CALDERWOOD VALLEY
Urban Design Assessment

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Calderwood Valley

lendlease

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INTRODUCTION

This report accompanies an Environmental Assessment Report (EAR) for a proposed S75W Modification Application to the Calderwood Concept Plan Approval (MP09_0082) (Approved Concept Plan) for the Calderwood Urban Development Project (CUDP).
A modification is sought to the Approved Concept Plan to allow for increased and more diverse housing supply at Calderwood. The Proposed Concept Plan is shown in **Figure 1**. The increase in housing supply is proposed to ensure that the existing area of urban zoned land at Calderwood is efficiently used for the continued supply of a range of housing types and sizes that both meet market demand and will assist address housing affordability pressures in the Illawarra region.

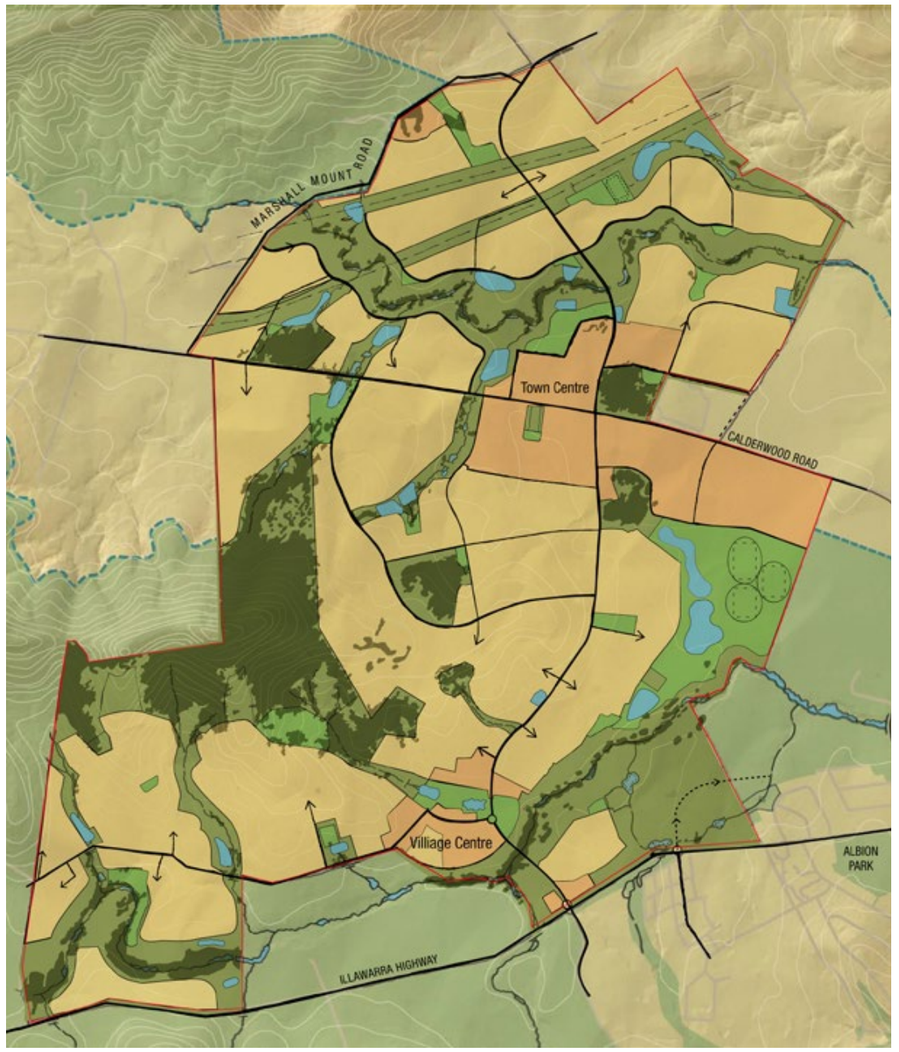
SITE DESCRIPTION

The CUDP site is located within the Calderwood Valley in the Illawarra Region. It is approximately 700 hectares in area with approximately 107 hectares of land in the Wollongong LGA (15%) and the balance in the Shellharbour LGA (85%).

Calderwood Valley is bound to the north by Marshall Mount Creek (which forms the boundary between the Shellharbour and Wollongong LGAs), to the south by the Macquarie Rivulet, to the south-west by Johnston's Spur and to the west by the Illawarra Escarpment. Beyond Johnston's Spur to the south is the adjoining Macquarie Rivulet Valley within the locality of North Macquarie.

The CUDP site extends south from the intersection of North Marshall Mount Road and Marshall Mount Road to the Illawarra Highway.

Figure 1: Proposed Concept Plan Modification



Concept Plan (MOD 4 PPR)

SOURCE: Taylor Brammer Landscape Architects.

1.0 SITE ANALYSIS

The Site Analysis diagrams have been produced to illustrate the intent of the development pattern against the existing site constraints and opportunities. Many of these have not changed, however some areas have been revisited and the findings are summarised below.

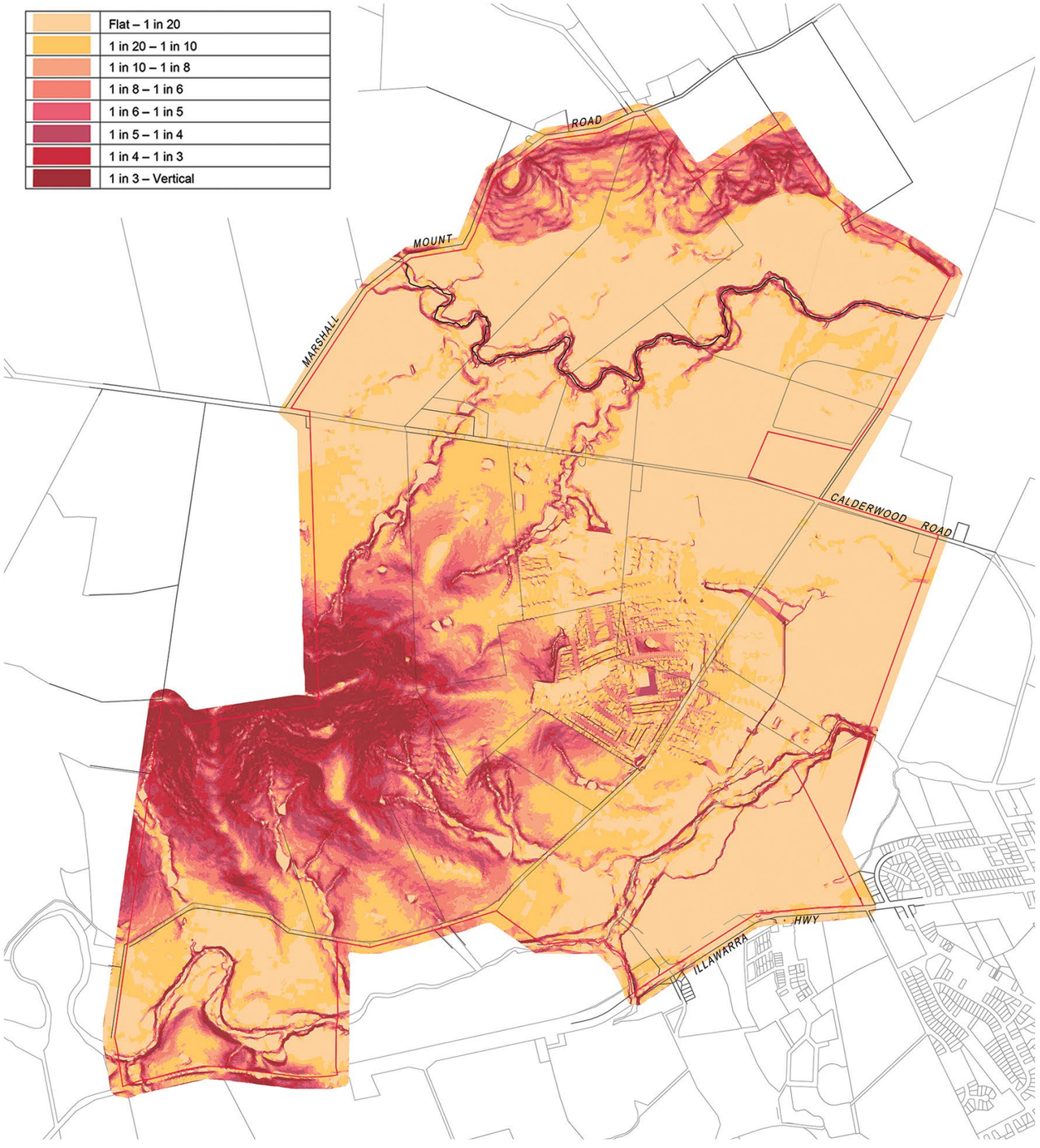
1.1 CONSTRAINTS

1.1.1 SLOPE

Figure 2 illustrates the slope of the Calderwood Concept Plan Area. The slope categories have been classified as shown on the legend. Most of the site comprises a gradient of 1:8 or less, which is suitable to accommodate economic and efficient urban development. The steepest gradients are predominantly in the southern, western and northern sections of the Calderwood development area. These are readily depictable in **Figure 2**, as shown by the darker pink to red colours. These have not changed from the Concept Plan. Principles adopted in the subdivision pattern to accommodate steep slopes include:

- Town Centre/Village Centre and higher density land on the flattest area of the site to allow for small lot housing and medium density development.
- Larger lots on the steep slopes.
- Roads are aligned parallel to slope to run along the contour on grades greater than 1:6.
- In addition, retaining walls and lots are designed to accommodate the building product that best responds to the steeper grades. Guidelines to assist homeowners and builders are contained in Appendix A.
- Environmental areas designated to protect steepest areas such as Johnstons Spur and the major riparian features.

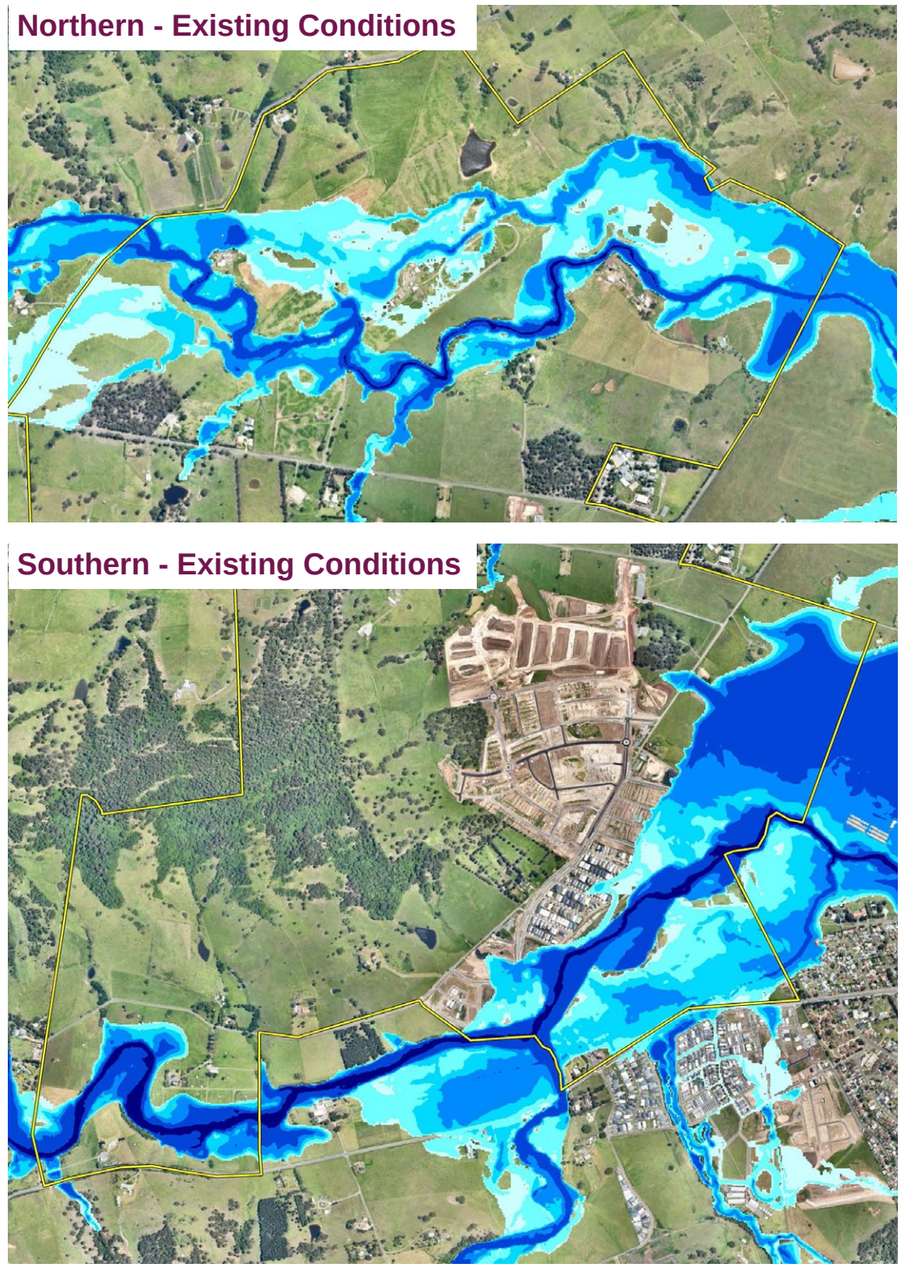
Figure 2: Slope Analysis



1.1.2 FLOOD INNUNDATION

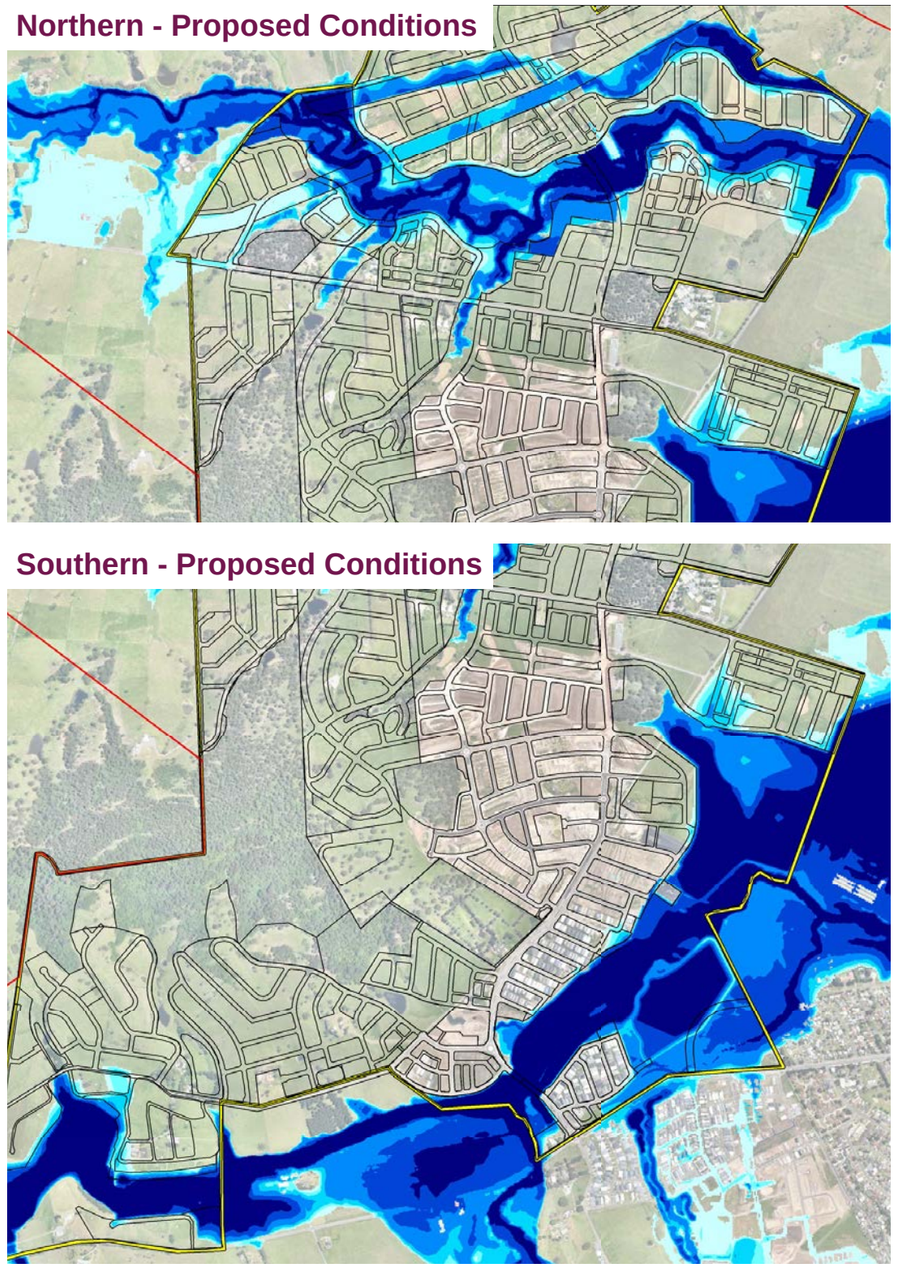
Flooding is shown on **Figure 3**. The development footprint respects the flooding constraints and stormwater strategy. Minor changes over the northern and southern part of the site are shown and have been adopted to alter the development footprint as illustrated in **Figure 4**.

