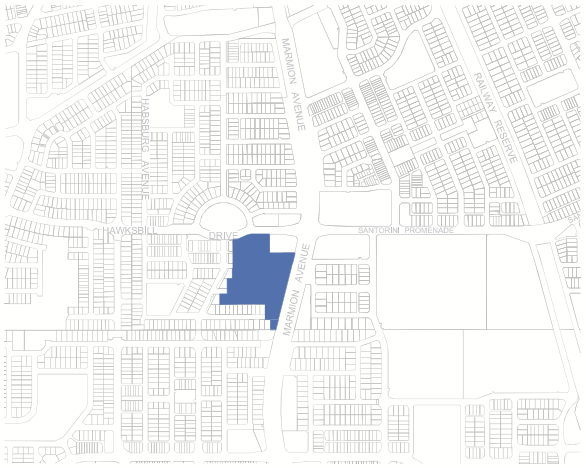
Location Plan



Local Development Plan Provisions

1.0 PRELIMINARY

1.1 Consultation with the adjoining or other landowners to achieve a variation to the Residential Design Codes Volume 1 (R-Codes Volume 1) or Local Planning Policy 4.19: Medium-Density Housing Standards (LPP 4.19) (as applicable), as provided by this Local Development Plan (LDP), is not required.

All requirements, other than those as detailed within this LDP, of the City of Wanneroo *District Planning Scheme No. 2* (DPS 2), R-Codes Volume 1 and LPP 4.19 are to be satisfied.

The development standards contained in this LDP apply in addition to those development requirements of the City of Wanneroo DPS 2, Agreed Structure Plan 60 – Lots 1011 & 1002 Marmion Avenue, Alkimos, any relevant planning policy (including LPP 4.19 and the R-Codes Volume 1) as applicable.

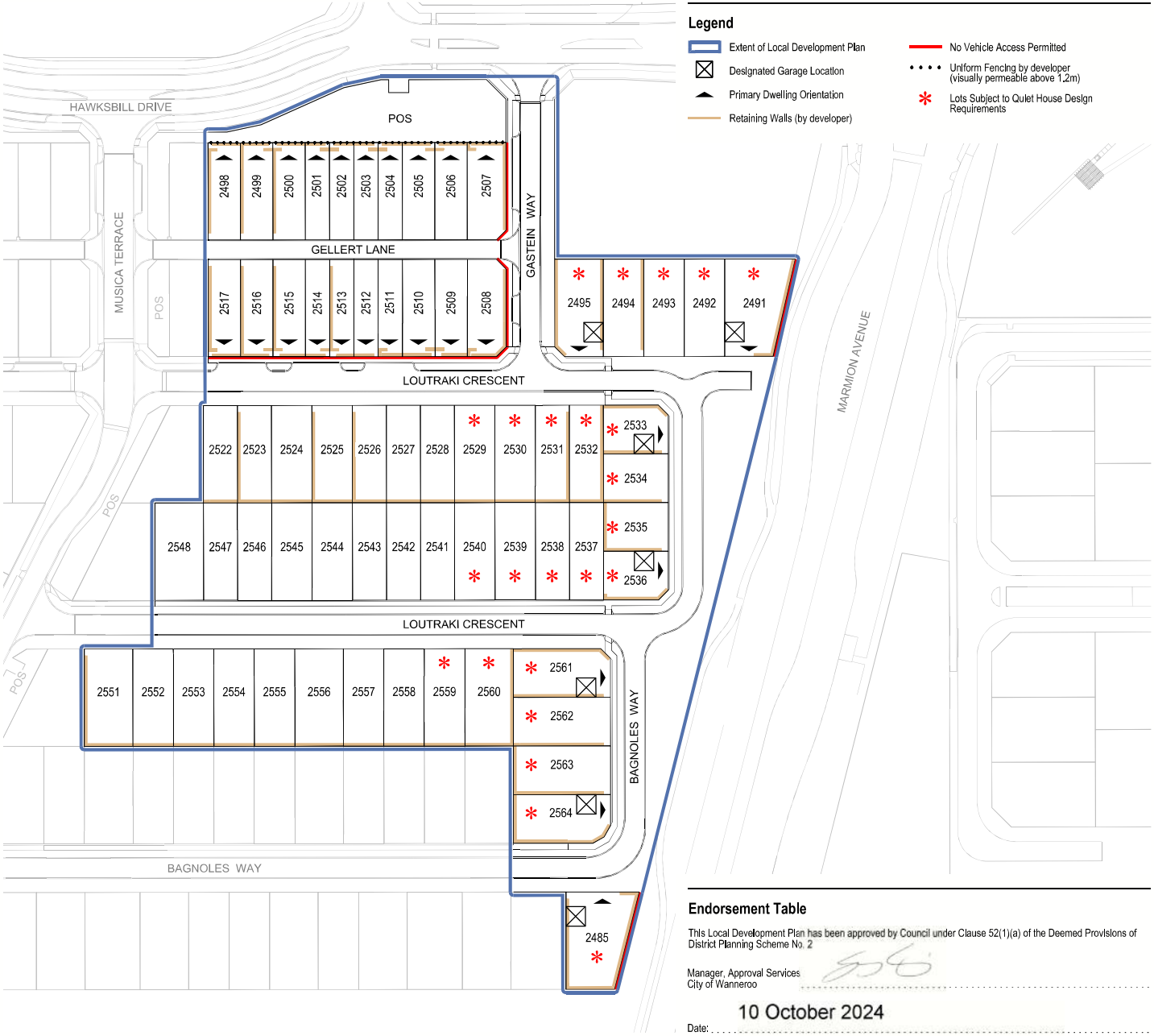
Notwithstanding the above, as at 10 April 2026, the City's LPP 4.19 will no longer apply to lots zoned R60 and the R-Codes Volume 1 will prevail unless otherwise approved by the City of Wanneroo.

