate locations; and
 - d. double glazed windows where noise transmission affects neighbouring buildings.
3. The consent authority may request an acoustic report prepared by a suitably qualified acoustical consultant, if there is the potential for significant impacts from noise emissions. The investigation shall include, but not be limited to the following:
 - a. the identification of sensitive noise receivers potentially impacted by the proposal;
 - b. the quantification of the existing acoustic environment at the receiver locations
 - c. the formulation of suitable assessment criteria;
 - d. details of any acoustic control measures that will be incorporated into the proposal;
 - e. the identification of all noise that is likely to emanate from the boarding house and the subsequent prediction of resultant noise at the identified sensitive receiver locations; and
 - f. a statement certifying that the development is capable of operating without causing a nuisance or result in an 'offensive noise' as defined in the *Protection of the Environment Operations Act 1997*.

4.4.4 Child care centres

4.4.4.5 Control of noise impacts to child care centres

1. An operational Plan of Management is to be submitted with any application to allow consideration of potential noise impacts.

2. The repeatable maximum LAeq1hr must not exceed 40 dBA (Leq1hr) within the internal spaces of the child care centre.
3. An acoustic assessment, including recommended noise attenuation measures and prepared by a suitably qualified acoustic consultant must be submitted with the development application to demonstrate that these provisions can be achieved.

4.4.6 Sex industry premises and adult entertainment

Home occupation (sex services) as defined in the *Sydney LEP 2012* means the provision of sex services in a dwelling that is a brothel, or in a building that is a brothel and is ancillary to such a dwelling, by no more than 2 permanent residents of the dwelling and that does not involve:

- b. interference with the amenity of the neighbourhood by reason of the emission of noise, traffic generation or otherwise, or

4.4.6.3 Scale of sex services premises

4. The consent authority may exercise discretion for an increase in the number of working rooms in a sex services premises where it can be demonstrated that the site can accommodate additional working rooms without adverse impacts, including traffic generation, noise and other amenity impacts on the surrounding area.

4.4.7 Telecommunications

3. Noise caused by the facility must not result in the transmission of "offensive noise" as defined in the *Protection of the Environment Operations Act 1997* or any subsequent relevant Act to any place of habitable use.

4.4.8 Visitor accommodation

4.4.8.1 General

6. A Plan of Management and a Noise Management Plan must be submitted with the development application.

4.4.8.4 Additional provisions for backpacker accommodation

4. Where communal outdoor facilities are proposed:
 - b. the design and location is to ensure that the noise impact to surrounding property is minimised;

4.4.8.5 Additional provisions for serviced apartments

10. A Plan of Management must be submitted with every application for a serviced apartment describing how on-going operations are to be managed with regard to:
 - b. minimising the impact of noise from the premises to adjoining properties;

Section 5 Specific Areas

This section of the DCP applies to the following specific areas within the City of Sydney LGA:

- Ashmore
- Central Sydney
- Epsom Park
- Green Square
- Lachlan
- North Rosebery
- Rosebery Estate

- Southern Employment Lands
- Danks Street South

None of these specific areas apply to the Pyrmont Peninsula.

Section 6 Specific Sites

6.2.11 97-101 Pyrmont Bridge Road, Pyrmont

Objectives

- Encourage mixed use development on the site that responds to the residential uses of Wattle Crescent and predominant commercial uses and along Pyrmont Bridge Road.
- Encourage commercial uses on the ground floor.
- Encourage separation between any future residential uses on the site and busy traffic along Pyrmont Bridge Road.

6.2.11.2 Setbacks

- Introduce a 0m setback for residential development along Wattle Street.
- Ground floor uses along Wattle Crescent and Pyrmont Bridge Road should be setback 0m.
- Ensure residential uses are set back from Pyrmont Bridge Road as far as possible to reduce the impact of traffic noise.

6.3.8 45 Murray Street, Pyrmont

Objectives

- Facilitate the provision of new tourist and visitor accommodation in appropriate locations.
- Provide a development on the site that relates to the surrounding context including other built form on Murray Street.
- Define maximum building envelope, including setbacks and street wall heights, to deliver a high quality built form that respects the local context and minimises amenity impacts including solar access, view, privacy and acoustic amenity impacts.
- Activate Murray Street and Union Lane through appropriate uses and design.

Schedules

Schedule 3 Late Night Trading

3.2 Plan of management requirements

(d) Noise

(i) The identification of all likely noise and vibration sources associated with the operation of the premises. This may include such sources as:

- Live entertainment and amplified sound;
- external (outside) areas such as courtyards, rooftops, balconies etc;
- patrons leaving and entering the premises;
- the operation of mechanical plant and equipment;
- waste disposal, sorting and collection of bottles etc

- in stand-alone gyms in buildings with residential accommodation, background music, air conditioning and the use of exercise machines and free weights.

(ii) Details of all noise and vibration attenuation measures related to the use and operation of the premises.

