



### LEGEND

- R30 LOTS
- R40 LOTS
- FOOTPATH
- RETAINING WALLS
- DESIGNATED GARAGE LOCATION
- \* QHD PACKAGE A
- \* QHD PACKAGE B
- \* QHD PACKAGE C
- BUSHFIRE ATTACK LEVEL 12.5
- + QHD NOTIFICATION ON TITLES
- ↖ CORNER LOT DESIGN
- ➔ PRIMARY DWELLING ORIENTATION
- ➔ SECONDARY DWELLING ORIENTATION

### ENDORSEMENT TABLE

This Local Development Plan has been approved by Council under clause 52(1)(a) of the deemed provisions of District Planning Scheme No.2

Manager Approval Services:  
City of Wanneroo

Date: 31/10/18

### LDP PROVISIONS

The provisions addressed below and accompanying plan relate to the Western Australian Planning Commission approved subdivision development WAPC Ref: 155283.

All requirements, other than those as detailed within this Local Development Plan (LDP), of the City of Wanneroo District Planning Scheme No.2, State Planning Policy 3.1 – Residential Design Codes (R-Codes) and Local Planning Policy 4.19: Medium-Density Housing Standards (R-MD Codes) are to be satisfied.

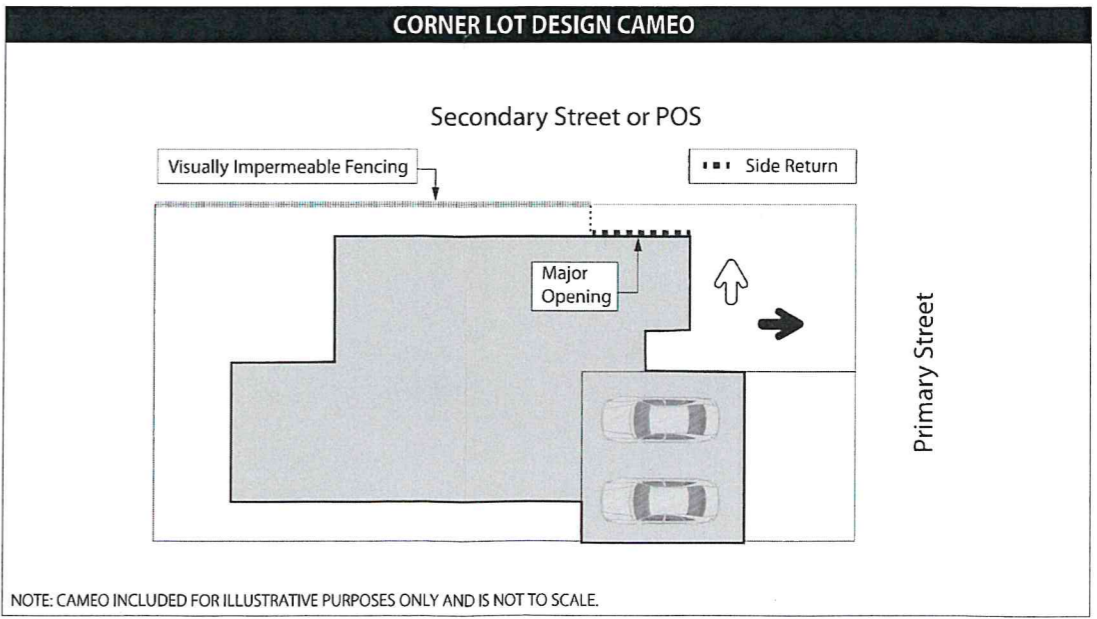
Consultation with the adjoining or other landowners to achieve a variation to the R-Codes or R-MD Codes, as provided by this LDP, is not required.