Figure 3: Existing Flood Conditions



SOURCE: J. Wyndham Prince

Figure 4: Proposed Flood Model

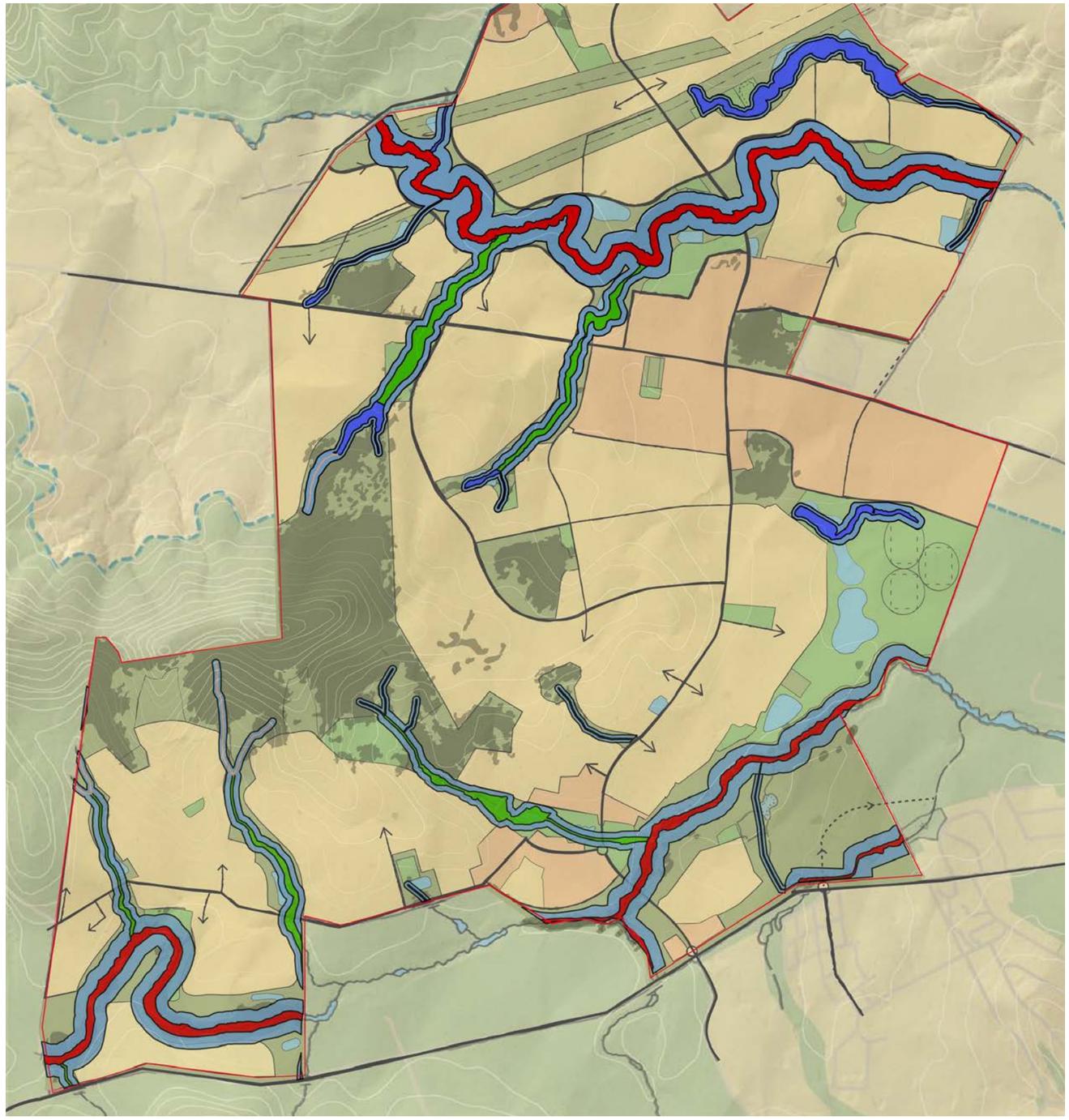


SOURCE: J. Wyndham Prince, April 2019.

1.1.3 RIVERS, CREEKS AND DRAINAGE LINES

Rivers, creeeks and drainage lines remain mostly unchanged from the Concept Plan. There has been one minor change to Stream Reach 15 which is addressed in the Environmental Assessment Report and Biodiversity Assessment. The development footprint respects these natural features within the necessary riparian corridors. The subdivision pattern allows for local drainage as part of the intended stormwater strategy as per the existing stages already completed. These riparian areas are shown in **Figure 5**.
All riparian corridor remodelling and rehabilitation is in accordance with an approved Vegetation Management Plan.

Figure 5: Rivers, Creeks and Drainage Lines

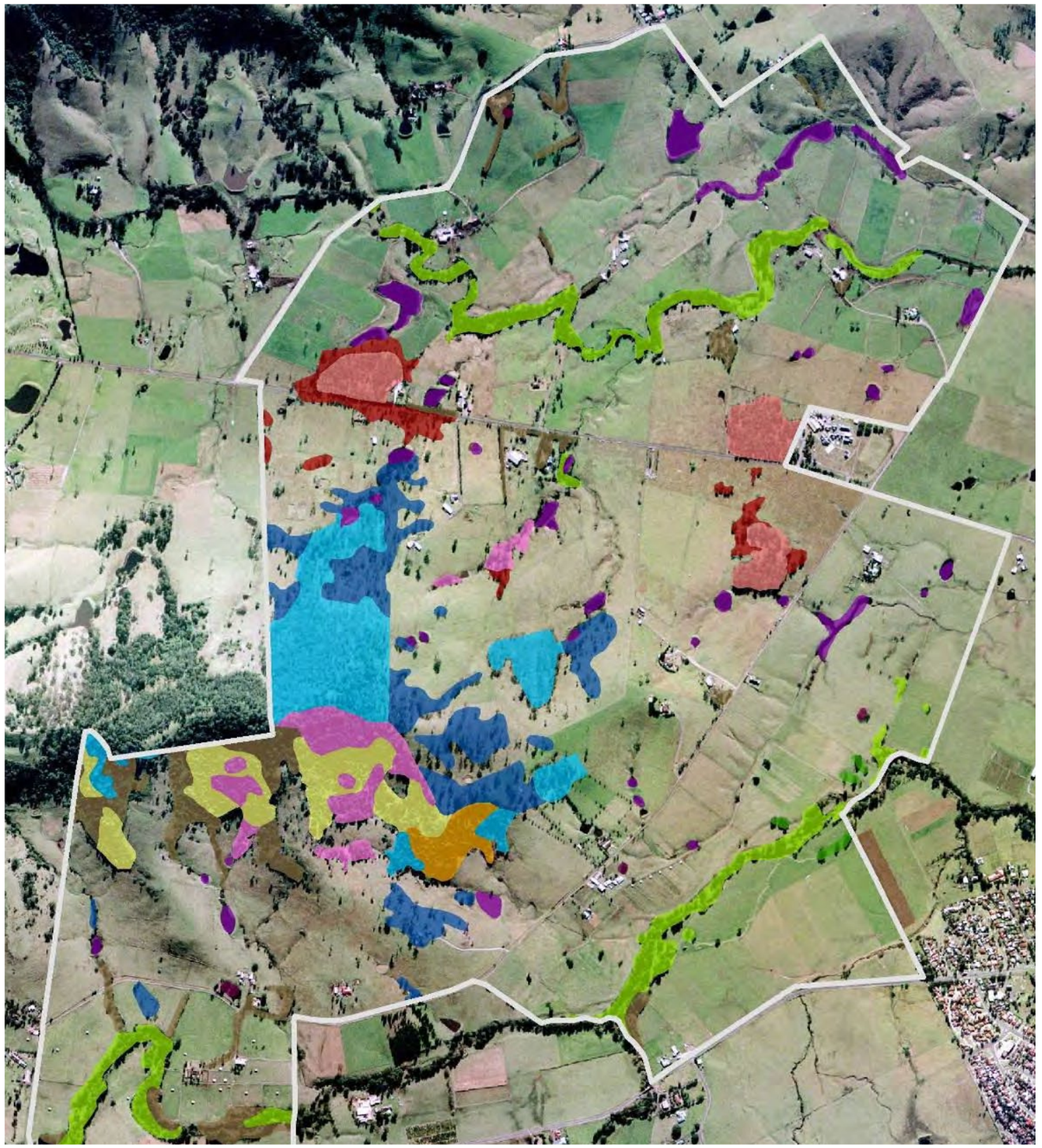


SOURCE: Taylor Brammer Landscape Architects

1.1.4 VEGETATION CONDITIONS

Figure 6 illustrates the vegetation communities located on site as per the approved Concept Plan. Significant Remnant Vegetation communities are retained within established environmental zoned lands.

Figure 6: Vegetation Communities and Conditions



SOURCE: Eco Logical Australia, March 2010.

1.1.5 GEOTECHNICAL

No further constraints have been identified and the geotechnical findings do not impact on the development footprint as per the previous Concept Plan.
See **Figure 7**.

1.1.6 ACID SULPHATE SOILS

This has not changed and the development footprint is unaltered from the Concept Plan. See **Figure 8**.

1.1.7 ARCHAEOLOGY

This has not changed and the development footprint is unaltered from the Concept Plan.

1.1.8 BUSHFIRE

This has not changed and the development footprint is unaltered from the Concept Plan. See **Figure 9**.

Figure 7: Ground Stability

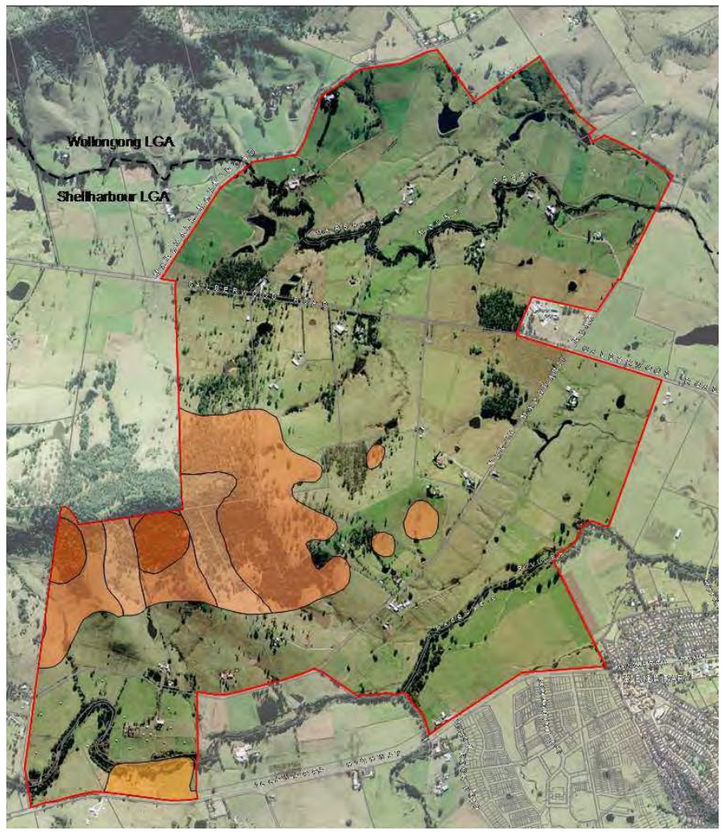
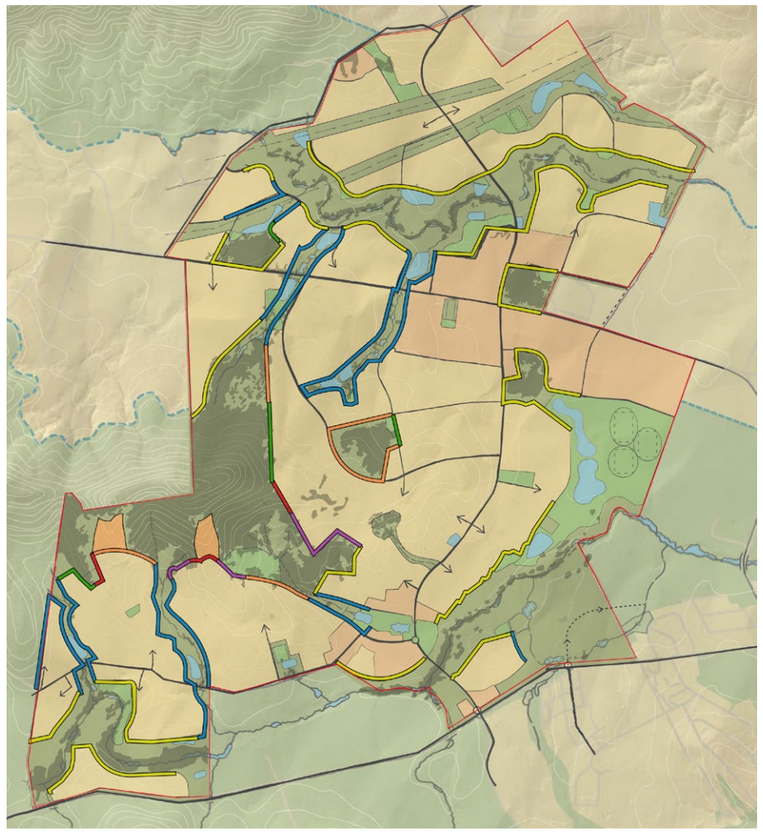


Figure 8: Acid Sulphate Soils

Figure 9: Bushfire Asset Protection Zones

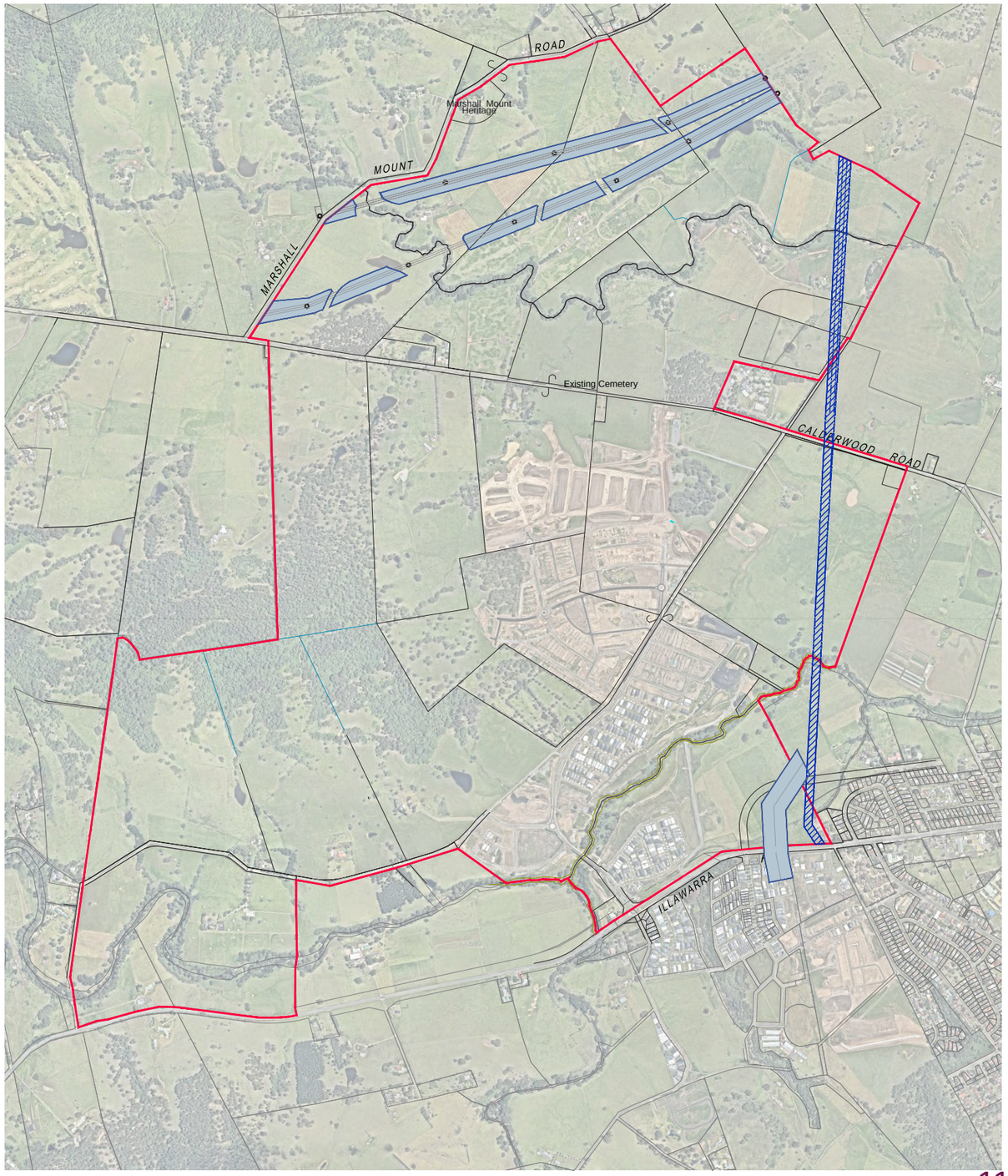


1.1.9 EXISTING ELECTRICAL EASEMENTS

This has not changed and the development footprint is unaltered from the Concept Plan. See **Figure 10**. Once developed the land ownership for the easement will vary and is anticipated to accommodate many purposes including:

- Public Open Space - some drainage and recreational use, such as walking and cycling trails. The open space proposed is outside of, and adjacent to, some easements which will compliment the embellished local and district open space network.
- Road Reserve.
- Private Lot - larger lots with the easement retained.

Figure 10: Existing Electrical Easements



1.1.10 HERITAGE ACTIVATION

There are two key sites within the Calderwood Development that are of heritage value and kept in their current form. These are the existing cemetery and the Marshall Mount Heritage lot, shown within **Figure 11**. Both sites have some road frontage that allows the public to interact and recognise their heritage value to the area. This also avoids the sites from being isolated and hidden away from the public eye.