(iii) A statement outlining the premises' compliance with all relevant noise and vibration standards, guidelines and legislation (eg. Australian Standards, Protection of the Environment Operations Act 1997, EPA Industrial Noise Guidelines, etc.);

(iv) Details of how management will address complaints relating to noise, and any noise control strategies that will be implemented to minimise the potential for complaints (eg. liaison with neighbours and local police, maintaining a complaint register etc);

(v) Details of any measures that will be taken to minimise noise from outdoor areas such as rooftops, courtyards, balconies or designated smoking areas etc; and

(vi) Details of any noise limiting devices to be installed;

Appendix C

**Sydney DCP 2012 Active Frontages Maps
(7, 8 and 15)**

Active frontages map
Sheet 007

Legend

- Active frontages
- Proposed lane
- Proposed streets
- Land excluded from this DCP



Scale 1:500 at A4



Sydney Development Control Plan 2012

Active frontages map
Sheet 008

Legend

- Active frontages
- Proposed lane
- Proposed street
- Land excluded from this DCP



Scale 1:800 (approx)

Copyright © 2012 City of Sydney. All rights reserved. This map is a reproduction of the City of Sydney Development Control Plan 2012. It is not to be used for any purpose other than as a reference. The City of Sydney is not responsible for any errors or omissions in this map. The City of Sydney is not responsible for any damage or loss resulting from the use of this map.

Version 1.0 (2012)
Date: 10/10/2012
Author: City of Sydney
Project: Development Control Plan 2012

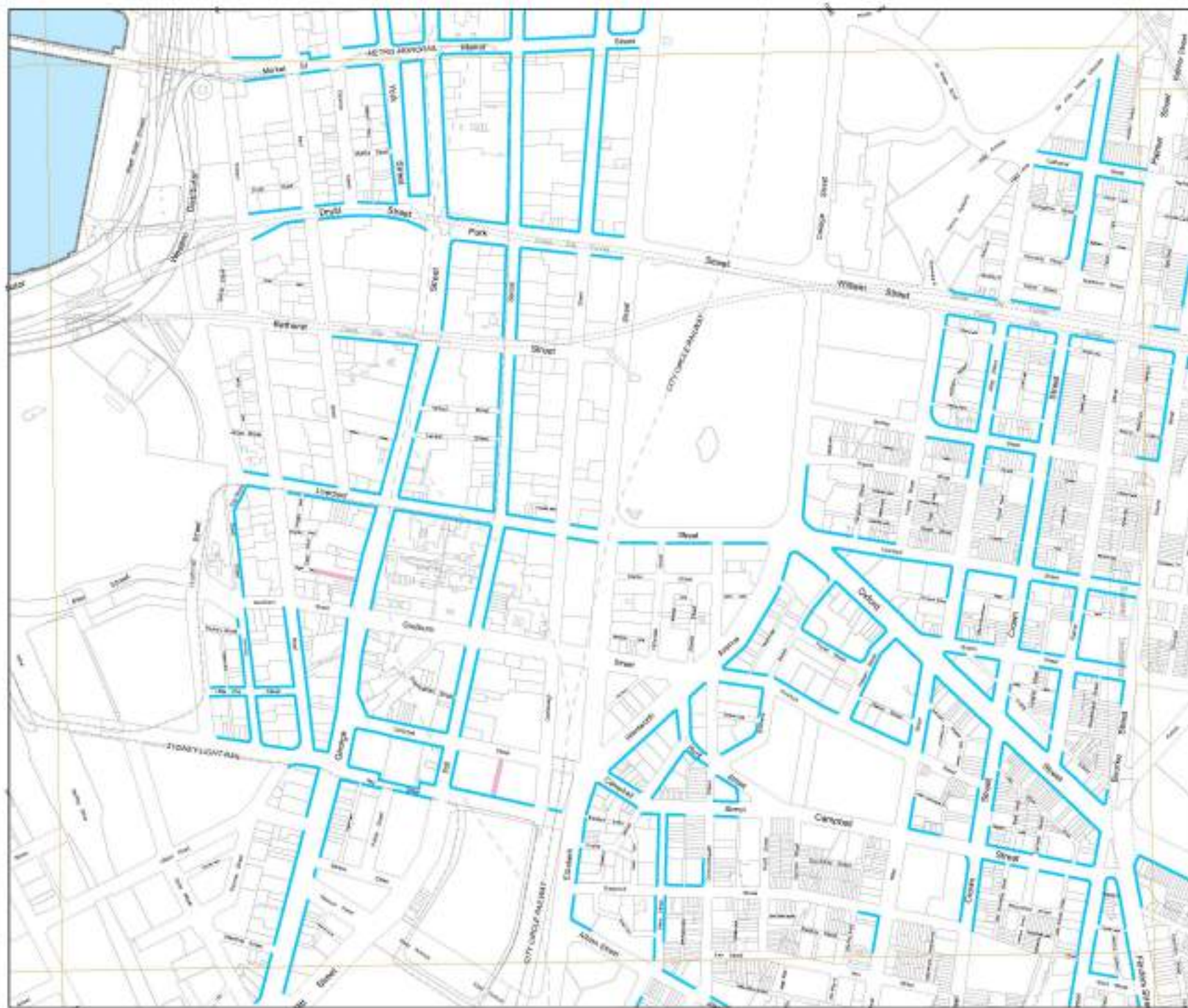


Sydney Development Control Plan 2012

Active frontages map Sheet 015

Legend

- Active frontages
- Proposed lane
- Proposed streets
- Land excluded from this DCP



