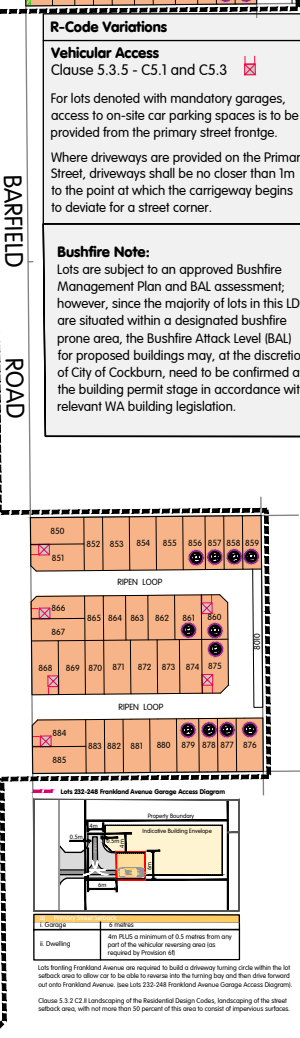


- LEGEND**
- Local Development Plan Boundary
 - Proposed Lot Boundary
 - Future Lot Boundary
 - RMD R25
 - RMD R30
 - RMD R40
 - No Vehicular Access
 - 1.0 metre garage setback (to allow space for bin collection)
 - Developer retaining & fencing
 - Developer fencing (colorbond)
 - Non-habitable Development
 - Building orientation - Outdoor Living Area to address public open space. (entry point to adjoining public open space not required)
 - Lots Affected by Quiet House Design Requirements (refer to Page 2 of this LDP)
 - Double Storey Boundary Walls (refer provisions marked green on this LDP, not applicable to single storey dwellings)
 - Mandatory Garage (refer table c1. 5.3.5)
 - Tree Retention
 - For Frankland Avenue Lots driveways are to be designed for two-way access to allow for vehicles to enter the street in forward gear (refer to garage access diagram)

- Non-habitable Development
- Building orientation - Outdoor Living Area to address public open space. (entry point to adjoining public open space not required)
- Lots Affected by Quiet House Design Requirements (refer to Page 2 of this LDP)
- Double Storey Boundary Walls (refer provisions marked green on this LDP, not applicable to single storey dwellings)
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- For Frankland Avenue Lots driveways are to be designed for two-way access to allow for vehicles to enter the street in forward gear (refer to garage access diagram)



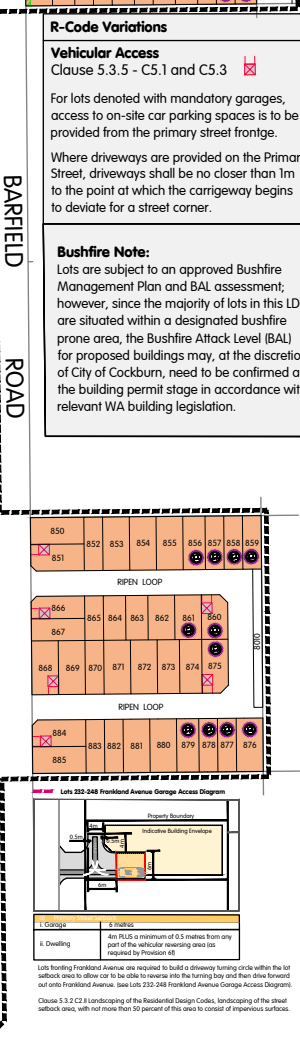
R-Code Variations

Vehicular Access
Clause 5.3.5 - C5.1 and C5.3

For lots denoted with mandatory garages, access to on-site car parking spaces is to be provided from the primary street frontage.

Where driveways are provided on the Primary Street, driveways shall be no closer than 1m to the point at which the carriageway begins to deviate for a street corner.

Bushfire Note:
Lots are subject to an approved Bushfire Management Plan and BAL assessment; however, since the majority of lots in this LDP are situated within a designated bushfire prone area, the Bushfire Attack Level (BAL) for proposed buildings may, at the discretion of City of Cockburn, need to be confirmed at the building permit stage in accordance with relevant WA building legislation.



LOCAL DEVELOPMENT PLAN - VIVENTE ESTATE

This Local Development Plan (LDP) is made under the provisions of the City of Cockburn Town Planning Scheme No. 3 (TPS3) and provides variations to the 'Deemed-to-comply' provisions of the Residential Design Codes (R-Codes), TPS3 and Local Planning Policies as shown on the plan and written below. The requirements of the R-Code and the Policies shall be satisfied in all other matters.