Figure 11: Heritage Sites

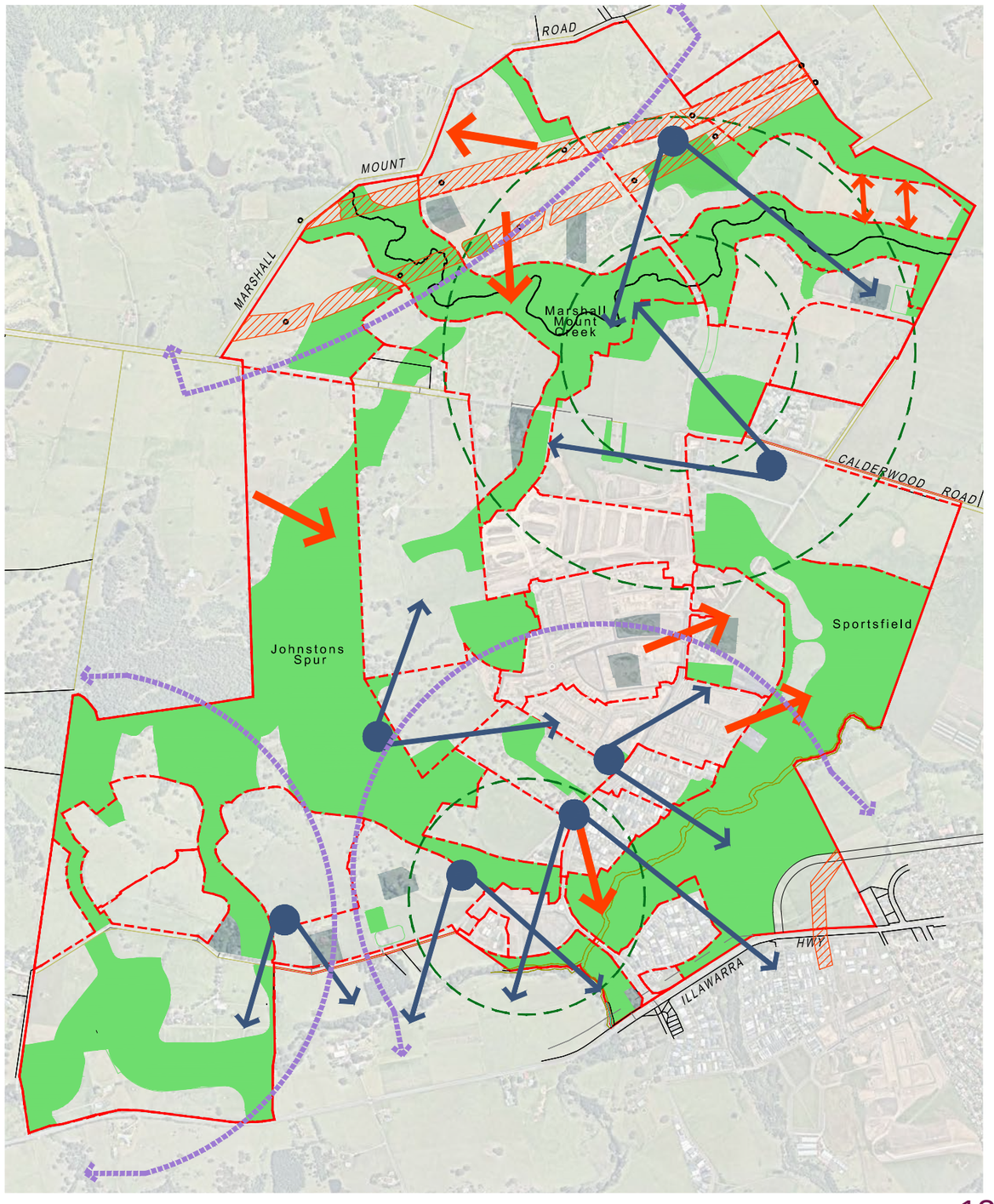
1.2 OPPORTUNITIES

1.2.1 VIEWS AND VISTAS

The site observations of Calderwood Valley highlight the existing conditions and potential views that will form an integral part of the structure plan and development. These features will be utilised to assist in transitioning of the site in to an urban development. Views extend from the top of the valley towards the Illawarra Escarpment which are a significant feature of the visual and landscape character of Calderwood Valley.

Johnstons Spur ridgeline and upper reaches of the area will assist in reducing the impacts of the development and assist in maintaining the natural ridgeline. Key open spaces will be visible from Marshall Mount Road, Calderwood Road and Illawarra Highway. The red arrows in **Figure 12** highlight the opportunities created by the development with internal roads having visual connection to open spaces. The development of the Escarpment will be a dominant visual feature for the site. Marshall Mount House and City Wide Parks terminate on public realm vistas. Maintaining these ridgelines and vistas are a crucial part in creating landmark opportunities for the development. As the sites natural topography is varied and covers numerous areas of the development, the importance of creating views and vistas to the lower area adds value to the project.

Figure 12: Views and Vistas



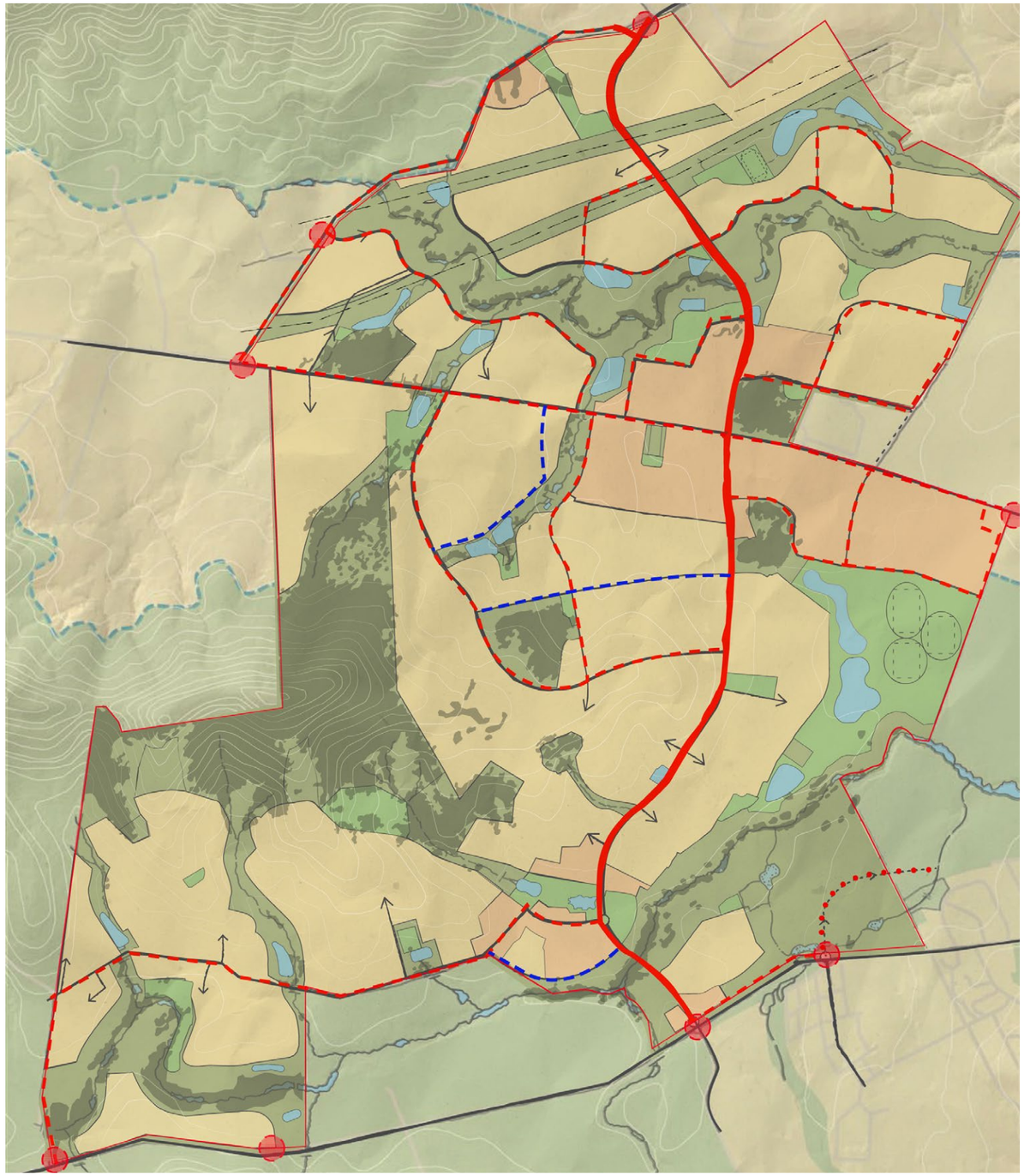
1.2.2 ACCESS AND CONNECTIVITY

Movement throughout the Calderwood Development is primarily along a north/south and east/west road system. The sub-arterial road connects the Illawarra Highway along the southern boundary through the middle of the site, joining Marshall Mount Road on the northern boundary. This central spine does not allow direct-lot access yet forms an important function in connecting residents to most of the stages within the project.

Calderwood Road is an existing road that will be upgraded to no direct-lot access east of the Town Centre in the future. Connecting to broader catchments, this major collector prioritises pedestrian-friendly movement for the schools, town centre and open spaces. Numerous minor collectors accommodate for bus routes and local streets are connected to enhance pedestrian linkages between residents and areas of amenity.

These key movement networks are illustrated in **Figure 13**.

Figure 13: Access and Connectivity



SOURCE: Taylor Brammer Landscape Architects

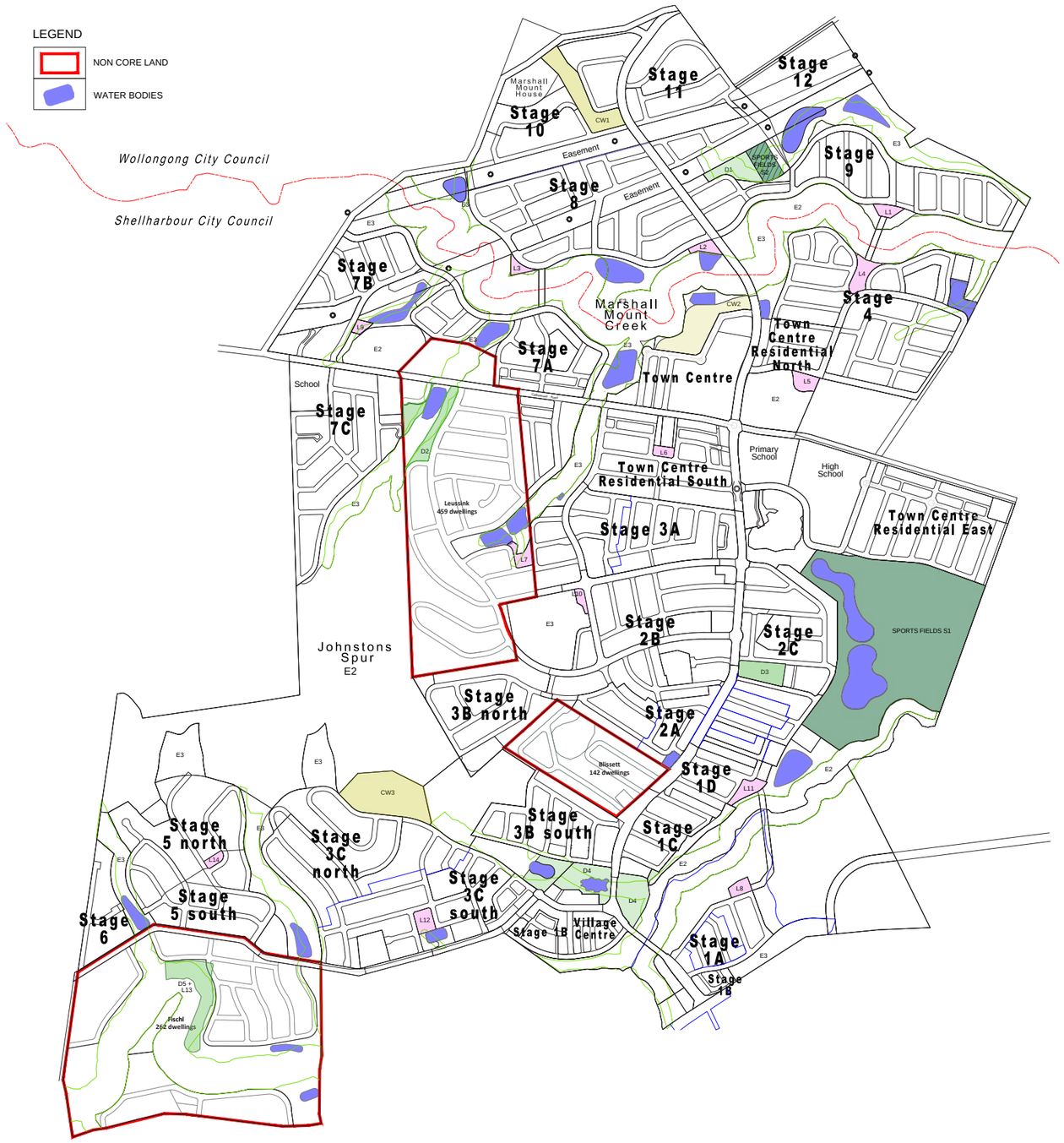
1.2.3 PUBLIC OPEN SPACE

Required Public Open Space is shown in **Figure 14**.

OPEN SPACE- PASSIVE AND ACTIVE
TOTAL AREA REQUIRED: 43.808 Ha (BASED ON 6000 DWELLINGS)

KEY	PARKS SCHEDULE	VPA APPROVED (Ha)	MOD 4 PPR AREA (Ha)	DIFFERENCE (ADDITIONAL OPEN SPACE)	COMMENT
PASSIVE OPEN SPACE					
	DISTRICT PARKS				
	D1 (WCC)	1.00	1.00	0	RELOCATED CLOSER TO ESCARPMENT DRIVE
	D3	1.00	1.00	0	NO CHANGE
	D4	3.80	3.80	0	PARTIAL CONSTRUCTION COMPLETED
	D2 (NON CORE LAND)	1.00	1.3962	0.3962	RELOCATED AND INCREASE IN PARK SIZE
	D5 (NON CORE LAND)	1.00	2.0133	1.0133	AMALGAMATED WITH L13. INCREASE IN PARK SIZE
	LOCAL PARKS				
	L1 (WCC)	0.20	0.30	0.10	RELOCATED AND INCREASE IN PARK SIZE
	L2 (WCC)	0.20	0.3029	0.1029	ACCURATE AUTOCAD MEASURE
	L3 (WCC)	0.20	0.5577	0.3577	ACCURATE AUTOCAD MEASURE
	L4	0.20	0.6392	0.4392	ACCURATE AUTOCAD MEASURE
	L5	0.20	0.4568	0.2568	ACCURATE AUTOCAD MEASURE
	L6	0.20	0.2404	0.0404	INCREASE IN PARK SIZE
	L7 (NON CORE LAND)	0.20	0.4142	0.2142	RELOCATED AND INCREASE IN PARK SIZE
	L8	0.20	0.3185	0.1185	ACCURATE AUTOCAD MEASURE. CONSTRUCTION COMPLETED
	L9	0.20	0.5191	0.3191	RELOCATED AND INCREASED IN PARK SIZE
	L10	0.20	0.20	0	NO CHANGE
	L11	0.20	0.4988	0.2988	ACCURATE AUTOCAD MEASURE. CONSTRUCTION COMPLETED
	L12	0.20	0.4578	0.2578	RELOCATED AND INCREASE IN PARK SIZE
	L13 (NON CORE LAND)	0.20	COMBINED WITH D5	-0.20	AMALGAMATED WITH D5
	L14		0.20	0.20	NEWLY CREATED LOCAL PARK
	CITYWIDE PARKS				
	CW1 (WCC)	2.00	2.10	0.10	RELOCATED AND INCREASED IN PARK SIZE
	CW2	2.00	2.00	0	NO CHANGE
	CW3	3.43	3.43	0	RELOCATED. NO CHANGE IN PARK SIZE
	TOTAL	**17.83**	**21.8449**	**4.0149**	
ACTIVE OPEN SPACE					
	SPORTS FIELDS S1	15.84	21.0592	5.2192	ACCURATE AUTOCAD MEASURE (EXCLUDES BASINS)
	POTENTIAL ADDITIONAL ACTIVE OPEN SPACE				
	EXTENSION TO D1 PARK (SPORTS FIELDS S2)		0.9039	0.9039	NEW ACTIVE OPEN SPACE
	TOTAL	**15.84**	**21.9631**	**6.1231**	
OVERALL TOTAL		**33.67**	**43.808**	**10.138**	

Figure 14: Open Space Analysis

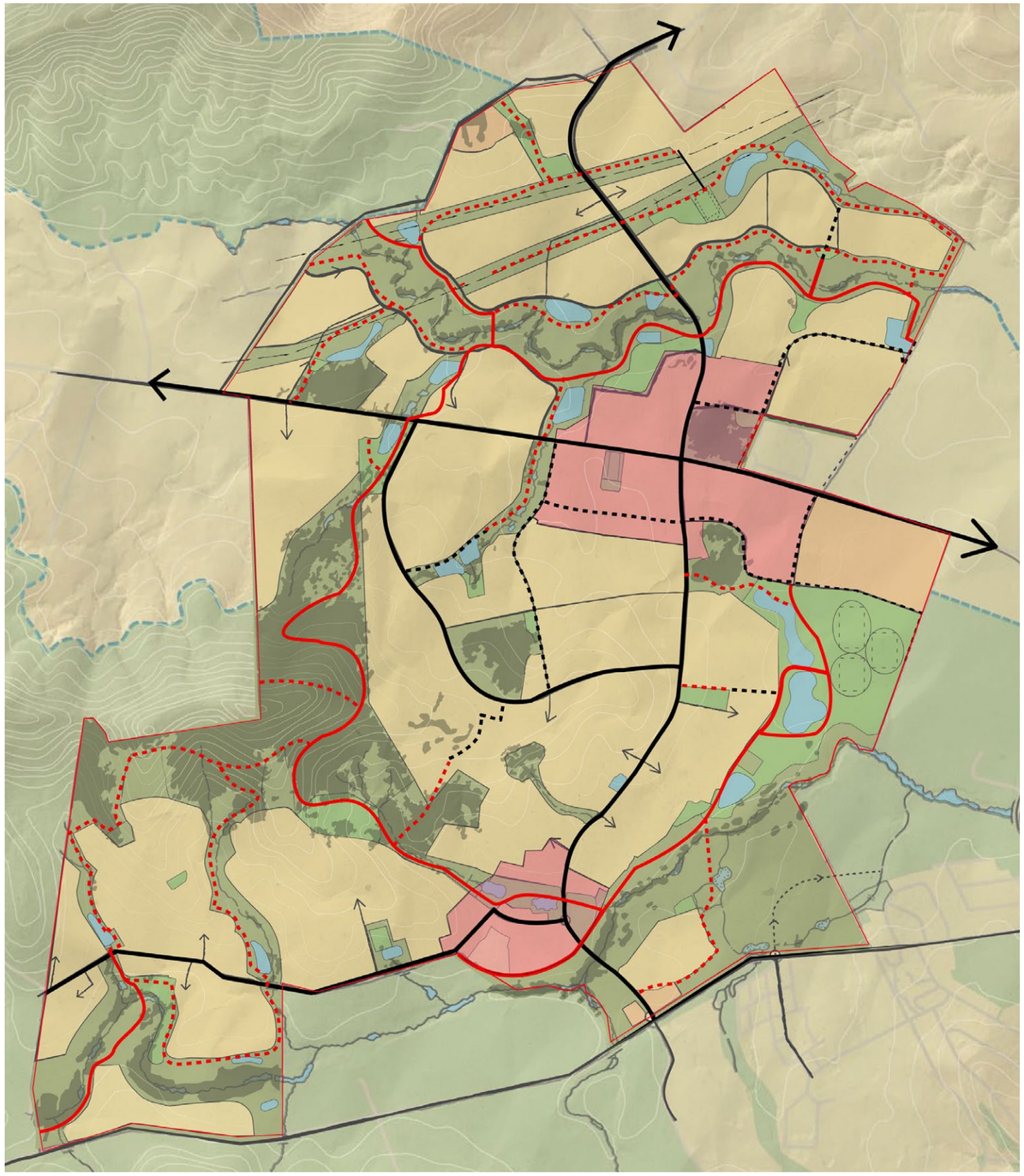


SOURCE: Taylor Brammer Landscape Architects, May 2019.

1.2.4 PEDESTRIAN AND CYCLE CONNECTIONS

Figure 15 highlights the indicative pedestrian and cycle routes throughout the site.