2.0 DEVELOPMENT STANDARDS

2.1 For Lots 2498-2507 directly orientated to Public Open Space (POS), a minimum 2.0m setback to the POS boundary is permitted.
2.2 For Lots 2498-2507, dwellings shall have one or more major opening(s) to a habitable room facing north to the POS.
2.3 For Lots 2498-2507, all clothes drying areas and outbuildings shall be screened from view and not visible from the POS.
2.3 For Lots 2485, 2491, 2495, 2533, 2536, 2561 and 2564, garage locations are to be provided as shown on the LDP.

3.0 ACOUSTIC REQUIREMENTS

LOTS APPLICABLE	REQUIREMENTS
Lots 2485, 2491-2495, 2529-2540, 2559-2564	4.1 Façade protection treatments (Quiet House Design Measures) as defined in the Lloyd George Transportation Noise Assessment dated 9 January 2024 are required for the following: Ground Floor: Lots 2494-2495, 2538-2539 as per Package 'A', Lots 2492-2493, 2533-2534, 2537, 2561-2562 as per Package 'B', Lots 2535-2536, 2563-2564 as per Package 'C' and Lot 2491 and 2485 subject to 'Specialist Advice'. Upper Floor: Lots 2529-2531, 2539-2540, 2559-2560 as per Package 'A', Lots 2493-2495, 2532, 2537-2538 as per Package 'B', Lots 2492, 2533-2536, 2561-2564 as per Package 'C' and Lot 2491 and 2485 subject to 'Specialist Advice'. Details of the Quiet House Design Requirements are included in Attachment 1.



Legend

- Extent of Local Development Plan
- Designated Garage Location
- Primary Dwelling Orientation
- Retaining Walls (by developer)
- No Vehicle Access Permitted
- Uniform Fencing by developer (visually permeable above 1.2m)
- Lots Subject to Quiet House Design Requirements

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: 10 October 2024

Local Development Plan - Aura Stage 36A, 36B and 41 (LDP13) (WAPC Subdivision Approval Ref. 160755)

TRINITY ESTATE ALKIMOS

A Northern Corridor Developments Ltd Project

plan: 20/012/083 | date: 12/08/2024 | designed: FF
scale: 1:1250@A3 | grid: PCG 94 | checked: KS
0 12.5 25m | aerial: - | drawn: JB