This approved LDP shall repeal and supersede LDP 19/12 for Lots 402, 403, 404 and 405 fronting Parco Glade.

Development Approval is exempt for any Single House that is compliant with the provisions of this LDP, the R-Codes, TPS3, and all relevant Local Planning Policies.

This LDP applies to all lots shaded and within the Local Development Plan Boundary as denoted on the plan. The LDP provisions only apply to Single Houses.

Minor variations to the R-Codes, Local Policies and this LDP will require Development Approval by the City of Cockburn.

For lots affected by Quiet House Design Requirements, refer to Page 2 of this LDP and the Transportation Noise Assessment prepared by Lloyd George Acoustics. A copy of the Transportation Noise Assessment can be obtained from the City of Cockburn.

Lots may be affected by Bushfire Attack Level (BAL) construction standards. Copies of the Bushfire Management Plan can be obtained from the City of Cockburn.

Lots affected by a 'No Vehicular Access' provision shall restrict vehicle access on boundaries identified on the map.

R-Code Variations	R25 Lots	R30 Lots	R40 Lots
Street Setback & Front Fences	3.0 metre minimum, no average.	(R30 & R40 only) 2.0 metre minimum, no average [Excl. Frankland Ave Lots]	
	1.5 metres to porch / veranda / portico or similar, no maximum length.		
	1.5 metres minimum to secondary street. (R30 & R40 only) 1.0 metre minimum to secondary street.		
	Where street setbacks are less than 4.0 metres, Front fences within the primary street setback area being a maximum height of 0.9 metres above natural ground level, measured from the primary street side of the front setback.		
	Provided the front setback is greater than 4.0 metres, a front fence within the primary street setback area being a maximum of 1.8 metres above natural ground level and visually permeable above 1.2 metres, measured from the primary street side of the front fence.		
	Uniform fencing shall be provided by the developer where shown on the map for lots abutting the POS, and shall be visually permeable above 1.2 metres, measured from the top of any retaining wall. Any uniform fencing shall be maintained by the landowner, and shall not be modified without written consent from the City of Cockburn.		
Lot Boundary Setback	Boundary Setbacks		Boundary Walls (R40 only)
	1.2 metres for wall height 3.5 metres or less with major openings.		To both side boundaries subject to: no maximum length to one side boundary, 2/3 max length to second side boundary for wall height 3.5 metres or less (or 6.0 metres or less for lot boundaries marked in green on the plan).
	1.0 metre for wall height 3.5 metres or less without major openings.		
	Boundary Walls		
	To both side boundaries subject to: 2/3 length to one side boundary, 1/3 max length to second side boundary for wall height 3.5 metres or less.		
Open Space	An outdoor living area (OLA) with an area of 10% of the lot size or 20sqm, whichever is greater, directly accessible from a habitable room of the dwelling and located behind the street setback area.		
	The OLA has a minimum 3.0 metres length or width dimension. No other R-Codes site cover standards apply.		
	At least 70% of the OLA must be uncovered and includes areas under eaves which adjoin uncovered areas.		
Garage setback and vehicular access	Rear Load		
	1.0 metre garage setback to laneway for lots marked with a light blue dashed line on the plan.		
	0.5 metre garage setback to laneway for all unmarked rear load lots.		
	Front Load		
	4.5 metre garage setback from the primary street and 1.5 metres from a secondary street.		
	The garage setback from the primary street may be reduced to 4.0 metres where an existing or planned footpath or shared path is located more than 0.5 metres from the street boundary.		
	For front loaded lots with street frontages between 10.5 and 12 metres, a double garage is permitted to a maximum width of 6.0 metres as viewed from the street subject to:		
	<ul style="list-style-type: none"> garage setback a minimum of 0.5 metres behind the building alignment; a major opening to a habitable room directly facing the primary street; An entry feature consisting of a porch, veranda, portico, or similar element with a minimum depth of 1.2 metres; & no vehicular crossover wider than 4.5 metres where it meets the street. 		
	Lots with a frontage less than 10.5 metres or not compliant with the above require single or tandem garaging.		
Overshadowing	No maximum overshadowing for wall height 3.5 metres or less (or 6.0 metres or less for lot boundaries marked in green on the plan).		
	No maximum overshadowing for wall height greater than 3.5 metres where overshadowing is confined to the front half of the lot. If overshadowing intrudes into rear half of the lot, shadow cast does not exceed 25% of the rear half of the lot.		(R30 & R40 only) No maximum overshadowing for wall height greater than 3.5 metres (or greater than 6.0 metres for lot boundaries marked in green on the plan) where overshadowing is confined to the front half of the lot. If overshadowing intrudes into rear half of the lot, shadow cast does not exceed 35% of the rear half of the lot.
Privacy	R-Codes clause 5.4.1 C1.1 applies, however the setback distance is 3.0 metres to bedrooms and studies, 4.5 metres to major openings to habitable rooms other than bedrooms and studies and 6.0 metres to unenclosed outdoor active habitable spaces.		
	R-Codes 5.4.1 C1.1 does not apply to major openings and unenclosed outdoor active habitable spaces that are parallel and presented to the primary street.		