Figure 15: Pedestrian and Cycle Connections



Pedestrian/Bicycle Friendly Zones
2-4 lanes, Bus Route

Primary/Commuter Path in Road Corridors
2.5m sealed

Secondary Path in Road Corridors
1.5m-2.5m sealed

Primary Trail in Open Space Corridors
2.5m sealed*

Secondary Trail in Open Space Corridors
1.5m gravel

* Trail through the Johnstons Spur will be 1.5m and of a material sensitive to the environment (eg gravel, decomposed granite, etc)

Indicative Crossing Points (Vehicles Only)

SOURCE: Taylor Brammer Landscape Architects

1.2.5 EDUCATION AMENITY

All three of the education sites are located along Calderwood Road as one of the main spines for the development, as seen in **Figure 16**. This increases the exposure of the sites in drawing in other residents from a wider catchment. The primary and high school are co-located together, opposite the town centre and main sports field / recreation precinct. A hub of activity is therefore surrounding these two sites, creating a core education precinct. The other primary school is on the western edge of the site, accommodating a broader community catchment. All three of these schools are situated on flat land with grades no greater than 1:20.

Figure 16: Proposed School Locations

SOURCE: Taylor Brammer Landscape Architects

1.2.6 PUBLIC TRANSPORT NODES / LOCATIONS AND WALKING DISTANCES

Figure 17 shows the indicative public transport routes and 400m walking catchments from approximate bus stop locations.

Strategic Trunk Bus Route
To be negotiated with future operator

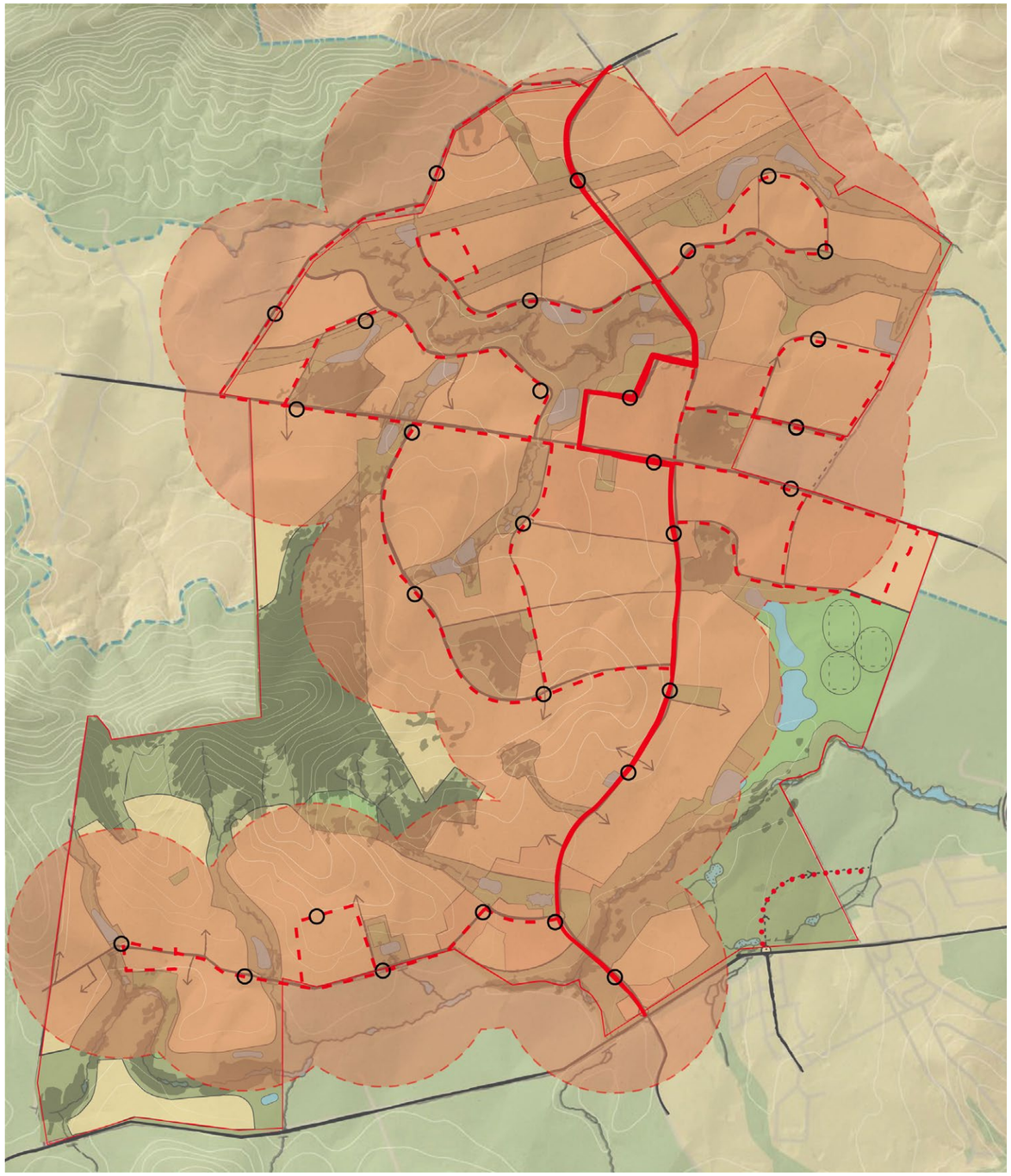
Approximate Bus Route
To be negotiated with future operator

Approximate Bus Stop Location
To be negotiated with future operator

400m Radius from Bus Stops
Typically 5 minutes walking radium

Albion Park Bypass
Indicative Route

Figure 17: Public Transport Bus Service



SOURCE: Taylor Brammer Landscape Architects

2.0 DWELLING TYPES, RESIDENTIAL CHARACTER, DWELLING DENSITY AND PLACEMENT

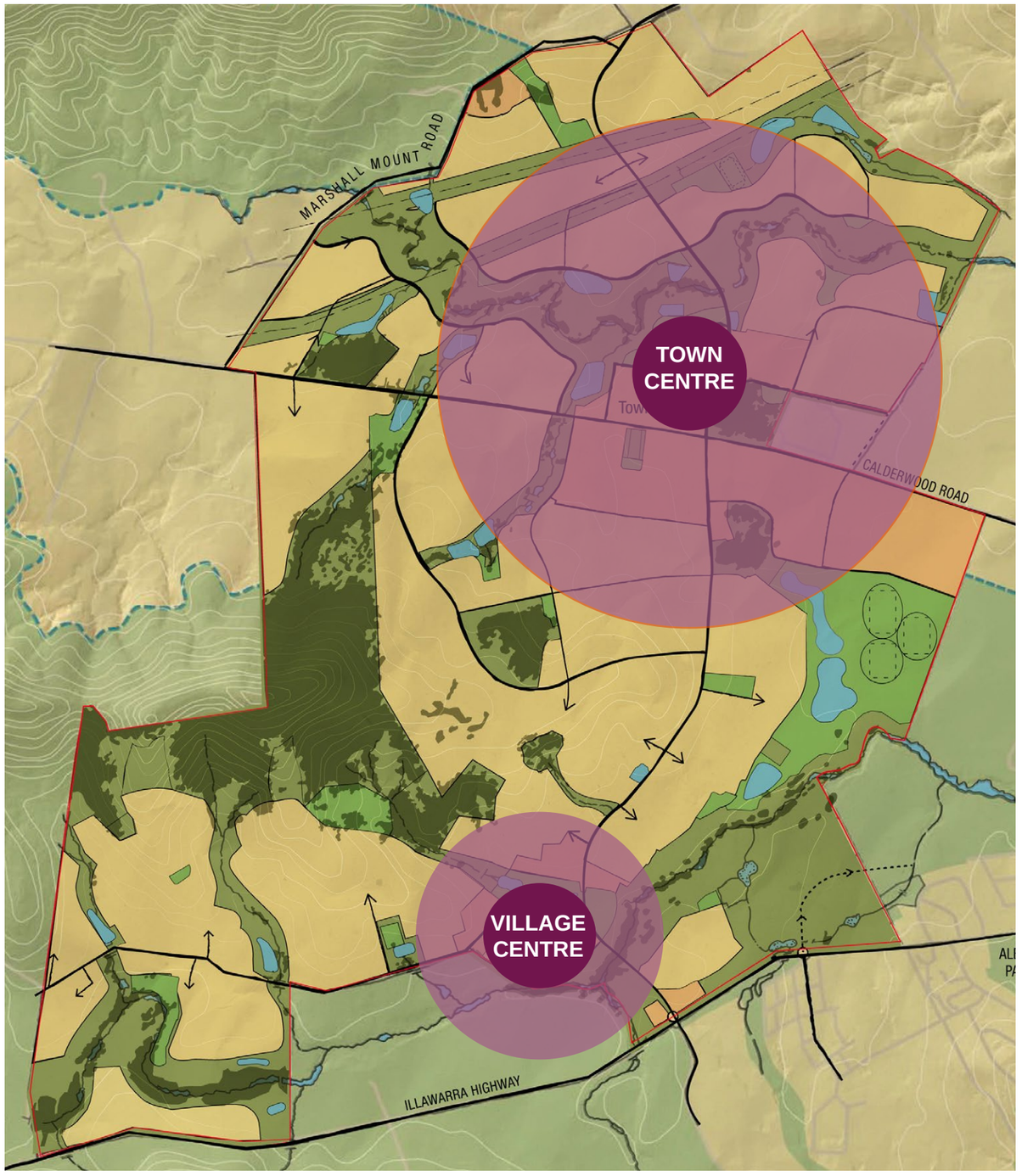
2.1 DWELLING TYPES

The revised Development Control Strategy (DCS) does introduce new dwelling typologies. There is a diverse range of dwelling types to respond to a variety of living conditions and community expectations as described below. The types of dwellings are contained within the revised Calderwood DCS, and provide for:

- Affordability within a master planned community with convenient access to open space, recreation, education, shopping and health.
- Smaller household types including families downsizing, semi-retired households and those entering the property market for the first time.
- Diversity in ownership and maintenance of housing to meet the lifestyle expectations of owners.
- Increase density around mixed use centres and Local Parks to sustain economic prosperity and efficiencies in infrastructure where slope permits (**Figure 18**).

Smaller Household Diversity

Figure 18: Town Centre & Village Centre Locations



SOURCE: Taylor Brammer Landscape Architects.

2.2 RESIDENTIAL CHARACTER

The previous Concept Plan envisaged a higher proportion of dwellings on allotment sizes of 300m² in land area and above. In comparison the proposed Concept Plan increases the number of smaller dwellings in areas that suit the constraints, and are within the proposed urban characters of the Village and Town Centres. Regarding the existing Residential Character Areas Plan in the DCS, there will be no change to the intent of the Character Areas, apart from allowing for an increase in smaller dwellings for those development areas unconstructed, and within 800m or a 10 minute walk of the Town Centre.

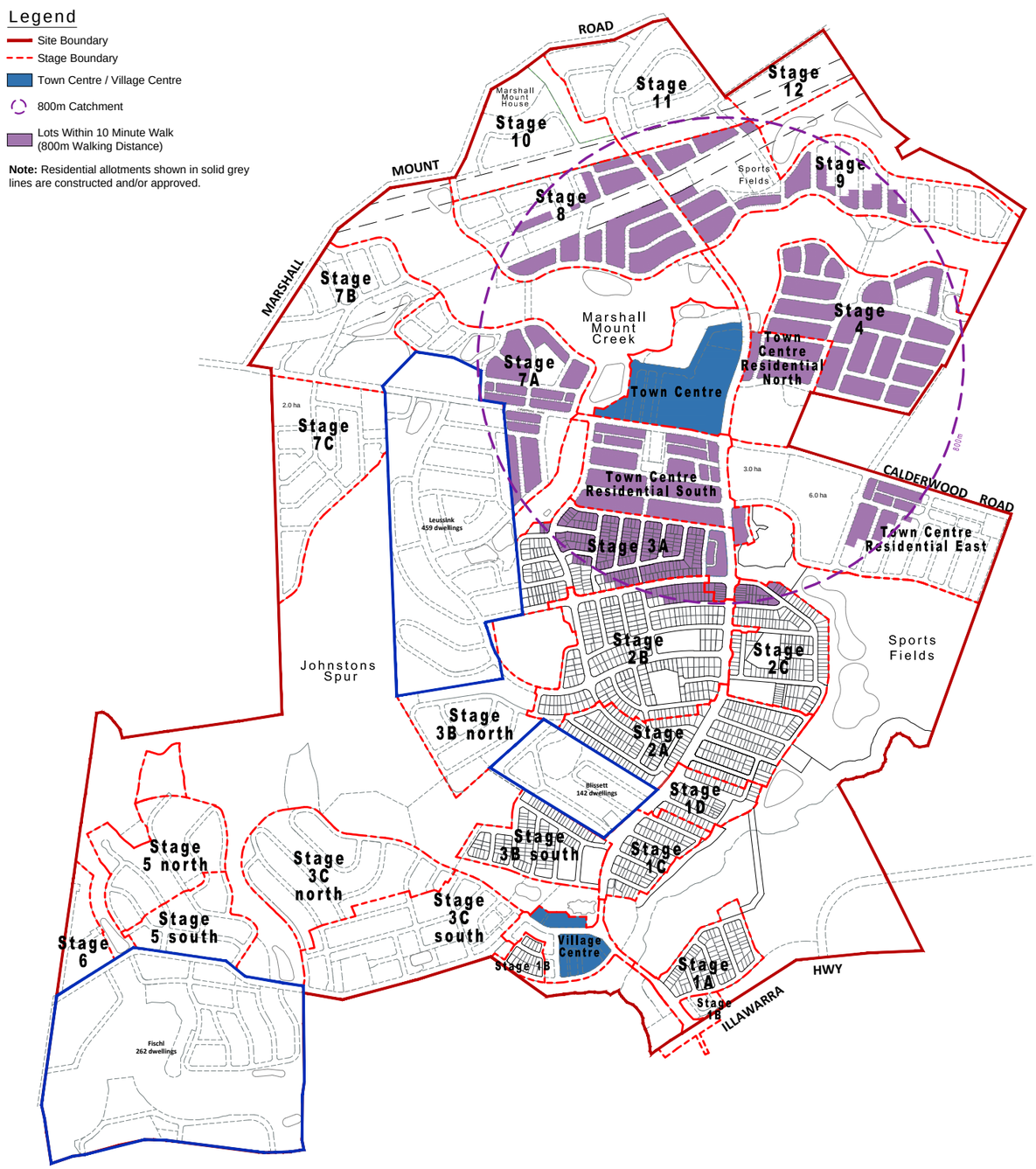
General Residential areas that align with the characteristics listed below are suited to comprise a mix of smaller dwellings on allotments less than 300m² in land size, on a mix of tenures:

- Directly adjacent or opposite parks at least 0.2ha in size, or
- Directly adjacent or opposite Town and Village Centres, or
- Within 800m or a 10 minute walk of the Town Centre**,** and
- Where the gradient of the site is less than 1 in 10.

These characteristics allow for higher densities than the remaining areas of General Residential.

In order to determine which dwellings are within a 800m or 10 minute walk of the Town Centre, a Ped Shed Analysis has been completed. The Ped Shed Analysis approach is seen as best practice for determining walkable catchments. For this analysis, an average walking pace of 5 kilometers per hour is adopted. This equates to 800m walking distance over the course of 10 minutes. The Ped Shed Analysis shown in **Figure 19** depicts all lots that are within a 800m walking distance from the Town Centre.

Figure 19: Ped Shed Analysis



SOURCE: RPS.

2.3 DWELLING TYPES

As discussed above, dwelling type placement and dwelling density varies according to the Residential Character. **Figure 20** demonstrates how the dwellings have been distributed throughout the Concept Plan, considering the character and constraints. This Plan highlights the following:

- Residential character type,
- The dwelling types that are applicable to each area, and
- The indicative dwelling numbers in each area.

It also separates the Town and Village Centre Character area into Mixed-Use Areas and Town Centre / Village Residential areas. It also identifies existing stages and landholdings not owned by Lendlease.

Section 3 outlines the indicative subdivision and potential lot layouts for each Residential Character Type as contained in **Figure 20**.