Scale 1:5000 A4

Copyright © 2012 City of Sydney. All rights reserved.
This map is a reproduction of the original map and is not to be used for any other purpose without the written consent of the City of Sydney.
The City of Sydney is not responsible for any errors or omissions in this map.
The City of Sydney is not responsible for any damage or loss arising from the use of this map.
The City of Sydney is not responsible for any liability arising from the use of this map.

Appendix D

**City of Sydney – existing and proposed
noise conditions**

City of Sydney Standard Conditions of Development Consent

The City's current standard noise conditions are outlined below:

(1) NOISE - ENTERTAINMENT

- a. *The $L_{A10, 15 \text{ minute}}$ noise level emitted from the use must not exceed the background noise level ($L_{A90, 15 \text{ minute}}$) in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) by more than 5dB between the hours of 7.00am and 12.00 midnight when assessed at the boundary of any affected residence.*
- b. *The $L_{A10, 15 \text{ minute}}$ noise level emitted from the use must not exceed the background noise level ($L_{A90, 15 \text{ minute}}$) in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) between the hours of 12.00 midnight and 7.00am when assessed at the boundary of any affected residence.*
- c. *Notwithstanding compliance with (a) and (b) above, noise from the use when assessed as an $L_{A10, 15 \text{ minute}}$ enters any residential use through an internal to internal transmission path is not to exceed the existing internal $L_{A90, 15 \text{ minute}}$ (from external sources excluding the use) in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) when assessed within a habitable room at any affected residential use between the hours of 7am and 12midnight. Where the $L_{A10, 15 \text{ minute}}$ noise level is below the threshold of hearing, T_f at any Octave Band Centre Frequency as defined in Table 1 of International Standard ISO 226 : 2003- Normal Equal-Loudness-Level Contours then the value of T_f corresponding to that Octave Band Centre Frequency shall be used instead.*
- d. *Notwithstanding compliance with (a), (b) and (c) above, the noise from the use must not be audible within any habitable room in any residential use between the hours of 12.00 midnight and 7.00am.*
- e. *The $L_{A10, 15 \text{ minute}}$ noise level emitted from the use must not exceed the background noise level ($L_{A90, 15 \text{ minute}}$) in any Octave Band Centre Frequency (31.5 Hz to 8 kHz inclusive) by more than 3dB when assessed indoors at any affected commercial premises.*

Note: The $L_{A10, 15 \text{ minute}}$ noise level emitted from the use is as per the definition in the Australian Standard AS1055-1997 Acoustics – Description and measurement of environmental noise. The background noise level $L_{A90, 15 \text{ minute}}$ is to be determined in the absence of noise emitted by the use and be representative of the noise sensitive receiver. Background noise monitoring must be carried out in accordance with the long-term methodology in Fact Sheet B of the NPfI unless otherwise agreed by the City's Area Planning Manager.

[HEALTH EHO: This condition is only applicable to music, patron noise and other entertainment noise emissions associated with a use, e.g. licensed premises, restaurants, cafes, music studios, communal balconies etc. the second half of its title maybe changed to suit the specific area or operation or an introductory paragraph describing the applicable noise subject to control given.

(2) NOISE – COMMERCIAL PLANT / INDUSTRIAL DEVELOPMENT

- a. *Noise from commercial plant and industrial development must not exceed a project amenity/intrusiveness noise level or maximum noise level in accordance with relevant requirements of the NSW EPA Noise Policy for Industry 2017 (NPfI) unless agreed to by the City's Area Planning Manager. Further:*
 - i. *Background noise monitoring must be carried out in accordance with the long-term methodology in Fact Sheet B of the NPfI unless otherwise agreed by the City's Area Planning Manager.*
 - ii. *Commercial plant is limited to heating, ventilation, air conditioning, refrigeration and energy generation equipment.*

[Health & Building Unit to insert clause below for internal residential and commercial amenity only]

- b. *An $L_{Aeq, 15 \text{ minute}}$ (noise level) emitted from the development must not exceed the $L_{A90, 15 \text{ minute}}$ (background noise level) by more than 3dB when assessed inside any habitable room of any affected residence or noise sensitive commercial premises at any time. Further:

 - i. *The noise level and the background noise level must both be measured with all external doors and windows of the affected residence closed.*
 - ii. *Background noise measurements must not include noise from the development but may include noise from necessary ventilation at the affected premise.**
- c. *Corrections in Fact Sheet C of the NPfl are applicable to relevant noise from the development measured in accordance with this condition, however duration corrections are excluded from commercial noise.*

(3) NOISE LIMITERS

Use of the all amplification equipment must comply with the following:

- a. *At a minimum, all amplification equipment used at the event must be controlled by a Root Mean Square (RMS) noise limiter, set by a suitably qualified acoustic consultant* in accordance with the manufactures specification to ensure that resultant amplified sound complies with the Council's licensed premises noise criteria. The equipment must be tamper proof and only operable by the acoustic consultant.*
- b. *The noise limiter must be factory or laboratory calibrated by an accredited instrumentation calibration service provider at the time of installation. The limiter must be checked by an acoustic consultant with a piston phone calibrator at the time of installation and on three subsequent occasions during the first 60 days of monitoring. The checks must correlate with the close of business as per the requirements of Part (b)ii), Additional Noise Conditions for Licensed Premises and not be undertaken before any external noise compliance checks. The proprietor is not to be made aware on what date the calibration checks are to be conducted and will provide the consultant access to the limiter.*
- c. *A piston phone check of the noise limiter must be completed by the consultant every twelve months, the result reported to Council and a copy kept on the premises available at all times.*
- d. *Field calibration check results (times and levels), serial numbers and laboratory calibration parameters of all other instrumentation and calibrators used in the process of setting and calibrating the noise limiter must be reported.*
- e. *$L_{Aeq 1 \text{ minute}}$ 1/1 octave band (31.5Hz to 8kHz centre frequencies inclusive) measurement results internal and external of hand held sound level meters used to assist in setting the noise limiter must be reported to the satisfaction of council.*

Additionally, a white noise signal must be played through the noise amplification system in order to set the maximum permissible broadband level of the noise limiter. The results are to be reported.

- f. *Finally, where necessary and where complex signal processing equipment is used to limit noise, the maximum A-Weighted LAF Sound Pressure Levels which are not to be exceeded in any 1/1 octave band 31.5Hz – 16kHz inclusive, within each of the rooms with noise amplification equipment are to be specified such that the noise control approval conditions cannot be exceeded must be reported.*
- g. *All noise amplification equipment must be controlled by the noise limitation device as detailed in (a) above.*
- h. *Access to noise limiter settings must be restricted to the Licensee or manager of the premises. The limiter settings/calibration levels must be available to Council officers upon request.*
- i. *The Acoustic consultant must submit Certificate of Compliance to the Council to certify that the limiters are installed and calibrated to satisfy of Council's noise criteria for the licensed venues.*

Note: Suitably qualified Acoustic Consultant means a consultant who possesses the qualifications to render them eligible for membership of the Australian Acoustics Society, Institution of Engineers Australia or the Association of Australian Acoustic Consultants at the grade of member.

(4) DEMOLITION, EXCAVATION AND CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN

The plan must include but not be limited to the following:-

- a. identification of noise sensitive receivers near to the site.
- b. A prediction as to the level of noise impact likely to affect the nearest noise sensitive receivers from the use and proposed number of high noise intrusive appliances intended to be operated onsite. A statement should also be submitted outlining whether or not predicted noise levels will comply with the noise criteria stated within the City of Sydney Construction Hours /Noise Code of Practice 1992 for the typical construction hours of 7.00am to 7.00pm. Where resultant site noise levels are likely to be in exceedance of this noise criteria then a suitable proposal must be given as to the duration and frequency of respite periods that will be afforded to the occupiers of neighbouring property.
- c. A representative background noise measurement ($L_{A90, 15 \text{ minute}}$) should be submitted, assessed in the vicinity of any potentially affected receiver locations and measured in accordance with AS 1055:1.2.1997.
- d. Confirmation of the level of community consultation that has/is and will be undertaken with Building Managers/ occupiers of the main adjoining noise sensitive properties likely to be most affected by site works and the operation of plant/machinery particularly during the demolition and excavation phases.
- e. Confirmation of noise monitoring methodology that is to be undertaken during the main stages of work at neighbouring noise sensitive properties in order to keep complaints to a minimum and to ensure that noise from site works complies with the noise criteria contained within City's Construction Noise Code.
- f. What course of action will be undertaken following receipt of a complaint concerning offensive noise.
- g. Details of any noise mitigation measures that have been outlined by an acoustic consultant or otherwise that will be deployed on site to reduce noise impacts on the occupiers of neighbouring noise sensitive property to a minimum.
- h. What plant and equipment is to be used on site, the level of sound mitigation measures to be undertaken in each case and the criteria adopted in their selection taking into account the likely noise impacts on the occupiers of neighbouring property and other less intrusive technologies available.