Signs and symbols

- Local Development Plan Boundary
- Package A (Kwinana Fwy)
- Package A (Rowley Rd)
- Package A (Both Roads)
- Package B (Kwinana Fwy)
- Package B (Rowley Rd)
- Package B (Both Roads)
- Package C (Rowley Rd & Frankland Ave)
- Package C (Frankland Ave)
- 3m High Noise Wall

Quite House Design Requirements:

For lots effected by Quiet House Design Packages as depicted on this plan, refer to Appendix A of the Transportation Noise Assessment prepared by Lloyd George Acoustics.

Noise Report Reference: 14113024-03a
 Noise Report Date: 29 Sep 2020
 Report available from the City of Cockburn



RICHARD NOBLE GOLD ESTATES
 PROPERTY INTEGRITY COMMUNITY
ASSESSMENT NOTE
 This LDP has been prepared by RobertsDay on behalf of Gold Estates c/- Richard Noble. The City of Cockburn will administer all matters relating to the LDP. Any assessment enquiries should be directed to the City of Cockburn.



CADASTRAL INFORMATION
 SOURCE: MING
 Y/M/M/D: 22/04/26
 DWG REF: 96326lots-9999bn-PCG94
 PROJECTION: PCG94
 SIZE A3

NO	DESCRIPTION	Y/M/M/D	DRAWN	APPR'D
AO	LOT 19 AND 20 DEPTH MOD	24/04/29	FGH	TT
AN	TYP0	24/04/26	TG	TT
AM	PACKAGE ADDITION	24/04/10	TG	TT
AI	DRIVEWAY REG LOTS 232-248	23/12/22	TG	TT
AH	INCLUSION OF LOTS 232-237	23/12/08	TG	TT
AG	REMOVE NVA FROM LOTS 93+94	23/02/24	SB	TT
AF	PROVISIONS UPDATE OPEN SPACE	22/09/29	TG	TT
AE	PARCO GLADE LOT NO.5 UPDATED	22/09/21	SB	TT
REV	DESCRIPTION	Y/M/M/D	DRAWN	APPR'D