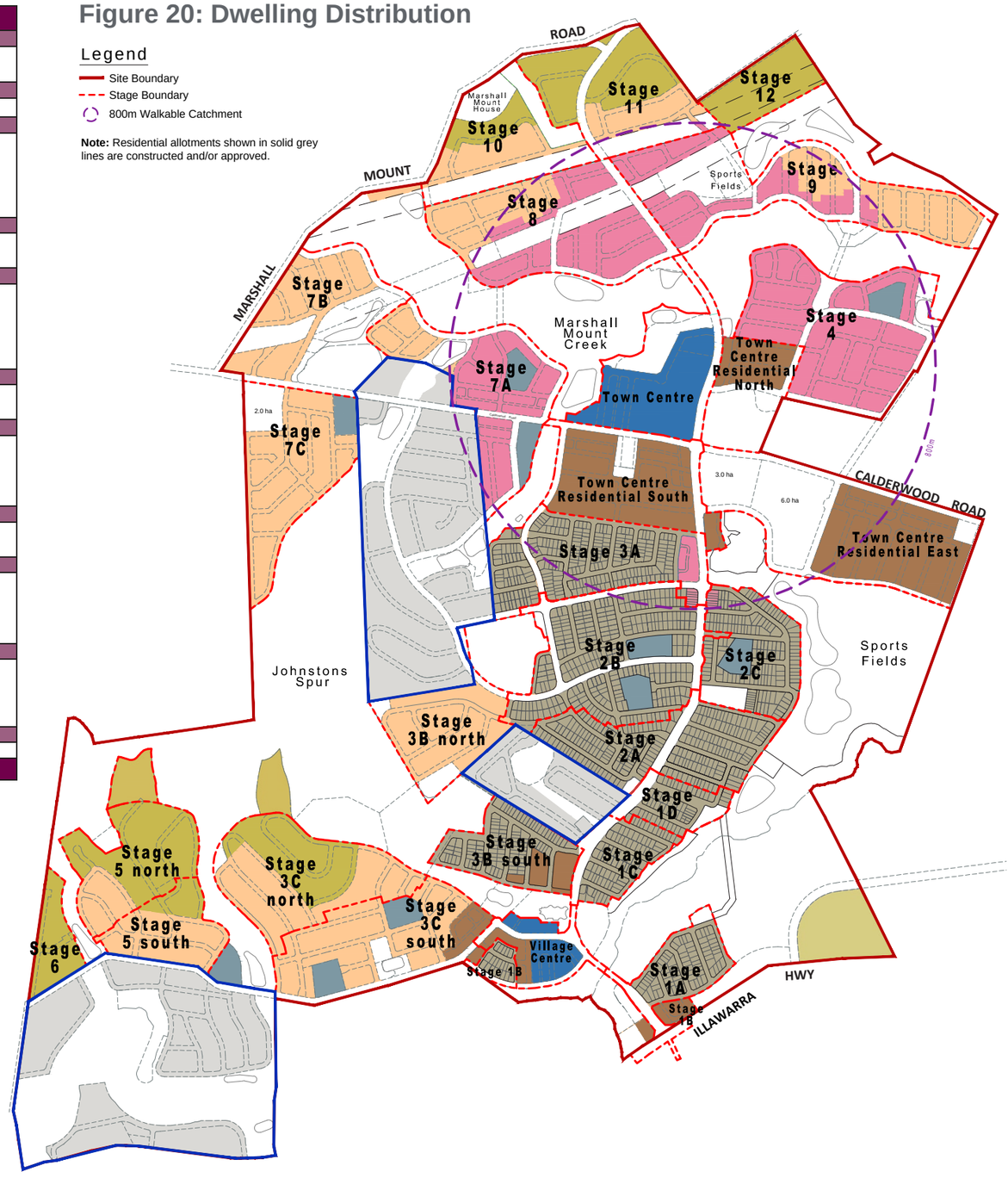
Standard Density Residential

Below: Dwelling types suitable close to Town and Village Centre, Local Parks and flatter topography

Residential Type	Dwelling Types	Dwelling Numbers	Density Range
Existing Stages (includes DA approved lots under construction)	**Existing**	1325	15-17dw/ha
Non LL Core Lands	**N/A**	913	15- 17 dw/ha
Landowner Lots	**Standard Residential** C1 - C9 Integrated Housing subject to locational criteria - Local Park C10-C21	215	15-17dw/ha
Slope Sensitive & Rural Lands	**Standard Residential** C3-C9	269	Various
General Residential	**Standard Residential** C1 - C7 Integrated Housing subject to locational criteria - Local Park C10-C21	1304	15-17dw/ha
Village Centre Mixed Use	**Integrated Housing** C1+C2, C10-C26	104	30-250dw/ha
Village Centre Residential (existing B4 Zone)	**Standard Residential** C1 - C7 **Integrated Housing** C10-C26	91	22-30dw/ha
Town Centre Mixed Use	**Integrated Housing** C1+C2, C10-C26	150	30-250dw/ha
Town Centre Residential (existing B4 Zone)	**Standard Residential** C1 - C7 **Integrated Housing** C10-C26	750	22-30dw/ha
General Residential / Town Centre Proximity	**Standard Residential** C1-C7 **Integrated Housing** C10-C24	879	17-22dw/ha
TOTAL		**6000**	

Note: Retirement Living will be located within Village Centre Mixed Use, Town Centre Mixed Use, Village Centre Residential, Town Centre Residential and/or General Residential areas, and will replace the dwelling numbers indicated above to ensure compliance with the overall dwelling upper limit of 6,000 dwellings.

Figure 20: Dwelling Distribution



NOTE: The Dwelling Types listed above refer to Section 1B and Appendix C of the Revised DCS.

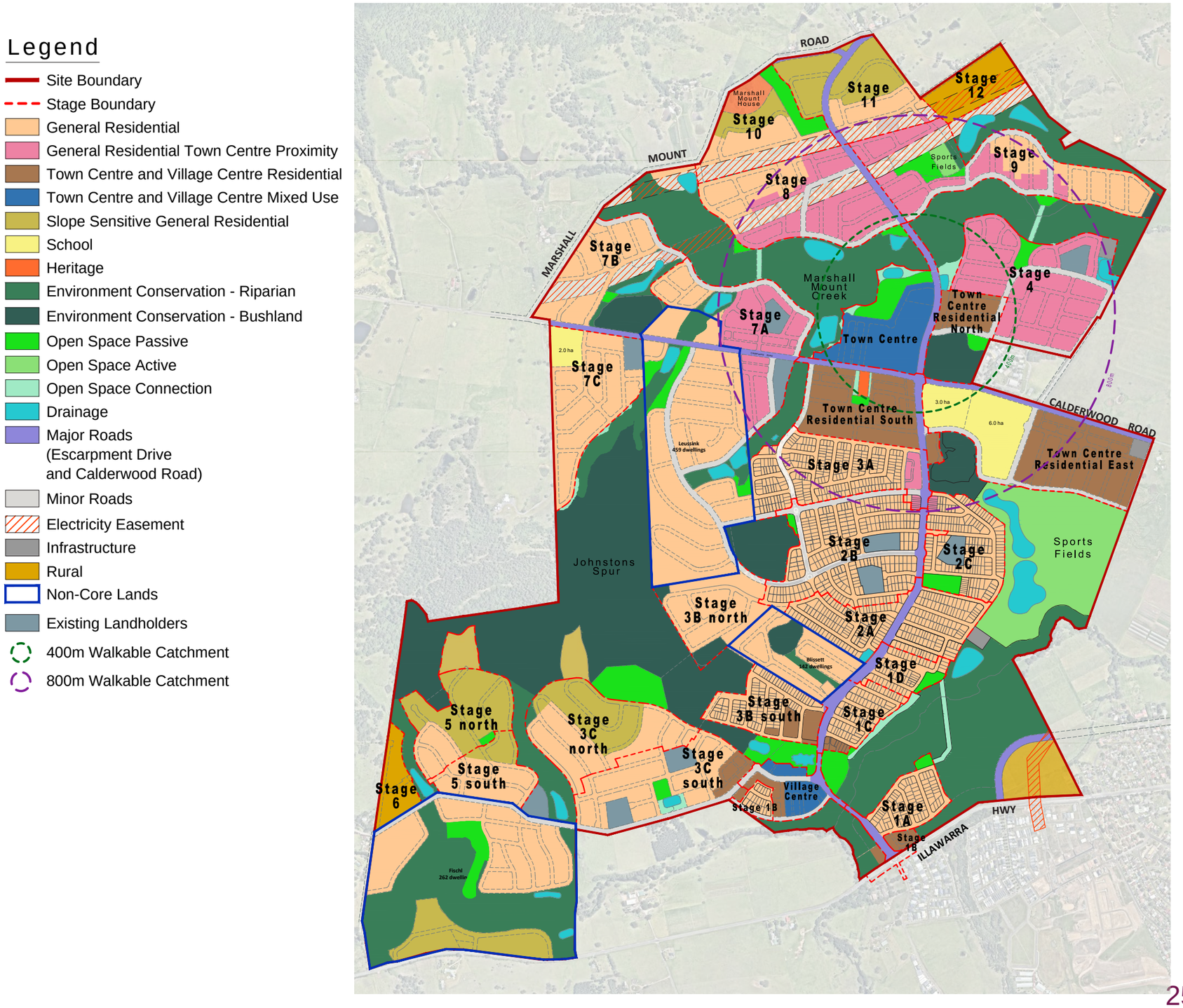
3.0 INDICATIVE SUBDIVISION PATTERN

The Indicative Subdivision Pattern has been refined to reflect the changes that have been made to structuring elements such as major roads and flooding.

The approach to the layout has not altered from the Urban Design Principles contained in the DCS. The location of roads and lots are influenced by many factors including site constraints and housing density.

Figure 21 illustrates the indicative subdivision layout overlaid on the constraints. This section provides examples and demonstrates how the indicative subdivision pattern conforms to the site and achieves the dwelling density.

Figure 21: Indicative Subdivision Pattern



3.1 GENERAL RESIDENTIAL

The General Residential area is comprised of four sub-categories:

- Existing Stages (approved and/or constructed),
- Undeveloped Lendlease land,
- Landowner Lots,
- Non Lendlease Core Lands.

The last two sub-categories are land that is not owned or to be developed by Lendlease.

Figure 22 highlights where these areas are located.

The number of dwellings per hectare generally ranges between 15 and 17 dwellings per hectare.

It should be noted that the Net Developable Area is defined as the number of dwellings divided by the land area of local roads and residential lots.

Residential Type	Dwelling Types	Dwelling Numbers
Existing Stages (includes DA approved lots under construction)	**Existing**	1325
Non LL Core Lands	**N/A**	913
Landowner Lots	**Standard Residential** C1 - C9 Integrated Housing subject to locational criteria - Local Park C10-C21	215
General Residential	**Standard Residential** C1 - C7 Integrated Housing subject to locational criteria - Local Park C10-C21	1304

Note: Retirement Living will be located within Village Centre Mixed Use, Town Centre Mixed Use, Village Centre Residential, Town Centre Residential and/or General Residential areas, and will replace the dwelling numbers indicated above to ensure compliance with the overall dwelling upper limit of 6,000 dwellings.

NOTE: The Dwelling Types listed above refer to Appendix C of the Revised DCS.

Figure 22: General Residential

3.1.1 GENERAL RESIDENTIAL EXAMPLES

The dwelling types include the Standard Residential Types of C1 to C7 and the Integrated Housing Types C10 to C21, subject to being located opposite a Local Park. These dwelling types and the densities being achieved have already been approved and are currently being constructed. It is intended that this form of residential continue to be developed in the future Stages of 7B, 7C, and parts of Stages 8, 9, 10, 11, 3 and 5 (in those areas not slope sensitive).

Lots above 300m² - Dwelling Types C1-C7

3.2 GENERAL RESIDENTIAL - TOWN CENTRE PROXIMITY

As indicated in Section 2.2, these areas are intended to remain within the General Residential character areas but due to the characteristics listed below they are suited to comprise a more diverse mix of dwellings including smaller dwellings on allotments less than 300m² in land size, on a mix of tenures.

Characteristics promoting a more diverse mix of dwellings are:

- Within 800m or a 10-minute walk of the Town Centre (refer to Ped Shed Analysis in Section 2.2),
- Opposite Parks, and
- Suitable topography and landform.

Figure 23 highlights where these areas are located.

The number of dwellings per hectare generally ranges between 17-22 dwellings per hectare.

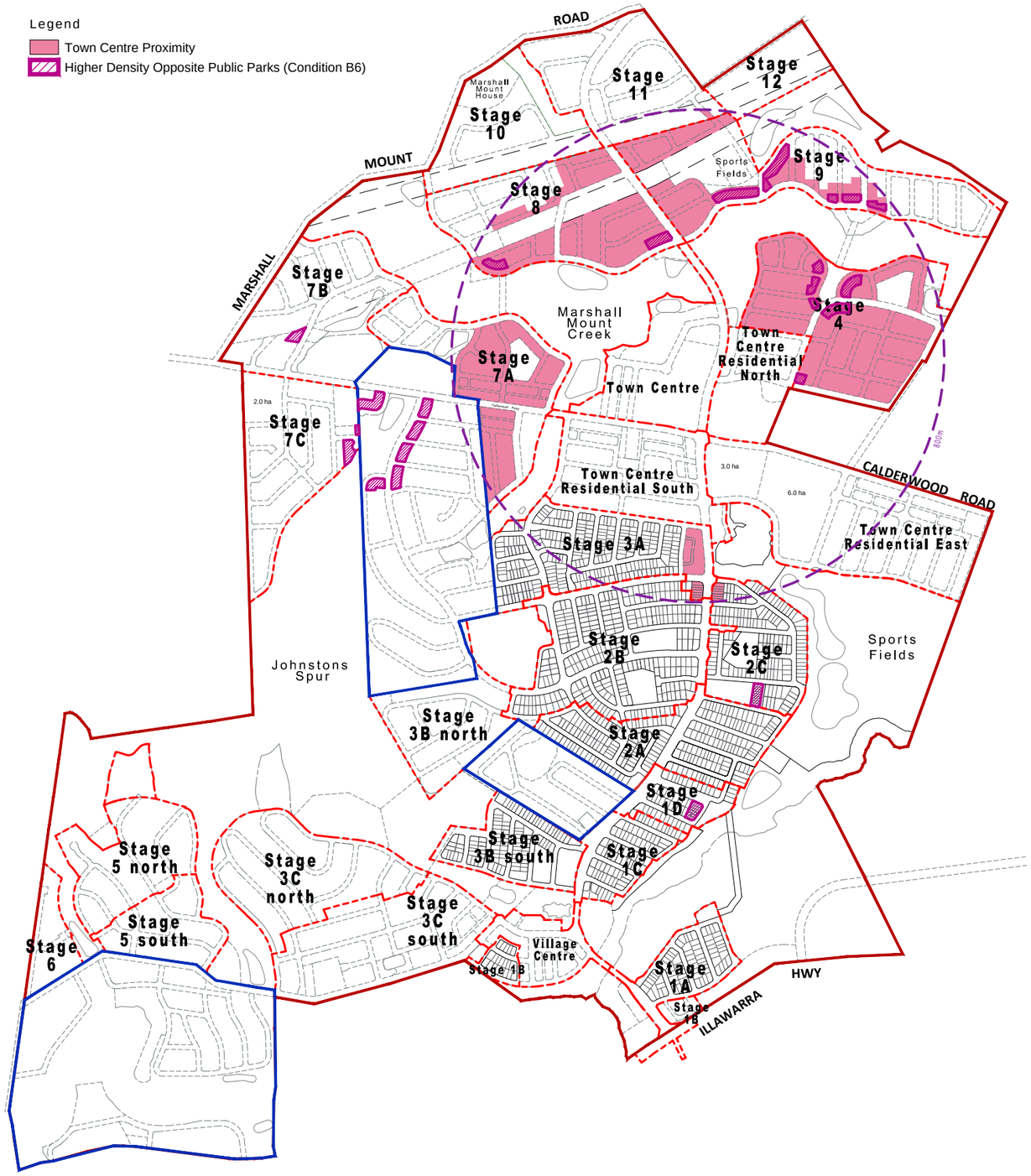
It should be noted that the Net Developable Area is defined as the number of dwellings divided by the land area of local roads and residential lots.

Residential Type	Dwelling Types	Dwelling Numbers
General Residential / Town Centre Proximity	**Standard Residential** C1-C7 **Integrated Housing** C10-C24	879

Note: Retirement Living will be located within Village Centre Mixed Use, Town Centre Mixed Use, Village Centre Residential, Town Centre Residential and/or General Residential areas, and will replace the dwelling numbers indicated above to ensure compliance with the overall dwelling upper limit of 6,000 dwellings.

NOTE: The Dwelling Types listed above refer to Appendix C of the Revised DCS.

Figure 23: General Residential - Town Centre Proximity

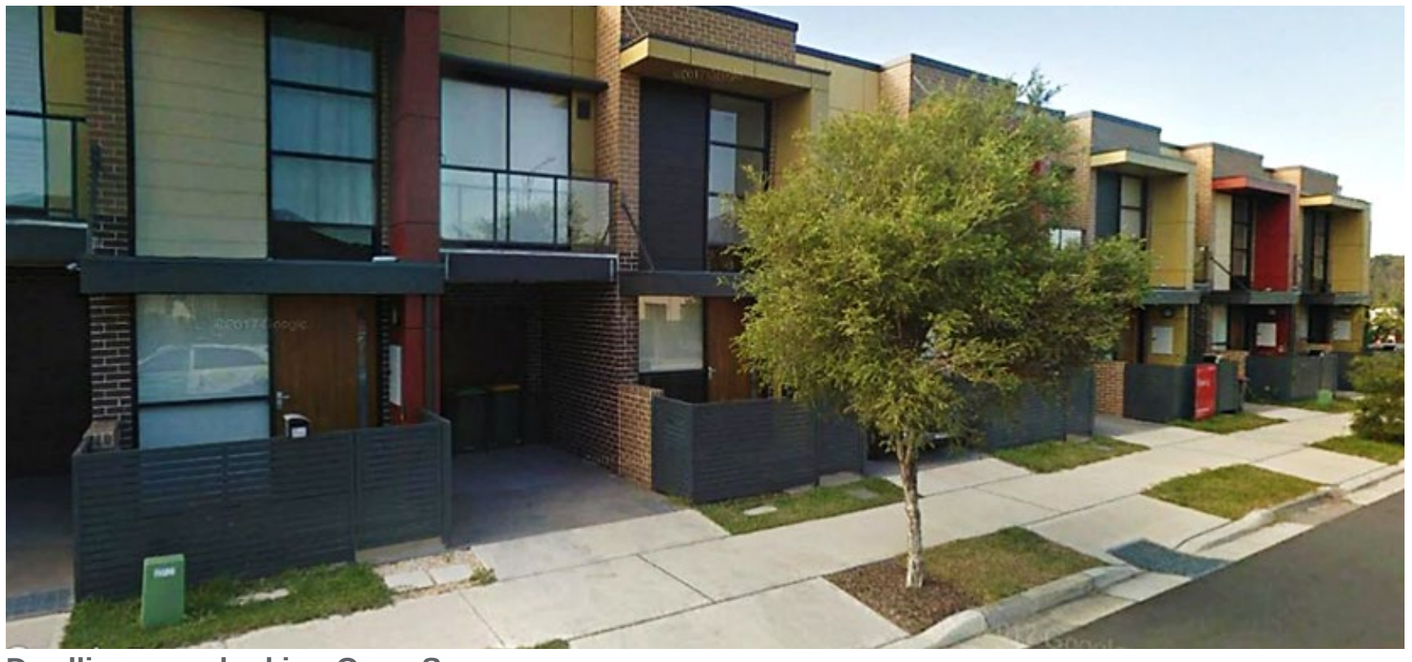


3.2.1 GENERAL RESIDENTIAL - TOWN CENTRE PROXIMITY EXAMPLES

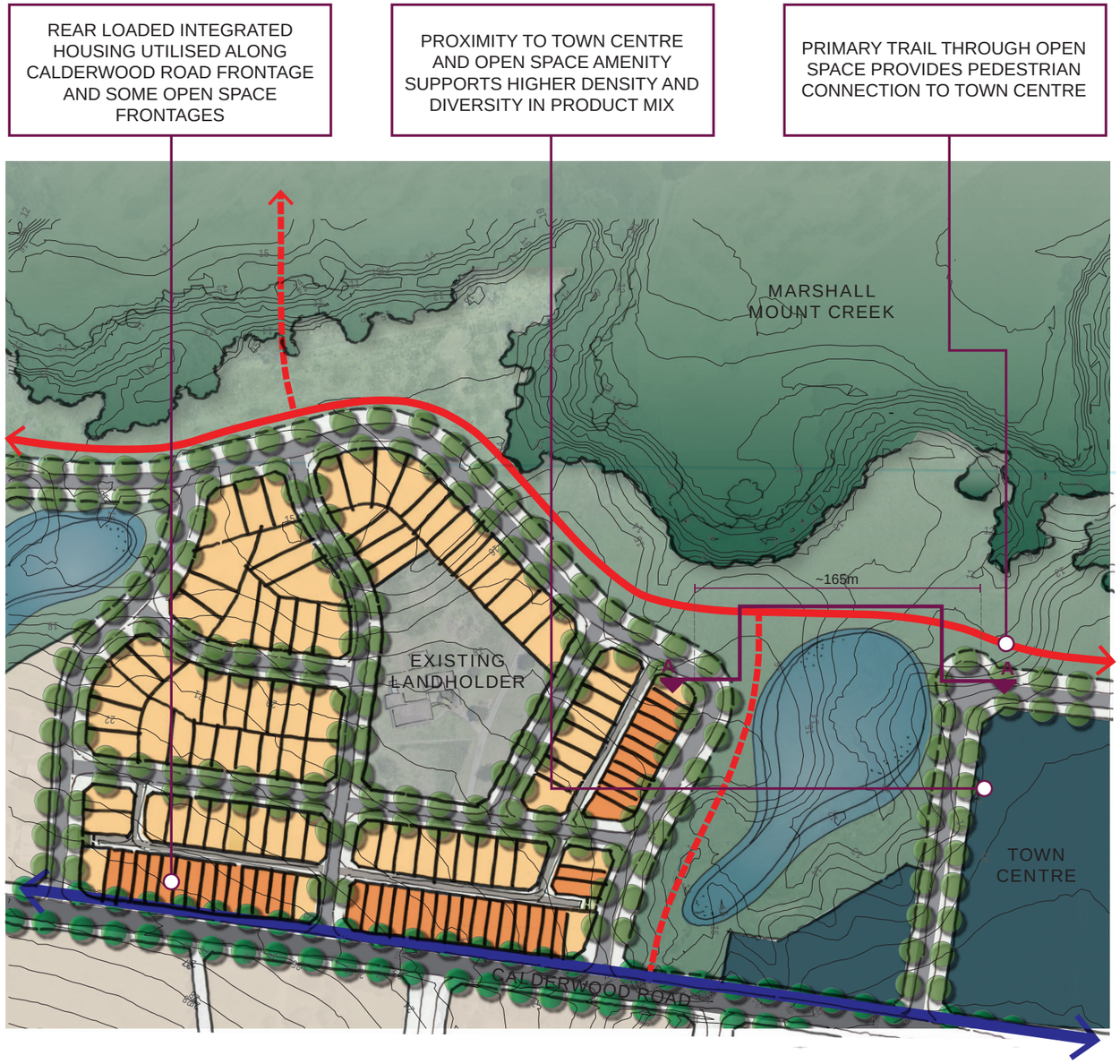
The dwelling types include the Standard Residential types of C1 to C7 and the Integrated Housing types of C10 to C24. These dwelling types are illustrated in the images below.