(5) ADDITIONAL NOISE CONDITIONS FOR LICENSED PREMISES OR ENTERTAINMENT VENUES

A suitably qualified acoustic consultant must be engaged by the proponent before the entertainment commences and details of that appointment must be submitted to Council's Health & Building Unit.

During the first 60 days of entertainment being provided at the premises, the consultant must complete the following work in accordance with the given conditions.

- a. The acoustic consultant must:
 - i. Measure and verify that the noise emanating from the premises complies with the noise criteria in the "Noise Use – Licensed Premises and Entertainment Venues" condition; and
 - ii. If necessary, make recommendations to ensure that the noise emanating from the premises complies with the noise criteria in "Noise Use – Licensed Premises and Entertainment Venues" condition.
- b. The noise measurements and any recommendations must:
 - i. Be undertaken without the knowledge of the applicant, manager or operator of the premises; and
 - ii. Be taken on at least three different occasions on three different days of the week (excluding Monday, Tuesday and Wednesday) from 11.00pm until the end of the entertainment or the close of business, whichever occurs first; and

- iii. Be submitted in writing to the satisfaction of Council's Health & Building Compliance unit within 5 weeks of the testing.
- c. If the acoustic consultant recommends that additional treatment or works be undertaken under as per (a) and (b) above, a plan of action to affect those recommendations must be:
 - i. Submitted to the satisfaction of Council's Health & Building Unit in writing alongside other particulars in (b)(ii) above; and
 - ii. Be implemented to the acoustic consultant's and the Council's satisfaction by the proponent within two (2) months from the date referenced in written agreement from the Area Manager, Health & Building. A follow up assessment and written report in accordance with parts (a), (b) and (c) of this condition will be required to verify that the subsequent controls are in affect and working.

If the acoustic consultant's recommendations are not implemented in accordance with this condition, the premises must not be used for entertainment in a manner that does not comply with noise control approval conditions until such time as the recommendations are implemented and verified.

Note: Suitably qualified Acoustic Consultant means a consultant who possesses the qualifications to render them eligible for membership of the Australian Acoustics Society, Institution of Engineers Australia or the Association of Australian Acoustic Consultants at the grade of member.

(6) COMMON PROPERTY MUSIC PRACTICE ROOM - ACOUSTIC REQUIREMENTS

The Music Practice Room (music room) must remain common property and be provided and maintained for the use of all residents and achieve the following acoustic requirements:

- a. [Planner – include where a music room wall forms an adjoining construction to another separate dwelling], The [Planner to specify wall/s] must have an airborne sound insulation rating equal to or greater than RW + Ctr of 58.
- b. [Planner – include where the ceiling of a music room forms the part of an adjoining floor/ceiling construction to a separate dwelling]. The ceiling must have an airborne sound insulation rating equal to or greater than RW + Ctr of 58. In this instance, to prevent flanking paths for noise, the walls and ceiling must meet the deemed to satisfy provisions F5.5 (e) and F5.5 (f) of the Volume One (Class 2-9) of the National Construction Code.
- c. Music Room door systems (door, frame & seal) must achieve an airborne sound insulation rating of Rw 45, and windows (combined glass frame and seal) must achieve an Rw 40. Windows to the façade of a building must be of minimum necessary dimensions, per the requirements of the Building Code of Australia. Access doors must be to common property accessible by all building occupants.
- d. The floor is to be carpeted.

Proposed noise criteria for new residential noise-sensitive developments and venues

Table 1 Proposed criteria for new residential or noise-sensitive development and venues

Area	Noise Criteria	Technical Description
New residential/ noise-sensitive development	Residential design criteria	Bedrooms LAeq,(period) <35dB(A), day and evening LAeq,(period) <30dB(A), night time Other habitable areas LAeq,(period) <35dB(A), all times
New venues	Venue design criteria – set relative to existing rating background noise level and closest existing noise-sensitive receiver	Day and evening: LAeq, 5min = Rating background level + 5 dB Night time: LAeq, 5min = Rating background level + 0 dB (current practice)