The following LDP standards represent variations to the R-Codes and constitutes 'Deemed to Comply' requirements pursuant to the R-Codes:

#### 1. BUILDING SETBACKS

Other Setbacks	Minimum
a) Garage Setbacks	i) For front loaded lots with street frontages between 10.5 and 12m, a double garage is permitted to a maximum width of 6m as viewed from the street subject to: <ul style="list-style-type: none"> <li>• garage setback a minimum of 0.5m behind the building alignment;</li> <li>• a major opening to a habitable room directly facing the primary street;</li> <li>• an entry feature consisting of a porch or veranda with a minimum depth of 1.2m; and</li> <li>• no vehicular crossover wider than 4.5m where it meets the street.</li> </ul> ii) Lots with a frontage less than 10.5m or not compliant with provision i) above shall only be developed with single or tandem garaging.           iii) Notwithstanding provision ii) above: <ol style="list-style-type: none"> <li>a. A double garage is permitted on Lot 894 in the designated location shown on the LDP. The garage must be setback a minimum of 1m from the street boundary.</li> <li>b. A double garage is permitted to Lots 1724 &amp; 1723 where two-storey or higher development is proposed.</li> </ol>

- #### 2. BUILDING FORM & ORIENTATION
- a) Dwellings nominated on 'corner lots' must address both the Primary and Secondary Streets. The design of dwellings shall include a side return which has at least one major opening facing the direction of the Secondary Street or Public Open Space where applicable. The side return shall be articulated so to present as an extension of the front elevation and shall be not obstructed by visually impermeable fencing.
- NB. Side return relates to the portion of the dwelling which addresses the Secondary Street.
- #### 3. VEHICULAR ACCESS AND GARAGES
- a) Designated garage locations apply to some lots as identified on the LDP, referencing the side of the lot to which the garage must be located. Designated garage locations do not prescribe boundary walls. All other garage/carport locations will be subject to the location of infrastructure services.
- #### 4. NOISE MANAGEMENT
- a) As defined in the *Quiet House Design and Notifications Review* (5 December 2017) prepared by Herring Storer Acoustics, the following Quiet House Design packages apply:
  - i) Package A to both floors of LDP Lots 885;
  - ii) Package B to both floors of LDP Lots 1721-1724; and
  - iii) Package C to ground and first floors of LDP Lots 919 – 920, 1725 – 1726, 1728 - 1735
- #### 5. BUSHFIRE MANAGEMENT
- a) All lots with a Bushfire Attack Level rating, as identified on the LDP plan, must comply with the requirements of the Bushfire Management Plan (June 2017), prepared by Strategen, which may be incorporated as part of the building permit application.



## LOCAL DEVELOPMENT PLAN No. 13

Amberton (Stages 21B, 21C & 22C)

Area	Orientation to road or rail corridor	Package A $L_{Aeq}$ Day up to 60dB $L_{Aeq}$ Night up to 55dB	Package B $L_{Aeq}$ Day up to 63dB $L_{Aeq}$ Night up to 58dB	Package C $L_{Aeq}$ Day up to 65dB $L_{Aeq}$ Night up to 60dB	
Bedrooms	Facing	<ul style="list-style-type: none"> <li>Walls to <math>R_w+C_{tr}</math> 45dB</li> <li>Windows and external door systems: Minimum <math>R_w+C_{tr}</math> 28dB (Table 6.4), total glazing area up to 40% of room floor area. [if <math>R_w+C_{tr}</math> 31dB: 60%] [if <math>R_w+C_{tr}</math> 34dB: 80%]</li> <li>Roof and ceiling to <math>R_w+C_{tr}</math> 35dB (1 layer 10mm plasterboard)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to <math>R_w+C_{tr}</math> 50dB</li> <li>Windows and external door systems: Minimum <math>R_w+C_{tr}</math> 31dB (Table 6.4), total glazing area up to 40% of room floor area. [if <math>R_w+C_{tr}</math> 34dB: 60%]</li> <li>Roof and ceiling to <math>R_w+C_{tr}</math> 35dB (1 layer 10mm plasterboard)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to <math>R_w+C_{tr}</math> 50dB</li> <li>Windows and external door systems: Minimum <math>R_w+C_{tr}</math> 34dB (Table 6.4), total glazing area limited to 40% of room floor area [if 20% of floor area or less, <math>R_w+C_{tr}</math> 31dB]</li> <li>Roof and ceiling to <math>R_w+C_{tr}</math> 40dB (2 layers 10mm plasterboard)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	
	Side-on	•As above, except glazing $R_w+C_{tr}$ values for each package may be 3dB less, or max % area increased by 20%			
	Opposite	• No requirements	• As per Package A 'Side On'	• As per Package A 'Facing'	
Indoor living and work Areas	Facing	<ul style="list-style-type: none"> <li>Walls to <math>R_w+C_{tr}</math> 45dB</li> <li>Windows and external door systems: Minimum <math>R_w+C_{tr}</math> 25dB (Table 6.4), total glazing area limited to 40% of room floor area. [if <math>R_w+C_{tr}</math> 28dB: 60%] [if <math>R_w+C_{tr}</math> 31dB: 80%]</li> <li>External doors other than glass doors to <math>R_w+C_{tr}</math> 26dB (Table 6.4)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to <math>R_w+C_{tr}</math> 50dB</li> <li>Windows and external door systems: Minimum <math>R_w+C_{tr}</math> 28dB (Table 6.4), total glazing area up to 40% of room floor area. [if <math>R_w+C_{tr}</math> 31dB: 60%] [if <math>R_w+C_{tr}</math> 34dB: 80%]</li> <li>External doors other than glass doors to <math>R_w+C_{tr}</math> 26dB (Table 6.4)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	<ul style="list-style-type: none"> <li>Walls to <math>R_w+C_{tr}</math> 50dB</li> <li>Windows and external door systems: Minimum <math>R_w+C_{tr}</math> 31dB (Table 6.4), total glazing area up to 40% of room floor area. [if <math>R_w+C_{tr}</math> 34dB: 60%]</li> <li>External doors other than glass doors to <math>R_w+C_{tr}</math> 30dB (Table 6.4)</li> <li>Mechanical ventilation as per Section 6.3.1</li> </ul>	
	Side-on	• As above, except the glazing $R_w+C_{tr}$ values for each package may be 3dB less, or max % area increased by 20%			
	Opposite	• No requirements	• As per Package A 'Side On'	• As per Package A 'Facing'	
Other indoor areas	Any	• No requirements	• No requirements	• No requirements	
Outdoor living areas	Any (Section 6.2.3)	<ul style="list-style-type: none"> <li>As per Package C, and/or</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>As per Package C, and/or</li> <li>At least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level</li> </ul>	<ul style="list-style-type: none"> <li>At least one outdoor living area located on the opposite side of the building from the transport corridor</li> </ul>	