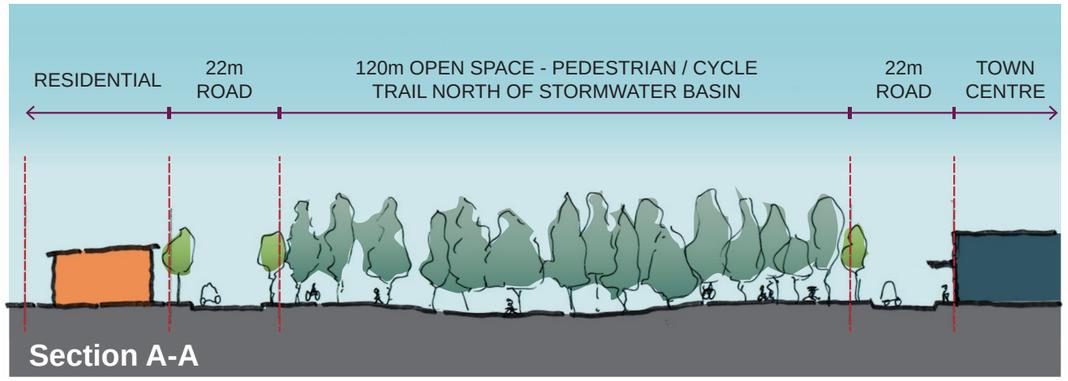
Lots above 300m² - Dwelling Types C1-C7

Lots below 300m²- Dwelling Types C10-C24 Terraces within 800m of Town Centre



Dwellings overlooking Open Space





LEGEND

- Town Centre
- Lots >300m² (C1 - C9 Standard Residential)
- Lots <300m² (C10 - C24 Integrated Housing)
- Primary / Commuter Pedestrian & Cycle Path
- Primary Trail in Open Space Corridors
- Secondary Trail in Open Space Corridors

Indicative layout over Stage 7A illustrating potential location of integrated housing in response to open space amenity and proximity to town centre

3.3 TOWN CENTRE AND VILLAGE CENTRE RESIDENTIAL

The Town Centre and Village Centre Residential comprises the most diverse dwelling mix with the highest proportion of smaller dwellings on lots below 300m². Contained within the existing B4 Residential Zones **Figure 24** highlights where these areas are located.

The number of dwellings per hectare generally ranges between 22 to 30 dwellings per hectare.

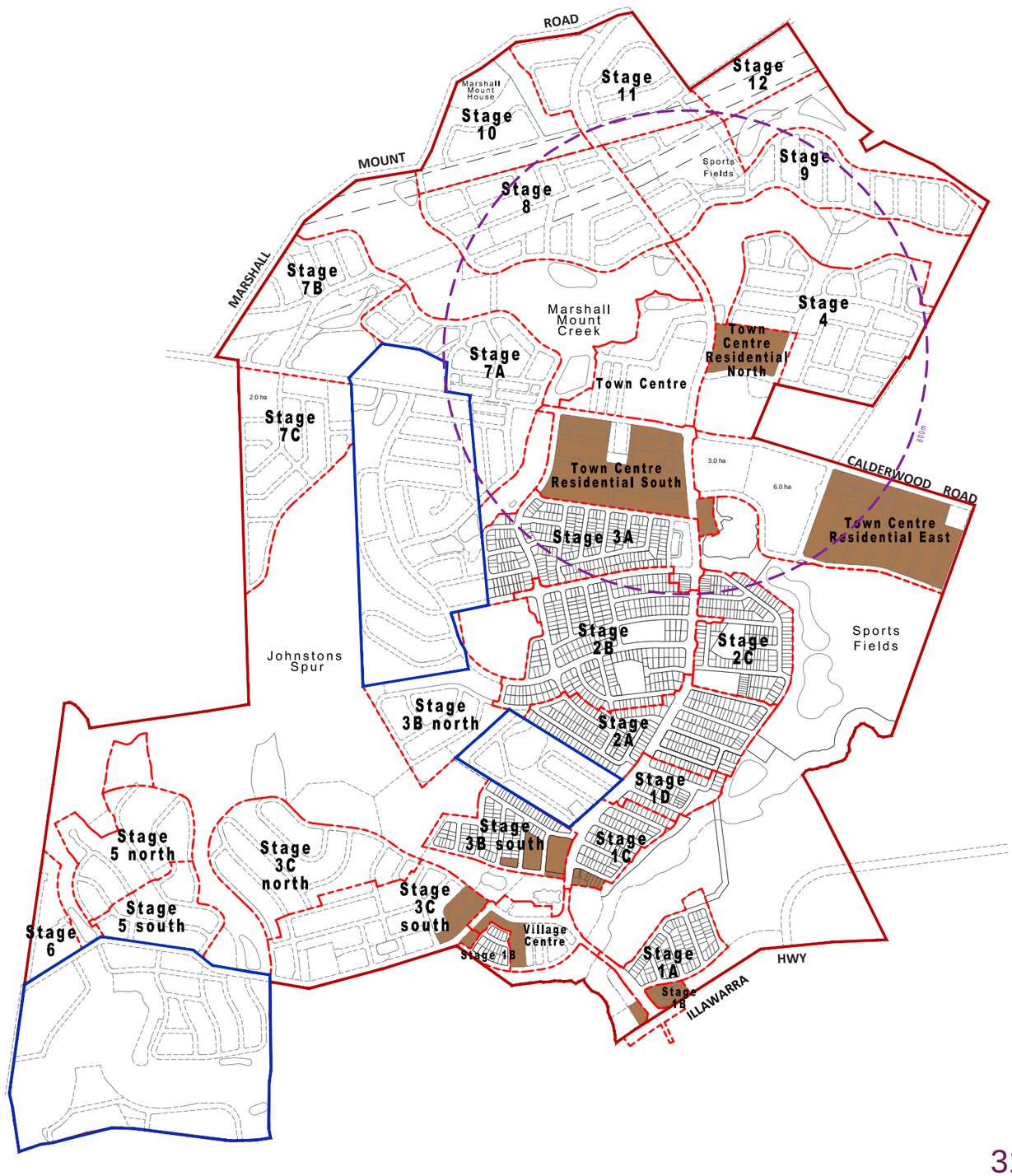
It should be noted that the Net Developable Area is defined as the number of dwellings divided by the land area of local roads and residential lots.

Residential Type	Dwelling Types	Dwelling Numbers
Village Centre Residential (existing B4 Zone)	**Standard Residential** C1 - C7 **Integrated Housing** C10-C26	91
Town Centre Residential (existing B4 Zone)	**Standard Residential** C1 - C7 **Integrated Housing** C10-C26	750

Note: Retirement Living will be located within Village Centre Mixed Use, Town Centre Mixed Use, Village Centre Residential, Town Centre Residential and/or General Residential areas, and will replace the dwelling numbers indicated above to ensure compliance with the overall dwelling upper limit of 6,000 dwellings.

NOTE: The Dwelling Types listed above refer to Appendix C of the Revised DCS.

Figure 24: Town Centre and Village Centre Residential



3.3.1 TOWN CENTRE AND VILLAGE CENTRE RESIDENTIAL EXAMPLES

The dwelling types include the Standard Residential types of C1 to C7 and the Integrated Housing types of C10 to C26. These are like the dwelling types highlighted in the General Residential – Town Proximity area. The difference will be an increase in the number of smaller lots below 300m² which will achieve a higher density of dwellings per hectare.

3.4 TOWN CENTRE AND VILLAGE CENTRE MIXED USE

The Town Centre and Village Centre Mixed Use areas comprises the densest dwelling mix. Contained within the existing B4 Residential Zones, **Figure 25** highlights where these areas are located.

Given the mixed-use nature of the centres, the dwelling densities will vary considerably depending on ultimate dwelling design composition between the various Integrated Housing Types. It is proposed that the Village Centre will comprise 104 dwellings and the Town Centre 150 dwellings as shown in the blue areas in **Figure 25**.

The number of dwellings per hectare will vary considerably on a site by site basis. Generally, these can range from 30 dwellings per hectare for terrace style homes to 250 dwellings per hectare for 4 to 5 storey apartments depending on parking and mixed-use arrangements.

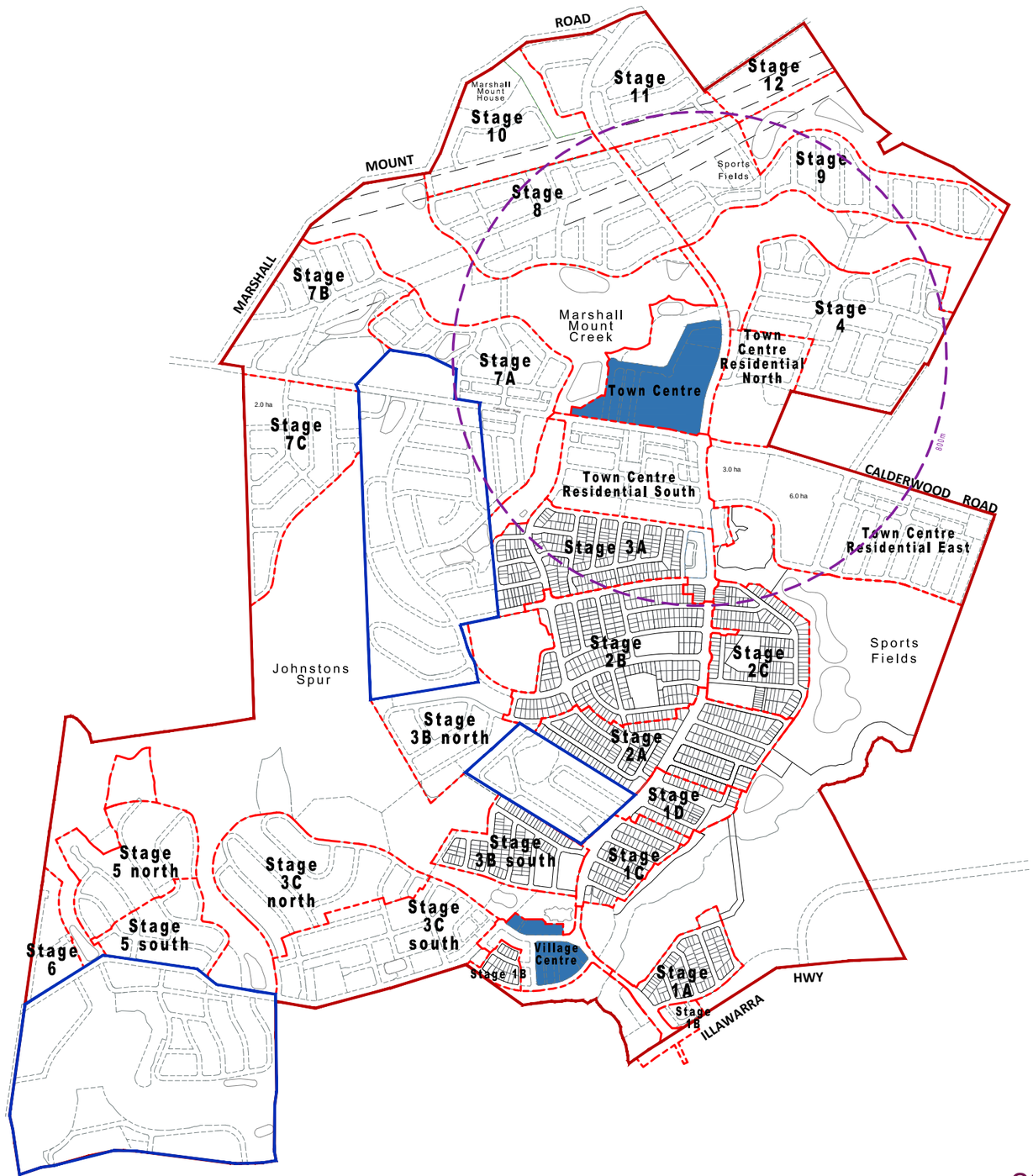
In this case dwellings per hectare excludes roads and is defined as the residential lot only.

Residential Type	Dwelling Types	Dwelling Numbers
Village Centre Mixed Use	**Integrated Housing** C1+C2, C10-C26	104
Town Centre Mixed Use	**Integrated Housing** C1+C2, C10-C26	150

Note: Retirement Living will be located within Village Centre Mixed Use, Town Centre Mixed Use, Village Centre Residential, Town Centre Residential and/or General Residential areas, and will replace the dwelling numbers indicated above to ensure compliance with the overall dwelling upper limit of 6,000 dwellings.

NOTE: The Dwelling Types listed above refer to Appendix C of the Revised DCS.

Figure 25: Town Centre and Village Centre Mixed Use



3.4.1 TOWN CENTRE MIXED USE EXAMPLES

The dwelling types include the Integrated Housing Dwelling Types of C10 to C26 contained in the Appendix of the Revised DCS.

Live / Work opportunities

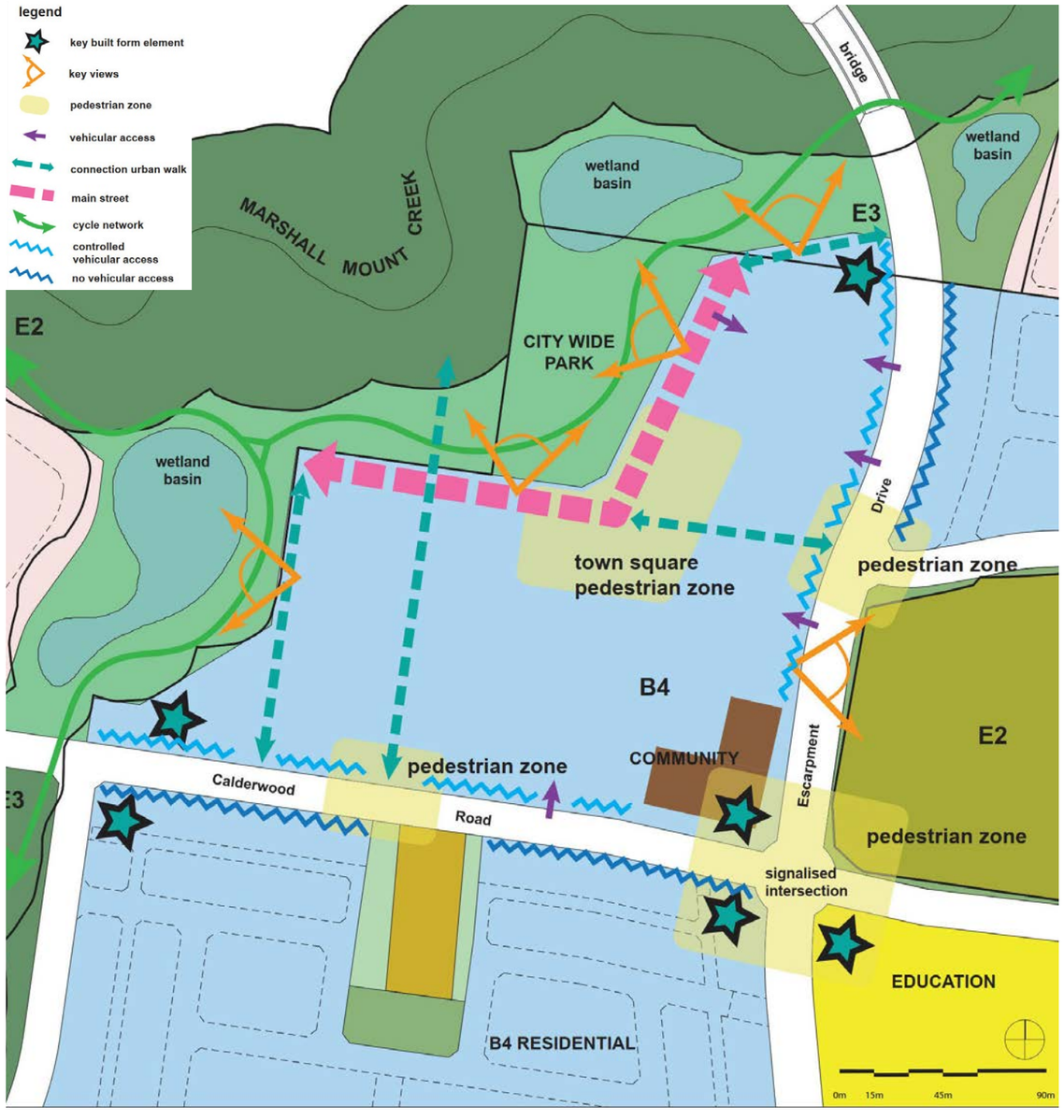
Terrace

3 storey apartments

3-4 storey apartments

4 storey apartments

3.4.2 TOWN CENTRE MIXED USE EXAMPLES



Calderwood Valley Town Centre Core Framework Plan

Examples of mixed use

3.4.3 TOWN CENTRE LAYOUT TESTING (INDICATIVE LAYOUT ONLY)

The following conceptual layouts consider the Retail, Commercial and Community GFA's required on the Town Centre site, and the relevant carparking requirements, across two separate options. It demonstrates that the development area proposed for the town centre can adequately accommodate the desired mixed use arrangements to meet expected market demand. The town centre framework provides a flexible solution for future detailed development to accommodate a reange of retail, commercial, community and residential land uses in a vibrant and efficient manner.