City of Wanneroo

ATTACHMENT 1 - QUIET HOUSE DESIGN PACKAGES - LLOYD GEORGE ACOUSTICS

Quiet House Package A

56-58 dB $L_{Aeq(Day)}$ & 51-53 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	• Up to 40% floor area ($R_w + C_{tr} \geq 28$): ○ Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing; ○ Sealed awning or casement windows with minimum 6mm glass. • Up to 60% floor area ($R_w + C_{tr} \geq 31$): ○ Sealed awning or casement windows with minimum 6mm glass.	• Up to 40% floor area ($R_w + C_{tr} \geq 25$): ○ Sliding or double hung with minimum 6mm single or 6mm-12mm-6mm double insulated glazing; • Up to 60% floor area ($R_w + C_{tr} \geq 28$); • Up to 80% floor area ($R_w + C_{tr} \geq 31$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	No specific requirements	
External Doors	Facing	• Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.	• Doors to achieve $R_w + C_{tr} \geq 25$: ○ 35mm Solid timber core hinged door and frame system certified to R_w 28 including seals; ○ Glazed sliding door with 10mm glass and weather seals.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less.	
	Opposite	No specific requirements	
External Walls	All	• $R_w + C_{tr} \geq 45$: ○ Two leaves of 90mm thick clay brick masonry with minimum 20mm cavity; or ○ Single leaf of 150mm brick masonry with 13mm cement render on each face; or ○ One row of 92mm studs at 600mm centres with: ▪ Resilient steel channels fixed to the outside of the studs; and ▪ 9.5mm hardboard or fibre cement sheeting or 11mm fibre cement weatherboards fixed to the outside; ▪ 75mm thick mineral wool insulation with a density of at least 11kgkg/m^3; and ▪ 2 x 16mm fire-rated plasterboard to inside.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 35$: ○ Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard.	
Outdoor Living Areas		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.	

Quiet House Package B

59-62 dB $L_{Aeq(Day)}$ & 54-57 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): ○ Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): ○ Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 28$): ○ Sliding or double hung with 6mm-12mm-10mm double insulated glazing; ○ Sealed awning or casement windows with minimum 6mm glass. • Up to 60% floor area ($R_w + C_{tr} \geq 31$); • Up to 80% floor area ($R_w + C_{tr} \geq 34$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass.	• Doors to achieve $R_w + C_{tr} \geq 28$: ○ 40mm Solid timber core hinged door and frame system certified to R_w 32 including seals; ○ Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: ○ Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester (24kg/m^3). Resilient ties used where required to connect leaves. ○ Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). ○ Single leaf of 220mm brick masonry with 13mm cement render on each face. ○ 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. ○ Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (11kg/m^3) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 35$: ○ Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling with R3.0+ fibrous insulation.	
Outdoor Living Areas		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 2.4 metres height above ground level.	

Quiet House Package C

63-66 dB $L_{Aeq(Day)}$ & 58-61 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	• Up to 20% floor area ($R_w + C_{tr} \geq 31$): ○ Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 40% floor area ($R_w + C_{tr} \geq 34$): ○ Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): ○ Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): ○ Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Not recommended.	• Doors to achieve $R_w + C_{tr} \geq 30$: ○ Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass; ○ 40mm Solid timber core side hinged door, frame and seal system certified to R_w 32 including seals. Any glass inserts to be minimum 6mm.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: ○ Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). Resilient ties used where required to connect leaves. ○ Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). ○ Single leaf of 220mm brick masonry with 13mm cement render on each face. ○ 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. ○ Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (11kg/m^3) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 40$: ○ Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibrous insulation between steel sheeting and roof battens; ○ R3.0+ insulation batts above ceiling; ○ 2 x 10mm plasterboard ceiling or 1 x 13mm sound-rated plasterboard affixed using steel furring channel to ceiling rafters.	
Outdoor Living Areas		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 2.4 metres height above ground level.	

Mechanical Ventilation requirements

In implementing the acceptable treatment packages, the following mechanical ventilation / air-conditioning considerations are required:

- Acoustically rated openings and ductwork to provide a minimum sound reduction performance of R_w 40 dB 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.

Notification

Notifications on title advise prospective purchasers of the potential for noise impacts from major transport corridors and help with managing expectations.

The Notification is to state as follows:

This lot is in the vicinity of a transport corridor and is affected, or may in the future be affected, by road and rail transport noise. Road and rail transport noise levels may rise or fall over time depending on the type and volume of traffic.