Table 2 *Technical parameters for the proposed noise criteria*

Parameter	Proposal/Options
Sound level descriptor	Leq (equivalent continuous sound level)
Measurement period	New residential/noise-sensitive development: 5-minute or 1-hr measurement period New venues: 5-minute measurement period for new venues
Low-Frequency noise	New residential/noise-sensitive development: Option 1
	LCeq,5min – LAeq,5min < 20 dB, or If LCeq,5min – LAeq,5min > 20 dB, logarithmic summation of 10–80 Hz 1/3 octave bands shall not exceed LAeq,5min 25 dB(A)
	Option 2
	Not greater than LLeq,5min 43 dB in any one-third octave band between and including 31.5 Hz to 125Hz in a bedroom not associated with the development, and Not greater than LLeq,5min 45 dB in any one-third octave band between and including 31.5 Hz to 125Hz in a living room not associated with the development. New venues:
	Option 1
	Broadband dB(A) criteria and 1/1 octave bands 63 Hz-125 Hz inclusive
	Option 2
	Broadband dB(C) criteria and 1/3 octave bands 63 Hz-125 Hz inclusive
Night time	Inaudibility: No inaudibility criteria for night time Duration: 7 hours (current practice) or 8 hours (based on Night Noise Guidelines for Europe) Time/options: From 10pm, 11pm, or 12am Different time for weekend nights
Measurement location	New residential/noise-sensitive development: Measured inside bedrooms and other habitable areas in dwellings (current practice) New venues: Measured at the boundary of the closest affected existing noise receiver (current practice) Self-monitoring for venues: The fixed venue design criteria will be converted to an internal monitoring level, to allow venues to monitor their own noise from inside the premises. Compliance for authorities: The venue design criteria will be converted to an external compliance level, measured immediately outside the venue so that compliance authorities can assess noise without having to enter the venue.

Sound level descriptor

Leq, or 'equivalent continuous sound level', is a widely-used parameter used for sound levels that fluctuate over time.

This parameter better represents the noise a person is exposed to due to entertainment uses, compared to L₁₀, that only represents the noise level exceeded just for 10% of the measurement period or L_{Max} that describes the highest sound level spike during measurement. This parameter is

also easier to apply as it is more mathematically robust when considering contributing levels from various noise sources.

Period

A 5-minute measurement period is proposed for new development. This will account for short-term changes to noise levels. Noise level changes are typical in areas with entertainment uses where sound levels fluctuate with activity, such as people opening doors or temporarily gathering in one area.

Alternatively, the 1-hour measurement period based on Sydney Development Control Plan requirements could be retained for new residential development.

Low frequency noise

Low frequency noise is difficult to mitigate as it passes through most building materials. Standard double glazing can block out mid-range noise such as people talking or traffic. However, low frequency, or bass, will still pass through. Its impact could therefore be accentuated due to its rhythm and the lack of mid-range noise to mask it.

The City is considering the following options on how to resolve issues with low frequency noise based on accuracy and simplicity of assessment:

Low frequency noise criteria for new residential or noise-sensitive development

Option	Parameter	Description
1	L _{Ceq,5min} – L _{Aeq,5min} < 20 dB, or If L _{Ceq,5min} – L _{Aeq,5min} > 20 dB, logarithmic summation of 10–80 Hz 1/3 octave bands shall not exceed L _{Aeq,5min} 25 dB(A)	A two-step approach that checks the presence of low frequency noise and analyses ways of managing it The assessment uses the equivalent continuous technique analysed over a five minute period across the low frequency noise spectrum
2	Not greater than L _{Leq,5min} 43 dB in any one-third octave band between and including 31.5 Hz to 125 Hz in a bedroom not associated with the development, and Not greater than L _{Leq,5min} 45 dB in any one-third octave band between and including 31.5 Hz to 125 Hz in a living room not associated with the development	The assessment uses the equivalent continuous technique analysed over a five minute period across the low frequency spectrum of noise This is a variation of the Fortitude Valley Special Entertainment area approach in Brisbane The requirement is set as an internal noise level instead of a reduction coefficient at the facade

Low-frequency noise criteria for new venues

Option	Parameter	Description
1	Broadband dB(A) criteria and 1/1 octave bands 63 Hz-125 Hz inclusive	Generally addresses patron and mid-range amplified frequency noise
2	Broadband dB(C) criteria and 1/3 octave bands 63 Hz-125 Hz inclusive	Generally addresses patron and mid low-frequency noise

Night-time period and audibility

The current approach to entertainment noise applies an inaudibility criteria between 12am to 7am for new development. However, audibility is subjective and difficult to predict. This contributes to uncertainty for venues and often leads to overly conservative and costly requirements to new development.

We propose to no longer use an inaudibility criterion in the night time period. Instead, new residential development will have to design to a fixed criteria of 30dB(A) to reduce sleep disturbance as suggested by

the World Health Organisation's Guidelines for Community Noise. New venues will have a rating background noise level + 0dB consistent with the City's current practice and the NSW Industrial Noise Policy.

We will also consider changing the hours of the night time period when stricter noise levels are set. Currently, the night time period is for 7 hours from 12am to 7am. The Night Noise Guidelines for Europe suggest a minimum of 8 hours of night-time to protect 50 per cent of people from sleep disturbance.

Depending on feedback we will consider alternatives such as an

8-hour period, starting the period at 10pm, 11pm or 12am and having a different period on weekend nights.

Measurement location

New residential development will be required to achieve the residential design criteria. This is a fixed internal sound level measured within bedrooms and other habitable areas, consistent with the City's current practice.

For new venues, the venue design criteria will be set at the property boundary of the closest affected existing noise receiver. Again, this is a continuation of current practice.

