

ATTACHMENT 1 - QUIET HOUSE DESIGN REQUIREMENTS

Provisions as per Herring Storer Acoustics Noise Management Plan (26988-1-20217) dated 10 December 2020 and Noise Management Plan (28567-20217-02) dated 10 November 2021.


PACKAGE A

Road Traffic and Passenger Rail Quiet House Requirements (Based on Table 3 of State Planning Policy 5.4.2019)

Acoustic rating and example constructions

Exposure Category	Orientation to corridor	Walls	External Doors	Windows	Roofs and ceilings of highest floors	Outdoor living areas	Mechanical ventilation / air conditioning considerations
A Quiet House A	Facing	<p>Bedroom and Indoor Living and work areas to $R_w + C_{tr}$ 45dB</p> <p>Stud frame walls</p> <ul style="list-style-type: none"> One row of 92mm studs at 60mm centres with: Resilient steel channels fixed to the outside of the studs; and 9.5mm hardboard or 9mm fibre cement weatherboards on one layer of 19mm board cladding fixed to the outside of the channels; and 75mm glass wool (11kg/m³) insulation, positioned between the studs; and Two layers of 16mm fire-protective grade plasterboard fixed to the inside face of the studs. 	<p>Bedrooms:</p> <ul style="list-style-type: none"> Fully glazed hinged door with certified R_w+C_{tr} 28dB rated door and frame including seals and 6mm glass. <p>Indoor Living and work areas:</p> <ul style="list-style-type: none"> 35mm solid core timber hinged door and frame system certified to R_w 28dB including seals: OR Glazed sliding door with 10mm glass and weather seals. 	<p>Bedrooms:</p> <ul style="list-style-type: none"> Total external door and window system area up to 40% of room floor area: Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing (R_w+C_{tr} 28dB). Sealed awning or casement windows may use 6mm glazing instead: OR Up to 60% floor area: as per above but must be sealed awning or casement type windows (R_w+C_{tr} 31dB). <p>Indoor Living and work areas</p> <ul style="list-style-type: none"> Up to 40% of floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (R_w+C_{tr} 25dB); OR Up to 60% floor area: As per Bedrooms at up to 40% area (R_w+C_{tr} 28dB); OR Up to 80% floor area: As per Bedrooms at up to 60% area (R_w+C_{tr} 31dB). 	<p>To R_w+C_{tr} 35dB:</p> <ul style="list-style-type: none"> Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling. 	<ul style="list-style-type: none"> At least one outdoor living area located on the opposite side of the building from the transport corridor and/or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2 metres height above ground level. 	<ul style="list-style-type: none"> Acoustically rated openings and ductwork to provide a minimum sound reduction performance of R_w 40dB into sensitive spaces. Evaporative systems require attenuated ceiling air vents to allow closed windows. Refrigerant-based systems need to be designed to achieve National Construction Code fresh air ventilation requirements. Openings such as eaves, vents and air inlets must be acoustically treated, closed or relocated to building sides facing away from the corridor where practicable.
	Side On	<p>Brick Walls</p> <ul style="list-style-type: none"> Single leaf of 150mm brick masonry with 13mm cement render on each face: OR Double brick: two leaves of 90mm clay brick masonry with a 20mm cavity between leaves. 	<p>Bedrooms:</p> <ul style="list-style-type: none"> As per 'Facing' above, except R_w+C_{tr} values may be 3dB less, eg: glazed sliding door with 10mm glass and weather seals for bedrooms. 	<p>Bedrooms:</p> <ul style="list-style-type: none"> As above, except R_w+C_{tr} values may be 3dB less, or max % area increased by 20%. 			
	Opposite			<p>No specific requirements</p>	<p>No specific requirements</p>		

This LDP has been approved by the City under Schedule 2, Clause 52(1)(e) of the Planning and Development (Local Planning Schemes) Regulations 2015.

 15/2/2024

Manager, Statutory Planning Date

LOCAL DEVELOPMENT PLAN 4

The provisions of this Local Development Plan (LDP) are in addition to any requirement under Local Planning Scheme No. 2, State Planning Policy 3.1 - Residential Design Codes (R Codes) or any development control provisions prescribed under a Local Structure Plan.

R Code variations for Baldvis Parks are in accordance with the Single House (RMD) Standards for Medium Density Housing at Table 1 of the approved Local Structure Plan, Part 1 - Statutory Section.

NOISE

- Buildings on the LDP identified as being noise affected (QHD) must be designed and constructed in accordance with the 'Transportation Noise Assessment' prepared by Herring Storer Acoustics dated 10 December 2020 and 10 November 2021.
- Should any 'affected' dwellings be proposed as double storey, they will require a specific assessment once the house plans are available. Such an assessment is to be undertaken by a suitably qualified acoustical consultant (being a member firm of the Association of Australian Acoustical Engineers) and submitted with the building permit application.

POS INTERFACE (Lots 1519 & 1546)

- Fencing to side boundaries abutting POS is permitted to be solid to a maximum height of 1.8m behind the primary street setback line.

SETBACKS

- Buildings, excluding garages (as defined by the R Codes) are permitted to be setback a minimum of 2m (no average) from the primary street boundary.

LEGEND

-  LDP Boundary
-  Acoustic Wall (2m high)
-  Acoustic Wall (3m high)
-  R25
-  QHD Lots Subject to Quiet House Design "Package A" (Herring Storer Acoustics - 10/12/2020 & 10/11/2021) See Attachment 1 in Sheet 2

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