Alternative constructions are acceptable, provided they are supported by an report prepared by an suitably qualified Acoustical Consultant.

**MINIMUM ACOUSTIC RATING OF SELECTED EXTERNAL BUILDING EXTERIOR WALLS**

Building Element	Type	$R_w + C_{tr}, dB$	Example Constructions
External wall	Steel framed	45	<p>One row of 92mm studs at 600mm centres with –</p> <ul style="list-style-type: none"> <li>• resilient steel channels fixed to the outside of the studs; and</li> <li>• 9.5mm hardboard or 9mm fibre cement sheeting or 11mm fibre cement weatherboards fixed to the outside of the channels; and</li> <li>• 75mm thick glass or mineral wool insulation with a density of 11kg/m<sup>3</sup> or</li> <li>• 75mm thick polyester insulation with a density of 14kg/m<sup>3</sup>, positioned between the studs; and</li> <li>• two layers of 16mm fire-protective grade plasterboard fixed to the inside face of the studs.</li> </ul> <p>One row of 92mm studs at 600mm centres with –</p> <ul style="list-style-type: none"> <li>• resilient steel channels fixed to the outside of the studs; and</li> <li>• one layer of 19mm board cladding fixed to the outside of the channels; and</li> <li>• 6mm fibre cement sheets fixed to the inside of the channels; and</li> <li>• 75mm thick glass or mineral wool insulation with a density of 11 kg/m<sup>3</sup> or</li> <li>• 75mm thick polyester insulation with a density of 14 kg/m<sup>3</sup>, positioned between the studs; and</li> <li>• two layers of 16mm fire-protective grade plasterboard fixed to the inside face of the studs.</li> </ul>
	Single leaf masonry, brick veneer	45	<ul style="list-style-type: none"> <li>• Single leaf of 150mm brick masonry with 13mm cement render on each face.</li> </ul>
		50	<p>Single leaf of 90mm clay brick masonry with –</p> <ul style="list-style-type: none"> <li>• a row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; and</li> <li>• a cavity of 25mm between leaves; and</li> <li>• 75mm thick glass or mineral wool insulation with a density of 11kg/m<sup>3</sup> or 75mm thick polyester insulation with a density of 14kg/m<sup>3</sup> positioned between studs; and</li> <li>• one layer of 10mm plasterboard fixed to the inside face.</li> </ul> <p>Single leaf of 220mm brick masonry with 13mm cement render on each face.</p> <p>150mm thick unlined concrete panel.</p> <p>200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face.</p>
		45	Two leaves of 90mm clay brick masonry with a 20mm cavity between leaves.
		50	<p>Two leaves of 90mm clay brick masonry with –</p> <ul style="list-style-type: none"> <li>• a 50mm cavity between leaves; and</li> <li>• 50mm thick glass wool insulation with a density of 11kg/m<sup>3</sup> or 50mm thick polyester insulation with a density of 14 kg/m<sup>3</sup> in the cavity; and</li> <li>• Where wall ties are required to connect leaves, the ties are of the resilient type.</li> </ul> <p>Two leaves of 110mm clay brick masonry with –</p> <ul style="list-style-type: none"> <li>• a 50mm cavity between leaves; and</li> <li>• 50mm thick glass wool insulation with a density of 11kg/m<sup>3</sup> or 50mm thick polyester insulation with a density of 14 kg/m<sup>3</sup> in the cavity.</li> </ul>