We will introduce two new locations where monitoring of noise can be carried out without access to either a dwelling or a venue. There will be a internal monitoring level to allow venues to monitor their own noise levels against their development consent. There will also be an external noise level to allow compliance authorities to check that the noise from the venue is consistent with that consent. These measuring locations are shown in Figure 7.

Noise measurement and natural ventilation

Measuring noise levels at residential dwellings with windows open for natural ventilation could make it very difficult and costly for new venues to meet the proposed noise criteria.

For new residential development, we propose to maintain the City's current practice of measuring noise levels with windows closed, as long as the building is designed to still get natural ventilation.

New residential buildings may need to employ good design to both manage the noise from venues and achieve natural ventilation.

This would allow commercial and night time areas of our city to maintain the entertainment and activity they have always had.

For new venues, the acceptable noise level will need to be achieved outside a dwelling at the property boundary of the closest existing residence. This will enable windows to be opened for natural ventilation or closed for additional protection from noise.

Appendix E

Liquor Amendment (24-hour Economy)

Bill 2020 – noise related excerpts

Relevant noise and noise regulation amendments – Liquor Amendment (24-hour Economy) Bill 2020, NSW

4.2 Liquor Regulation 2018

[1] Clause 3 Definitions

Insert after clause 3(1)—

(1A) For the purposes of this Regulation, references to **sound** and **noise** are taken to have the same meaning.

4.5 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

Part 2, Division 1 General Exempt Development Code

Insert after Subdivision 15AA—

Subdivision 15AB Entertainment associated with food and drink premises

2.30AC Specified development

Low impact performance of live music or arts is development specified for this code if it is not carried out in a residential zone.

2.30AD Specified development

- (1) The standards specified for this development are that the development—
 - (a) must be carried on inside a building, and
 - (b) must not contravene an existing relevant condition of the most recent development consent, other than a complying development certificate, that applies to the premises,
 - (c) must not contravene the *Protection of the Environment Operations Act 1997*, and
 - (d) must not be primarily used for adult entertainment, including, for example, a strip club, and
 - (e) must not be carried on in connection with a proposed change of use of premises.
- (2) In this clause—

existing relevant condition means a condition relating to any of the following—

 - (a) the number of persons permitted in the building,
 - (b) hours of operation,
 - (c) noise, other than a condition mentioned in the *Liquor Act 2017*, Schedule 1, clause 70(1),
 - (d) car parking, vehicular movement and traffic generation,
 - (e) loading management of waste,
 - (f) landscaping.

4.7 Local Government Act 1993 No 30

[1] Chapter 8, Part 3

Insert after section 201—

Part 3 Special entertainment precincts

202 Special entertainment precinct

- (1) This section is about establishing a special entertainment precinct.
- (2) A **special entertainment precinct** is an area in which—
 - (a) amplified music that is played in the area is regulated by or under a law other than the *Liquor Act 2007*, and
 - (b) requirements about noise attenuation apply to certain types of development in the area, and
 - (c) dedicated live music and performance venues are authorised to trade for an additional 30 minutes under the *Liquor Act 2007*, section 12A.
- (3) A council may establish a special entertainment precinct in its area by amending its local environmental plan to identify the special entertainment precinct.
- (4) A special entertainment precinct may consist of—

- (a) a single premises, or
 - (b) a precinct, streetscape or otherwise defined locality in the council's area.
- (5) If a council establishes a special entertainment precinct, the council must—
 - (a) prepare a plan for regulating noise from amplified music from premises in the special entertainment precinct and publish it on the council's website, and
 - (b) notify the following persons about the special entertainment precinct including, for example, by notice published on its website or a notation on planning certificates for land in the precinct—
 - (i) residents living in the area,
 - (ii) persons moving into the area.
- (6) In this section—
dedicated live music and performances venue has the same meaning as in the *Liquor Act 2007*.

planning certificate means a certificate under section 10.7 of the *Environmental Planning and Assessment Act 1979*.

203 Minister's guidelines

- (1) The Minister may, by notice published on the Department's website, issue, adopt or vary guidelines about—
 - (a) the establishment of special entertainment precincts, and
 - (b) the operation, revocation or suspension of special entertainment precincts.
- (2) A council must act in accordance with a guideline under subsection (1) in exercising its functions under this Part.