TOWN CENTRE LAYOUT OPTION ONE - STAGED DELIVERY

GROSS FLOOR AREA OVERVIEW

REQUIRED:
RETAIL: 25,000m²
COMMERCIAL: 20,000m²
COMMUNITY: 1,120m²

PROVIDED:
GROUND FLOOR:
RETAIL LARGE FORMAT: 11,600m²
RETAIL SPECIALITY, ETC: 11,720m²
TOTAL: 23,320m²
COMMERCIAL: N/A
COMMUNITY: 1,120m²

SECOND FLOOR:
RETAIL SPECIALITY, ETC: 1,680m²
COMMERCIAL: 7,500m²

THIRD FLOOR:
COMMERCIAL: 7,500m²

FOURTH FLOOR:
COMMERCIAL: 5,000m²

TOTAL RETAIL PROVIDED: 25,000m²
TOTAL COMMERCIAL PROVIDED: 20,000m²
TOTAL COMMUNITY PROVIDED: 1,120m²
OVERALL GFA: 46,120m²

CARPARKING - REQUIRED RATES

COMMERCIAL:
OFFICE / BUSINESS PREMISES: 1 space / 40m² GFA
GFA: 20,000m²
CARPARKING REQUIRED: 500 spaces

RETAIL:
RETAIL SHOP: 1 space / 35m² GFA
GFA: 13,400m²
CARPARKING REQUIRED: 383 spaces
SUPERMARKET: 1 space / 20m² GFA
GFA: 11,600m²
CARPARKING REQUIRED: 580 spaces

COMMUNITY CENTRE:
COMMUNITY FACILITIES:
1 space / 40m² GFA plus1 space per employee
GFA: 1,120m²
CARPARKING REQUIRED: 30 (assuming 2 employees)

TOTAL CARPARKS REQUIRED: 1493 SPACES

CARPARKING - PROVIDED

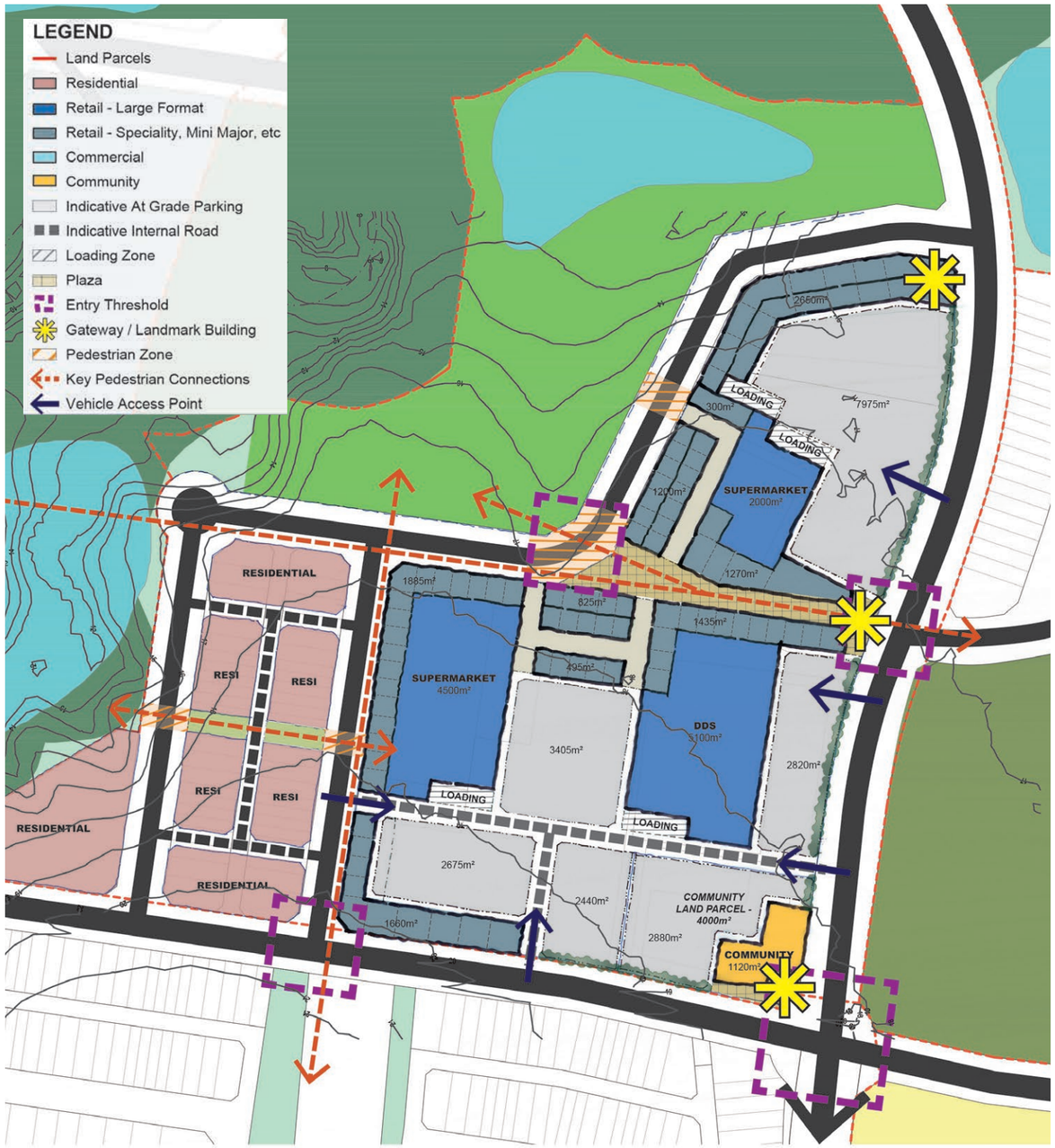
AT GRADE CARPARKING TOTAL AREA: 22,195m²
MINUS 5% INEFFICIENCY / LANDSCAPING: 21,085m²
Assuming 28m² / space - 753 spaces available at grade

BASEMENT CARPARKING TOTAL AREA: 20,840m²
MINUS 10% INEFFICIENCY / CORE: 18,756m²
Assuming 28m² / space - 669 spaces available in basement

STRUCTURED CARPARKING TOTAL AREA: 3,405m²
MINUS 10% INEFFICIENCY / CORE: 3,064m²
Assuming 28m² / space - 109 spaces available in structured parking per floor - only one floor required above ground

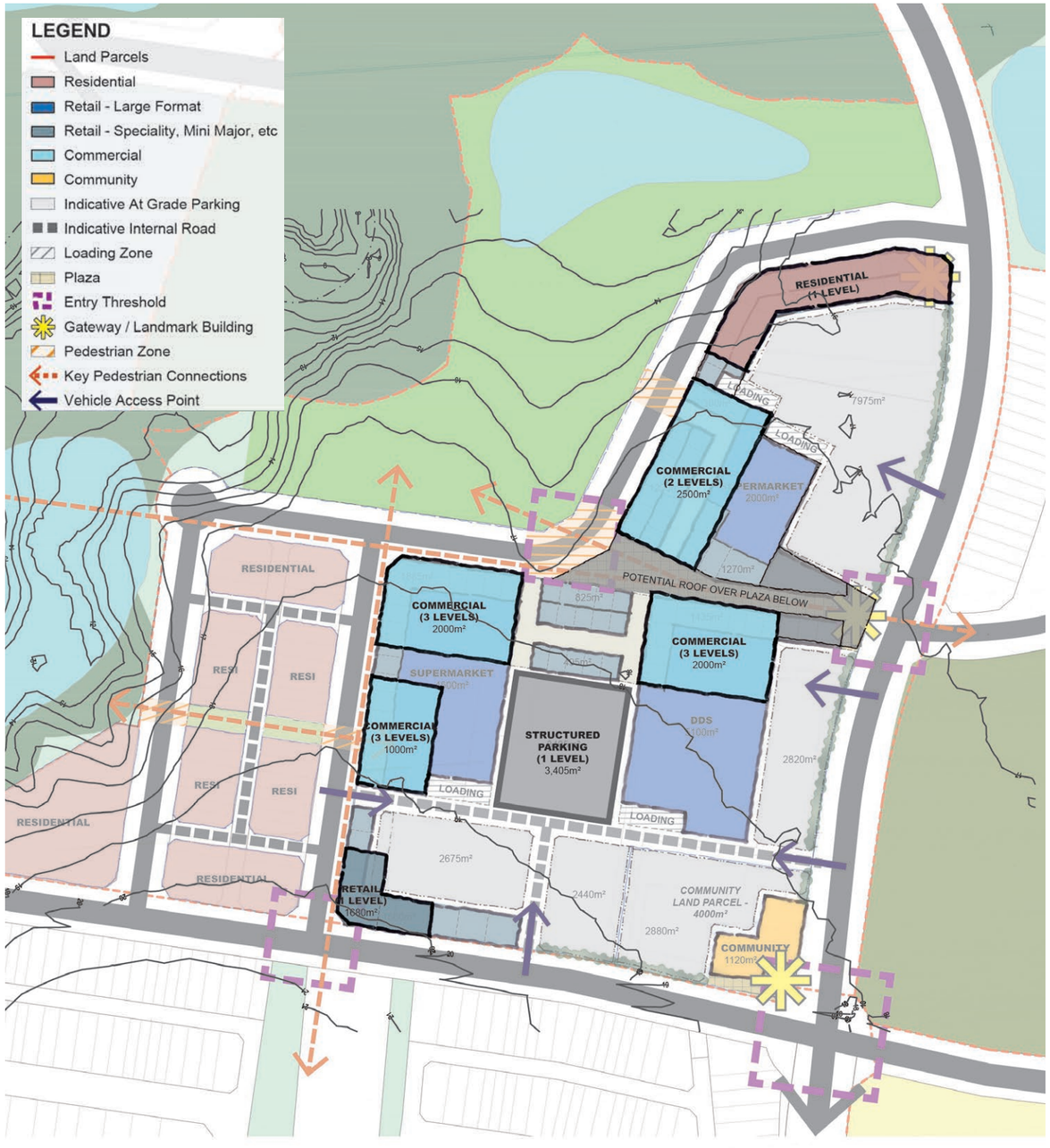
TOTAL CARPARKS PROVIDED: 1531 SPACES
(38 SPACES SURPLUS)

TOWN CENTRE LAYOUT OPTION ONE - STAGED DELIVERY

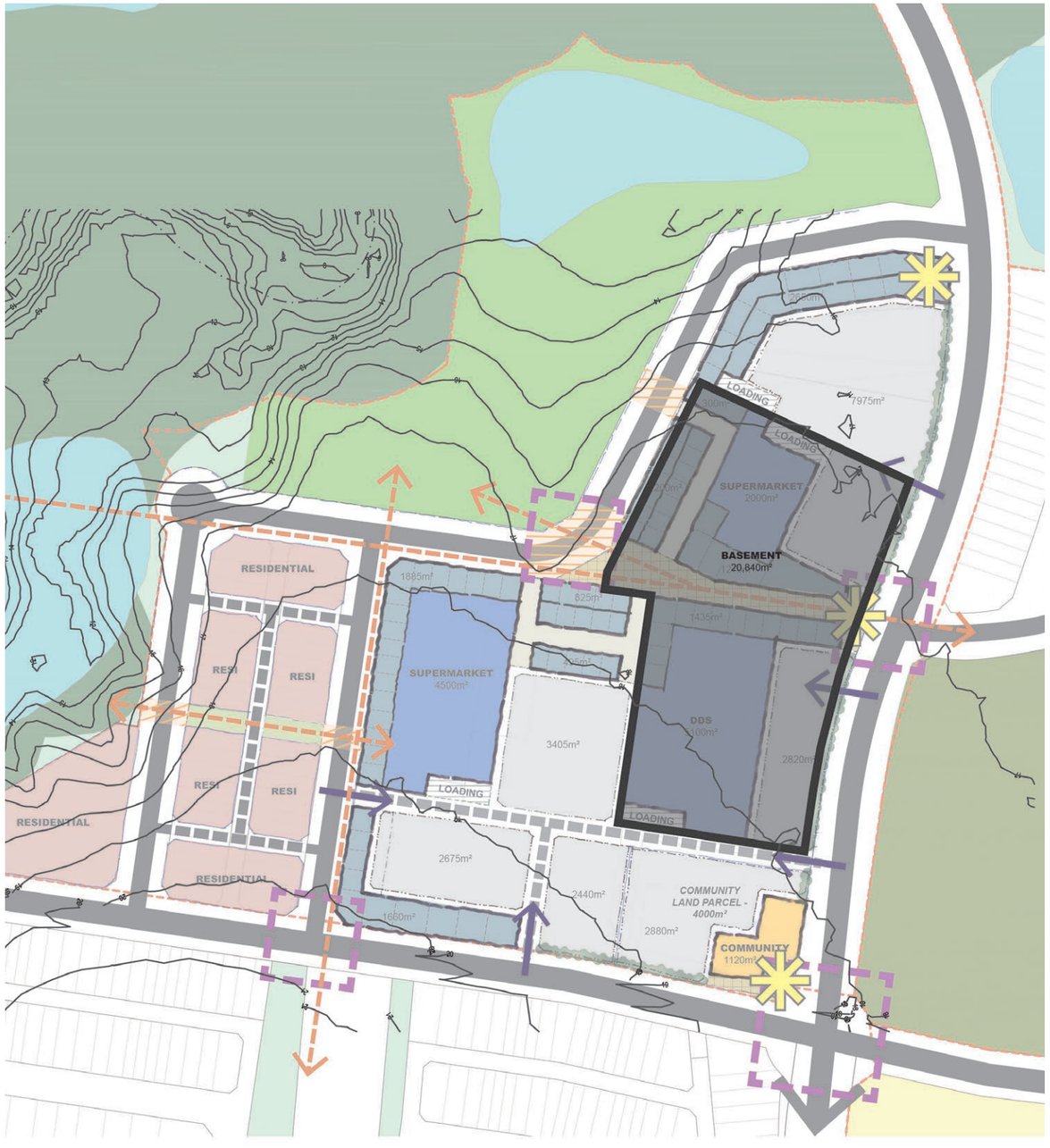


Ground Level (Indicative)

TOWN CENTRE LAYOUT OPTION ONE - STAGED DELIVERY



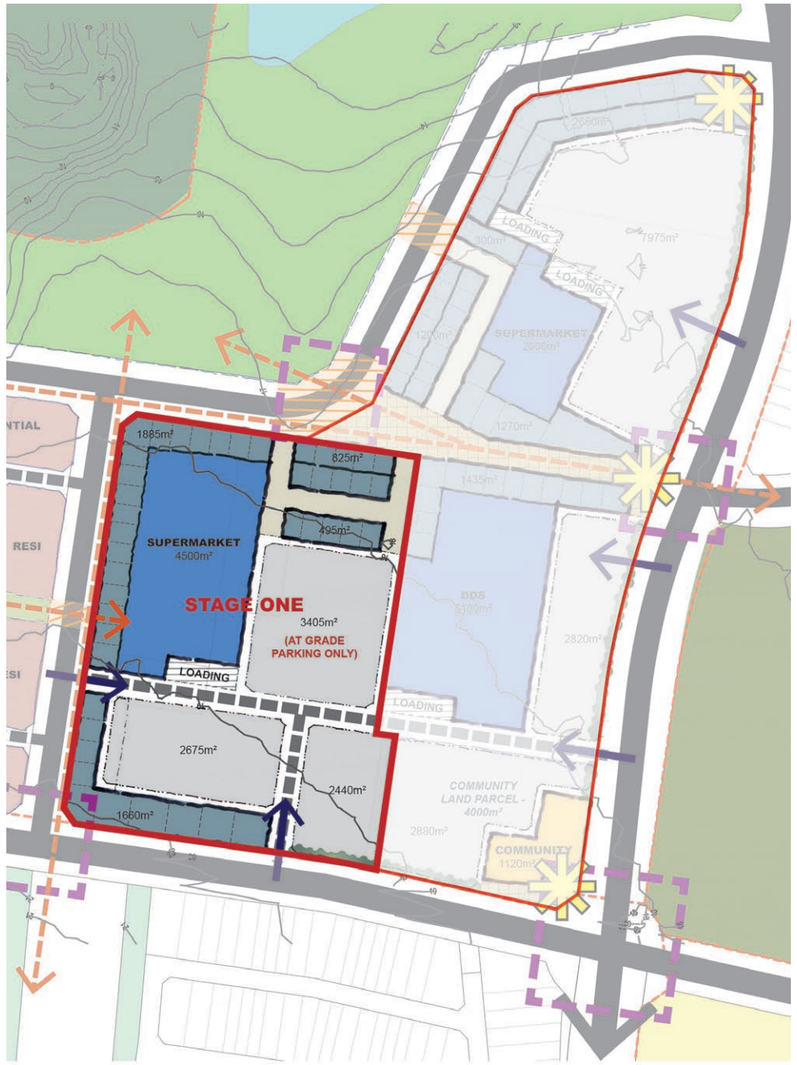
Above Ground (Indicative)