VIVENTE ESTATE LOCAL DEVELOPMENT PLAN
BARFIELD ROAD LOCAL STRUCTURE PLAN
 City of Cockburn

REF. NO. **RIC HAM** DRAW. NO. **RD1 402** REV. **AO**

DISCLAIMER: ISSUED FOR DESIGN INTENT ONLY. ALL AREAS AND DIMENSIONS ARE SUBJECT TO DETAIL DESIGN AND SURVEY



Table 3: Quiet house requirements

Exposure Category	Orientation to corridor	Acoustic rating and example constructions				Mechanical ventilation / air conditioning considerations			
		Walls	External doors	Windows	Roofs and ceilings of highest floors				
A Quiet House A	Facing	Bedroom and indoor living and work areas to Rw+Ctr 45dB <ul style="list-style-type: none"> One row of 92mm studs at 600mm centres with: <ul style="list-style-type: none"> Resilient steel channels fixed to the outside of the studs; and 9.5mm hardboard or 9mm fibre cement sheeting or 11mm fibre cement weatherboards or one layer of 19mm board cladding fixed to the outside of the channels; and 75mm glass wool (11kg/m³) or 75mm polyester (14kg/m³) insulation, positioned between the studs; and Two layers of 16mm fire-protective grade plasterboard fixed to the inside face of the studs. Single leaf of 150mm brick masonry with 13mm cement render on each face. Double brick: two leaves of 90mm clay brick masonry with a 20mm cavity between leaves. 	Bedrooms: <ul style="list-style-type: none"> Fully glazed hinged door with certified Rw+Ctr 28dB rated door and frame including seals and 6mm glass Other external doors to Rw+Ctr 25dB, e.g. <ul style="list-style-type: none"> 35mm solid core timber hinged door and frame system certified to Rw 28dB including seals Glazed sliding door with 10mm glass and weather seals 	Bedrooms: <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 (Rw+Ctr 28 dB). Sealed awning or casement windows may use 6 mm glazing instead. Up to 60% floor area: as per above but must be sealed awning or casement type windows (Rw+Ctr 31dB). Indoor living and work areas <ul style="list-style-type: none"> Up to 40% floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 25dB). Up to 60% floor area: As per Bedrooms at up to 40% area (Rw+Ctr 28 dB). Up to 80% floor area: As per Bedrooms at up to 60% area (Rw+Ctr 31dB). 	To Rw+Ctr 35dB <ul style="list-style-type: none"> Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling 	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 Rw 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							As per 'Facing' above, except Rw+Ctr values may be 3dB less, e.g. glazed sliding door with 10mm glass and weather seals for bedrooms.	As above, except Rw+Ctr values may be 3dB less, or max % area increased by 20%
	Opposite							No specific requirements	No specific requirements
A Quiet House A+	All	As per Quiet House A, except double leaf masonry / brick construction only.	As per Quiet House A.	As per Quiet House A, except that <ul style="list-style-type: none"> 'Side-on' requirements same as 'Facing'. All windows comprise minimum 6 mm thick laminated or toughened glass in sealed awning or casement frames. Polymer (e.g. uPVC) window framing should be used. Evaporative air conditioning systems are not recommended. No external doors for bedrooms with entry 'Facing' transport corridor 	No specific requirements				
B Quiet House B	Facing	Bedroom and indoor living and work areas to Rw+Ctr 50dB <ul style="list-style-type: none"> Single leaf of 90mm clay brick masonry with: <ul style="list-style-type: none"> A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; A cavity of 25mm between leaves; 50mm glass wool or polyester cavity insulation (R2.0+) insulation between studs; and One layer of 10mm plasterboard fixed to the inside face Single leaf of 220mm brick masonry with 13mm cement render on each face 	Bedrooms <ul style="list-style-type: none"> Fully glazed hinged door with certified Rw+Ctr 31dB rated door and frame including seals and 10mm glass Other external doors to Rw+Ctr 28dB, e.g. As per Quiet House A Bedrooms. 	Bedrooms: <ul style="list-style-type: none"> Total external door and window system area up to 40% of room floor area: Fixed sash, awning or casement with minimum 6mm single or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 31 dB). Up to 60% floor area: as per above but must be minimum 10 mm single or 6mm-12mm-10mm double insulated glazing (Rw+Ctr 34dB). Indoor living and work areas <ul style="list-style-type: none"> Up to 40% floor area: Sliding or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 28dB). Sealed awning or casement windows may use 6 mm glazing instead. Up to 60% floor area: As per Bedrooms at up to 40% area (Rw+Ctr 31 dB). Up to 80% floor area: As per Bedrooms at up to 60% area (Rw+Ctr 34dB). 	To Rw+Ctr 35dB <ul style="list-style-type: none"> Concrete or terracotta tile or metal sheet roof, sarking and at least 10mm plasterboard ceiling, R3.0+ insulation 	At least one outdoor living area located on the opposite side of the building from the 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			
	Side-on							As per Quiet House A 'Facing' above (Rw+Ctr values may be 3dB less, or max % area increased by 20%).	As per Quiet House A 'Side-on' above.
	Opposite							<ul style="list-style-type: none"> Double brick: two leaves of 90mm clay brick masonry with: <ul style="list-style-type: none"> A 50mm cavity between leaves 50mm glass wool or polyester cavity insulation (R2.0+) resilient ties where required to connect leaves Double brick: two leaves of 110mm clay brick masonry with a 50mm cavity between leaves and R2.0+ cavity insulation 	As per Quiet House A 'Facing' above (Rw+Ctr values may be 3dB less, or max % area increased by 20%).
B Quiet House B+	All	As per Quiet House B example above, except use double leaf masonry construction only.	As per Quiet House B, except <ul style="list-style-type: none"> No external doors for bedrooms with entry 'Facing' or 'Side-on' to transport corridor 	As per Quiet House B, except that <ul style="list-style-type: none"> 'Side-on' requirements become the same as Quiet House B 'Facing'. All windows comprise minimum 6 mm thick laminated or toughened glass in sealed awning or casement frames. Polymer (e.g. uPVC) window framing should be used. Evaporative air conditioning systems are not recommended. 	As per Quiet House C (to Rw+Ctr 40dB).				