Schedule 6 Amendment of Environmental Planning and Assessment Act 1979 No 203

Schedule 8 Special provisions

Insert before Part 4—

Part 1 Playing and performing music

1 Modifications involving playing and performing music

- (1) A council for a local government area may, by notice published on the council's website, modify development consents for licensed premises by declaring that all conditions of the development consents that are live entertainment conditions do not apply—
 - (a) in the local government area, or
 - (b) in a suburb in the local government area, or
 - (c) to a specified use of land in the local government area or a suburb.
- (2) Before publishing a notice under subclause (1), the council must—
 - (a) publish on the council's website, and in other ways the council considers appropriate, a notice that—
 - (i) states the council proposes to modify the development consent, and
 - (ii) gives details of the conditions that will be affected by the modification, and
 - (iii) invites submissions from the community about the proposed modification within the period, not less than 14 days after the day the notice is published, stated in the notice, and
 - (b) consider any submissions received in accordance with the notice and the impact of the proposed modification on the community.
- (3) The notice is taken to have effect on the day the notice is published, or a later date specified by the notice.
- (4) A condition to which the notice relates ceases to have effect from the time the notice takes effect.
- (5) Section 4.55 does not apply to a modification under this clause.
- (6) In this clause—
live entertainment condition—
 - (a) means a condition mentioned in the *Liquor Act 2007*, Schedule 1, clause 70(1)(a)–(h), but
 - (b) does not include a condition relating to noise.

Schedule 7 Amendment of Standard Instrument (Local Environmental Plans) Order 2006

Standard instrument

Insert after clause 5.19—

5.20 Standards that cannot be used to refuse consent—playing and performing music [compulsory]

- (1) The consent authority must not refuse consent to development in relation to licensed premises on the following grounds—
 - (a) the playing or performance of music, including the following—
 - (i) the genre of music played or performed, or
 - (ii) whether the music played or performed is live or amplified, or
 - (iii) whether the music played or performed is original music, or
 - (iv) the number of musicians or live entertainment acts playing or performing, or
 - (v) the type of instruments played,
 - (b) whether dancing occurs,
 - (c) the presence or use of a dance floor or another area ordinarily used for dancing,
 - (d) the direction in which a stage for players or performers faces,
 - (e) the decorations to be used, including, for example, mirror balls, or lighting used by players or performers.
- (2) The consent authority must not refuse consent to development in relation to licensed premises on the grounds of noise caused by the playing or performance of music, if the consent authority is satisfied the noise may be managed and minimised to an acceptable level.
- (3) In this clause—

licensed premises has the same meaning as in the *Liquor Act 2007*.

Schedule 4 Miscellaneous amendments of Liquor Act 2007 and regulation

70 Certain live entertainment conditions cease to have effect

- (1) This clause applies to any of the following conditions (a live entertainment condition) of a licence that are in force immediately before the commencement—
 - (a) a condition that restricts the genre of music that may be played or performed on the licensed premises,
 - (b) a condition that restricts the number of musicians or live entertainment acts that may perform on the licensed premises,
 - (c) a condition that restricts what type of instruments may be played on the licensed premises,
 - (d) a condition that restricts the performance of original music,
 - (e) a condition that restricts a stage for live performers from facing a particular direction,
 - (f) a condition that restricts decorations, including, for example, mirror balls, or lighting used by musicians,
 - (g) a condition that prohibits live music, live entertainment or the amplification of a musical instrument at all times or across the entire licensed premises,
 - (h) a condition that prohibits or restricts the presence or use of a dance floor or another area ordinarily used for dancing.
- (2) From the commencement of this clause, the live entertainment condition ceases to have effect.
- (3) However, despite subclause (2), the Secretary may impose a condition relating to noise abatement on a licence if—
 - (a) the Secretary receives a written complaint from—
 - (i) an occupier of neighbouring premises of the licensed premises, or
 - (ii) the local consent authority for the licensed premises, or
 - (iii) the Commissioner of Police, and
 - (b) the Secretary is satisfied the quiet and good order of the neighbourhood of the licensed premises are being unduly disturbed as a result of the conditions mentioned in subclause (1) ceasing to have effect.
- (4) Section 80 does not apply to a complaint referred to in subclause (3)(a).

- (5) To remove any doubt, this clause does not affect another condition that may impact on entertainment that is provided on the licensed premises, or an area adjacent to the premises.
Example. A condition relating to noise abatement
- (6) In this clause—
neighbouring premises has the meaning given by the regulations.

71 **Entertainment conditions not to be imposed**

- (1) From the commencement of this clause, an entertainment condition may not be imposed on a licence.
- (2) However, subclause (1) does not apply to—
 - (a) an entertainment condition imposed in response to a complaint made under section 79, or
 - (b) an entertainment condition relating to adult entertainment of a sexual nature.
- (3) From the commencement of this clause, a live entertainment condition may not be imposed on a licence.
- (4) However, subclause (3) does not apply to a live entertainment condition relating to adult entertainment of a sexual nature.
- (5) To remove any doubt, this clause does not prevent an entertainment condition in force immediately before the commencement of this clause being varied or revoked.
- (6) In this clause—
entertainment condition means a condition of a licence that has the effect of limiting—
 - (a) the entertainment that may be provided on licensed premises or an area adjacent to licensed premises, or
 - (b) the way in which entertainment may be provided on licensed premises or an area adjacent to licensed premises.**live entertainment condition** means a condition referred to in clause 70(1)



ghd.com

→ **The Power of Commitment**