**MINIMUM ACOUSTIC RATING OF GLAZED ELEMENTS**

Building Element	Type	Airborne weighted sound reduction rating with traffic correction $R_w+C_{tr}$ , dB	Building element Type Airborne weighted sound
Window, uPVC, aluminium or timber frame	Sliding or double hung opening	23	<ul style="list-style-type: none"> <li>• 4mm monolithic glass</li> </ul>
		26	<ul style="list-style-type: none"> <li>• Single pane glazing to <math>R_w</math> 33dB</li> <li>• 6mm monolithic or laminated glass</li> <li>• 6mm toughened safety glass</li> <li>• '6-12-6' double insulated glass unit (IGU)</li> </ul>
		29	<ul style="list-style-type: none"> <li>• Single pane glazing to <math>R_w</math> 36dB</li> <li>• 10mm monolithic (aka float) glass</li> <li>• 10mm laminated or toughened safety glass</li> <li>• 6mm-12mm-10mm double insulating</li> </ul>
	Fixed sash, awning or casement type opening	26	<ul style="list-style-type: none"> <li>• 4mm monolithic glass</li> </ul>
		31	<ul style="list-style-type: none"> <li>• Single pane glazing to <math>R_w</math> 33dB</li> <li>• 6mm monolithic or laminated glass</li> <li>• 6mm toughened safety glass</li> <li>• '6-12-6' double insulated glass unit (IGU)</li> </ul>
		34	<ul style="list-style-type: none"> <li>• Single pane glazing to <math>R_w</math> 36dB</li> <li>• 10mm monolithic (a.k.a. float) glass</li> <li>• 10mm laminated or toughened safety glass</li> <li>• 6mm-12mm-10mm double insulated glass unit (IGU)</li> </ul>
Single external door, aluminium uPVC or timber frame	Fully glazed sliding door	24	<ul style="list-style-type: none"> <li>• 6mm monolithic or laminated</li> <li>• 5 or 6mm toughened safety glass</li> </ul>
		27	<ul style="list-style-type: none"> <li>• 10mm monolithic or laminated</li> <li>• 10mm toughened safety glass</li> </ul>
	Fully glazed hinged door	28	<ul style="list-style-type: none"> <li>• Certified <math>R_w</math> 31dB acoustically rated door and frame including seals</li> <li>• 6mm monolithic or laminated</li> <li>• 5 or 6mm toughened safety glass</li> </ul>
		31	<ul style="list-style-type: none"> <li>• Certified <math>R_w</math> 34dB acoustically rated door and frame including seals</li> <li>• 10mm monolithic or laminated</li> <li>• 10mm toughened safety glass</li> </ul>
	Solid core timber frame, side hinged	26	<ul style="list-style-type: none"> <li>• Certified <math>R_w</math> 28dB acoustically rated door and frame system including seals</li> <li>• 35mm solid core timber</li> </ul>
		30	<ul style="list-style-type: none"> <li>• Certified <math>R_w</math> 32dB acoustically rated door and frame system including seals</li> <li>• 40mm solid core timber without glass insert</li> <li>• 40mm solid core timber with not less than 6mm</li> </ul>