Exposure Category	Orientation to corridor	Acoustic rating and example constructions				Mechanical ventilation / air conditioning considerations	
		Walls	External doors	Windows	Roofs and ceilings of highest floors		
C Quiet House C	Facing	Bedroom and indoor living and work areas to Rw+Ctr 50dB <ul style="list-style-type: none"> As per Quiet House B example above 	Bedrooms <ul style="list-style-type: none"> External doors to bedrooms facing the corridor are not recommended. Other external doors to Rw+Ctr 30dB, e.g. Fully glazed hinged door with certified Rw+Ctr 31dB rated door and frame including seals and 10mm glass. 40mm solid core timber frame and door (without glass or with glass inserts not less than 6mm), side hinged with certified Rw 32dB acoustically rated door and frame system including seals 	Bedrooms: <ul style="list-style-type: none"> Total external door and window system area up to 20% of room floor area: Fixed sash, awning or casement with minimum 6mm single or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 31 dB). Up to 40% floor area: as per above but must be minimum 10 mm single or 6mm-12mm-10mm double insulated glazing (Rw+Ctr 34dB). Indoor living and work areas <ul style="list-style-type: none"> Up to 40% floor area: Sliding or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 31dB). Sealed awning or casement windows may use 6 mm glazing instead. Up to 60% floor area: As per Bedrooms at up to 40% area (Rw+Ctr 34 dB). 	To Rw+Ctr 40dB <ul style="list-style-type: none"> To all bedrooms, 2 layers of 10mm plasterboard, or one layer 13 mm high density sealed plasterboard (minimum surface density of 12.5 kg/m²), affixed using steel furring channels beneath ceiling rafters / supports. R3.0+ insulation batts laid in cavity. Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibre insulation between steel sheeting and roof battens. 	As per Quiet House B	<ul style="list-style-type: none"> Acoustically rated openings and ductwork to provide a minimum sound reduction performance of Rw 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		As per Quiet House B 'Facing' above (Rw+Ctr values may be 3dB less, or max % area increased by 20%).				
	Opposite		As per Quiet House A 'Facing' above.				
C Quiet House C+	All	As per Quiet House B example above, except using double leaf masonry construction only. <ul style="list-style-type: none"> Double brick: two leaves of 90mm clay brick masonry with: <ul style="list-style-type: none"> A 50mm cavity between leaves R2.0+ cavity insulation resilient ties where required to connect Double brick: two leaves of 110mm clay brick masonry with a 50mm cavity between leaves and R2.0+ cavity insulation 	As per Quiet House C, except <ul style="list-style-type: none"> No external doors for bedrooms with entry 'Facing' or 'Side-on' to transport corridor. 	As per Quiet House C, except that <ul style="list-style-type: none"> 'Side-on' requirements same as Quiet House C 'Facing'. All windows into habitable areas comprise minimum 6 mm thick glazing in sealed awning or casement frames. Polymer (e.g. uPVC) window framing and hardware which cannot rattle loose should be used throughout. Evaporative air conditioning systems are not recommended. 	To Rw+Ctr 45dB As per Quiet House C, except <ul style="list-style-type: none"> the roof must be concrete or terracotta tile construction with sarking (i.e. no steel sheet roof option). Ceilings to bedrooms must be constructed from at least 2 overlapping layers of flush plasterboard. 		

Footnotes:

- The airborne weighted sound reduction index (Rw) and traffic correction term (Ctr) are published by manufacturers/suppliers, can be determined by acoustical consultants or measured in accordance with AS ISO 717.1. Higher Rw+Ctr values infer greater sound insulation. All values are minimum Rw+Ctr (dB)
- Example construction for different external wall ratings of Rw+Ctr 45dB and 50dB are provided and are listed within Specification F5.2 in Volume 1 Part F of the National Construction Code. These values are based on the installation and sealing of joints and penetrations in accordance with Specification F5.2.

- Window and external door sound reduction values provided are based on the provision of suitable acoustic seals to prevent sound leakage. To comply with the above ratings, all external glass windows and doors specified under requirements A, B and C must have the following:
 - Operable windows and external doors must have a seal to restrict air infiltration fitted to each edge and doors must have a drop seal to provide an airtight seal when closed
 - Within doors or fixed framing, glazing must be set and sealed using an airtight arrangement of non-hardening sealant, soft rubber (elastomer) gasket and/or glazing tape, or be verified by manufacturer or approved person that the construction system as to be installed achieves the relevant Rw+Ctr value

- In this context, a seal is foam or silicon based rubber compressible strip, fibrous seal with vinyl fin interleaf or the like. Brush / pile type seals without this seal included are not allowed.
- Glazing referenced can be monolithic, laminated or toughened safety glass
- Any penetrations in a part of the building envelope must be acoustically treated so as not to degrade the performance of the building elements affected. Most penetrations in external walls such as pipes, cables or ducts can be sealed through caulking gaps with non-hardening mastic or suitable mortar