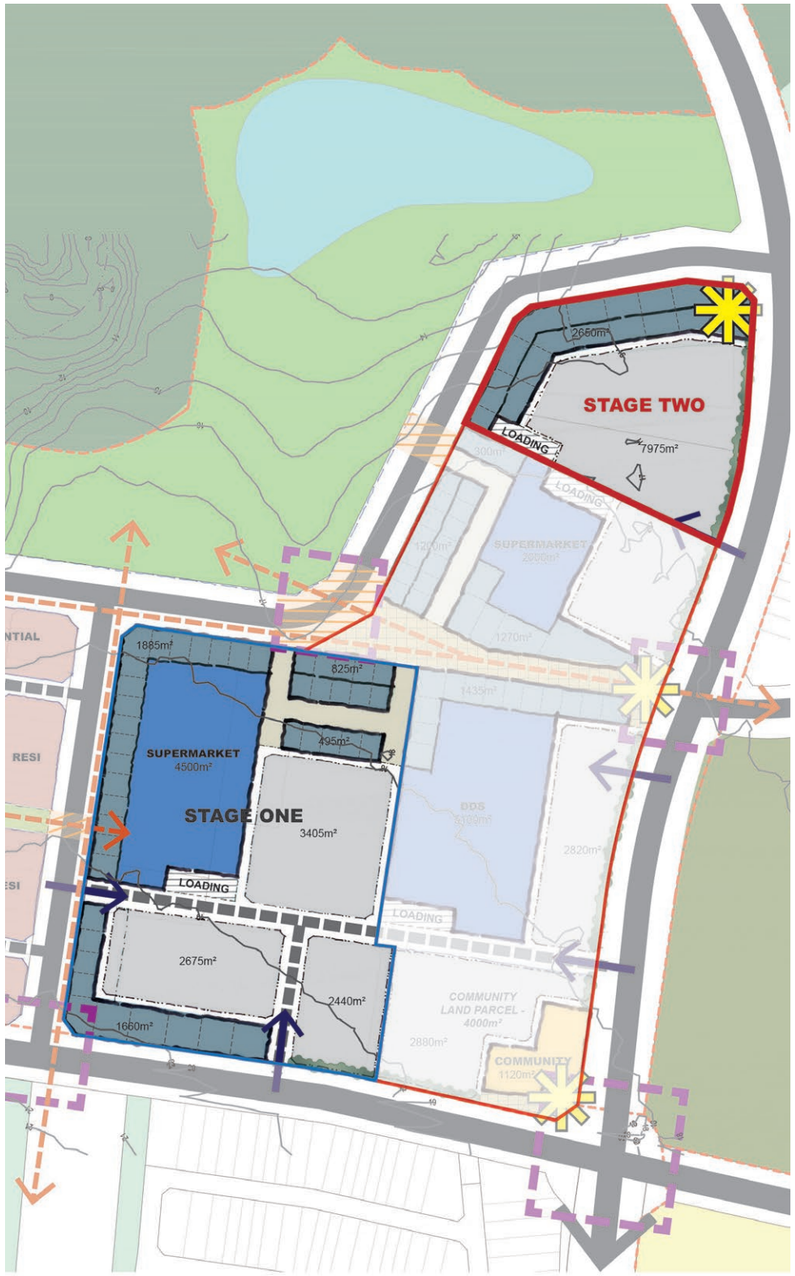
Basement (Indicative)

TOWN CENTRE LAYOUT OPTION ONE - STAGED DELIVERY

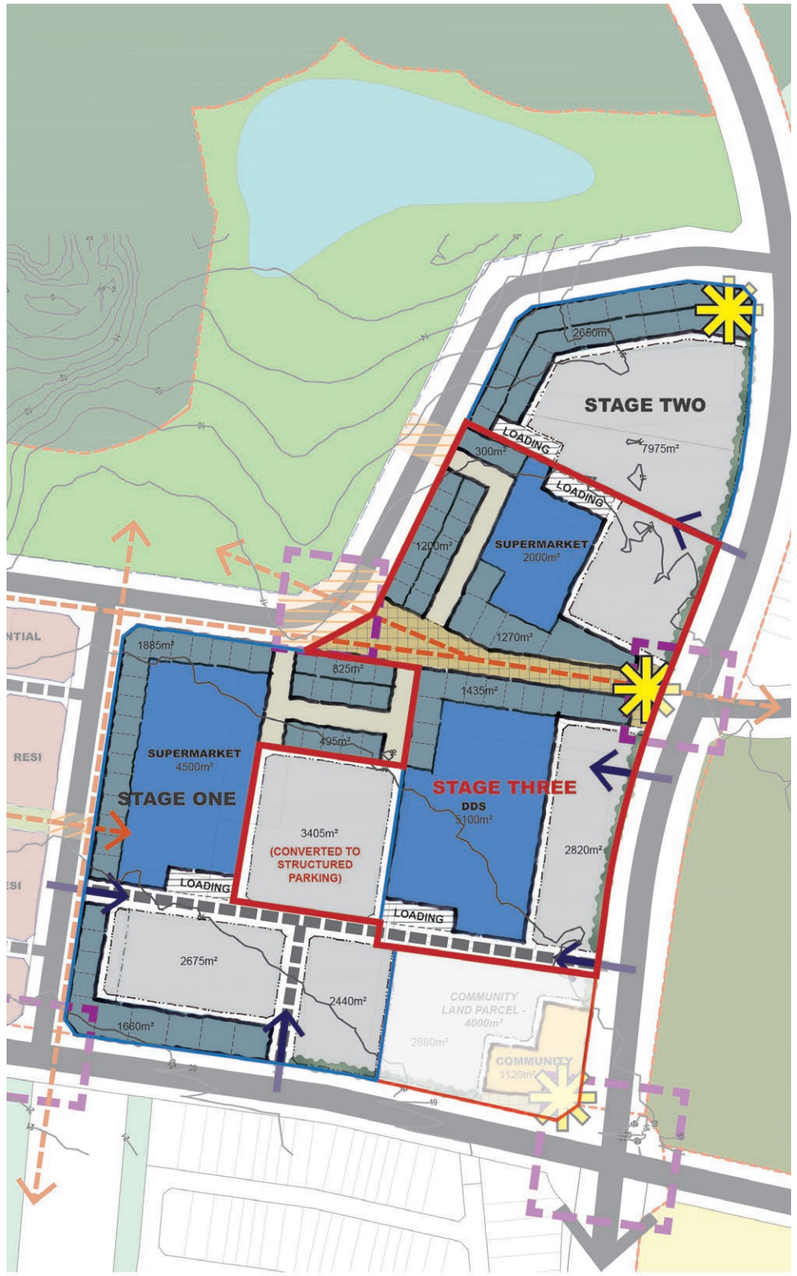
The indicative layout considers how the town centre delivery could be staged in it's delivery, including the timing of basement and structure carparking facilities.



Stage One (Indicative)



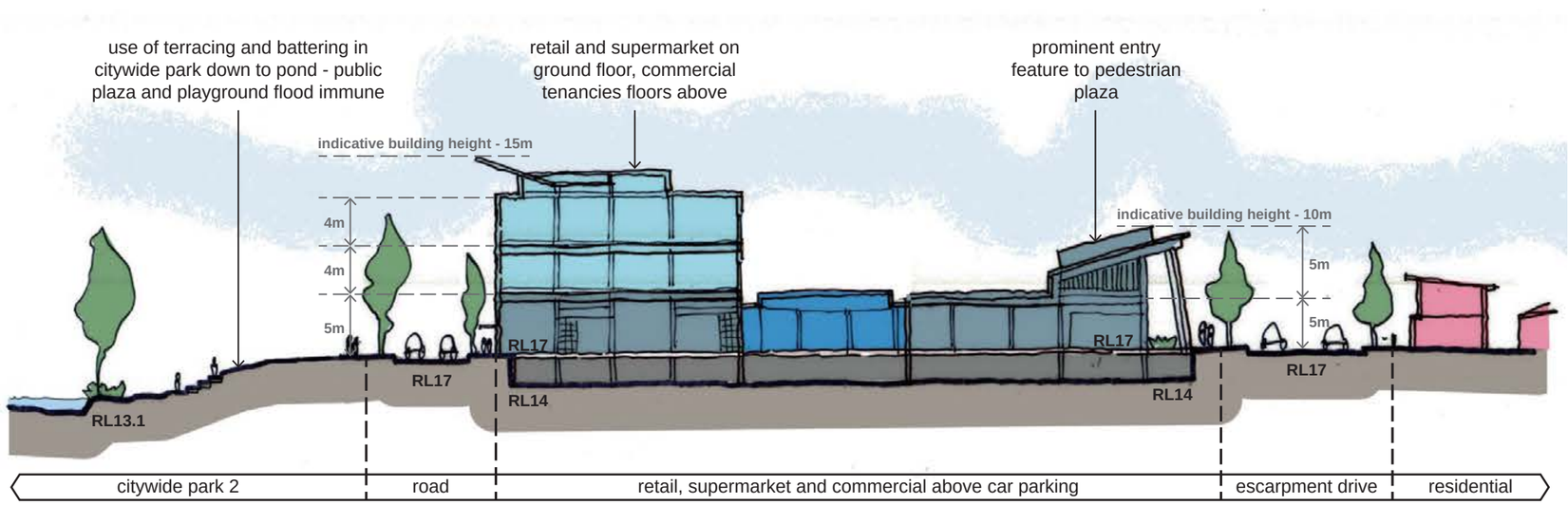
Stage Two (Indicative)



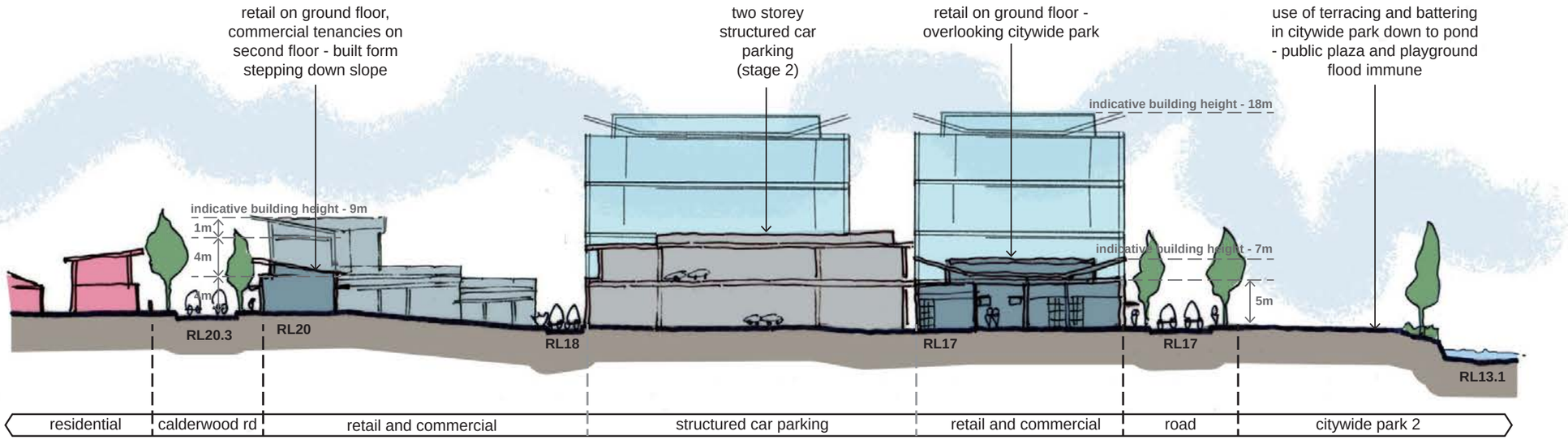
Stage Three (Indicative)

TOWN CENTRE LAYOUT OPTION ONE - STAGED DELIVERY

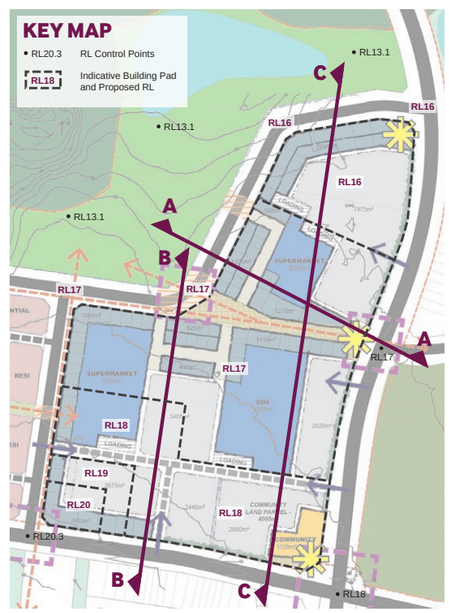
The following cross sections illustrate how grade could be addressed across the Town Centre site. Terracing and battering in to Citywide Park 2 would be required to allow activated retail frontages along the road interface.



SECTION A-A

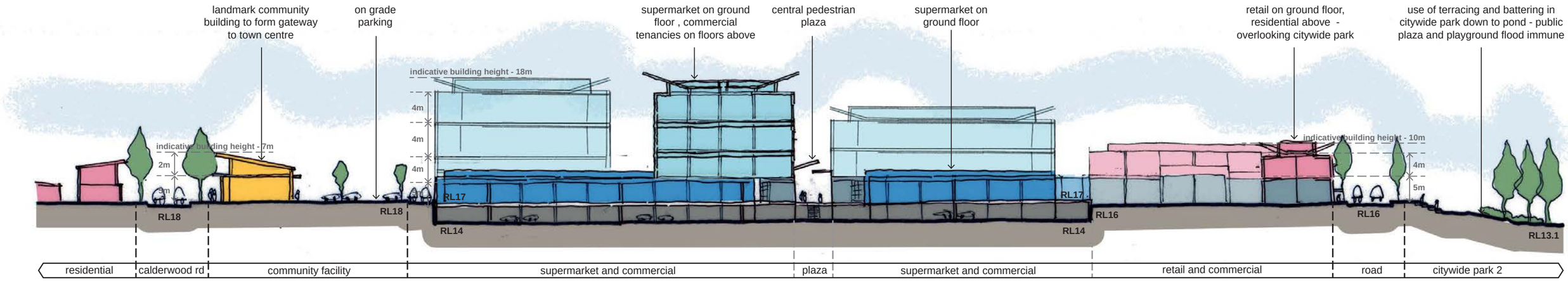


SECTION B-B



HORIZONTAL SCALE
0 5 10 15 20 30
VERTICAL SCALE
0 5 10 15

TOWN CENTRE LAYOUT OPTION ONE - STAGED DELIVERY



SECTION C-C

HORIZONTAL SCALE
0 5 10 15 20 30
VERTICAL SCALE
0 5 10 15

Citywide park terrace and battering example imagery, including pond interface examples

TOWN CENTRE LAYOUT OPTION TWO - SINGLE ENTITY OWNERSHIP MODEL

Gross Floor Area Overview

Required:
RETAIL: 25,000m2
COMMERCIAL: 20,000m2
COMMUNITY: 1,200m2

Provided:
GROUND FLOOR
RETAIL LARGE FORMAT: 13,050 m2
RETAIL SPECIALTY: 11,950 m2
COMMERCIAL: 3600 m2
COMMUNITY: 1,200m2

SECOND FLOOR
COMMERCIAL: 5800 m2

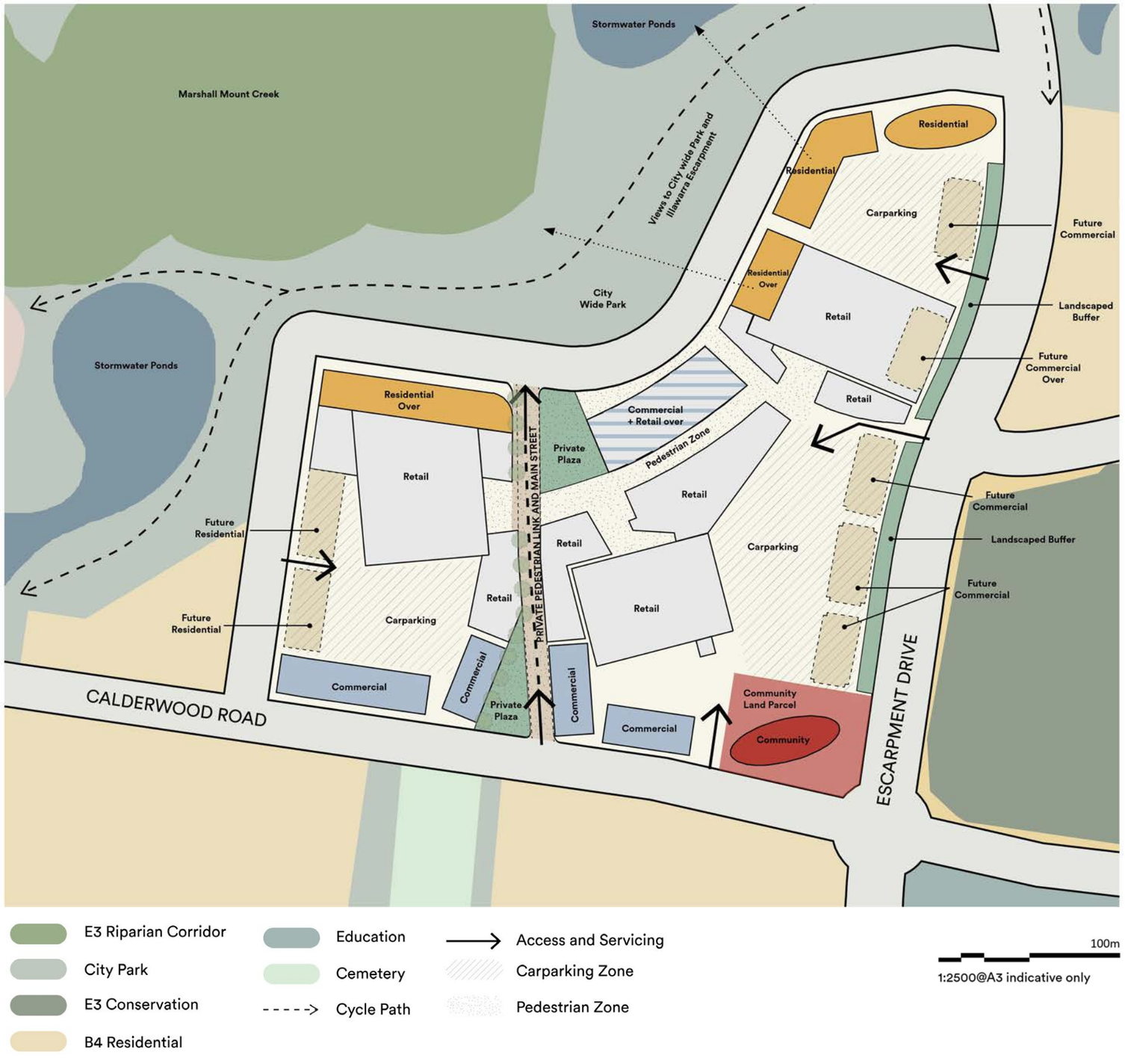
THIRD TO FIFTH FLOORS
COMMERCIAL: 10,600 m2

TOTAL RETAIL: 25,000m2
TOTAL COMMERCIAL: 20,000m2
TOTAL COMMUNITY: 1,200m2
OVERALL GFA: 46,200m2

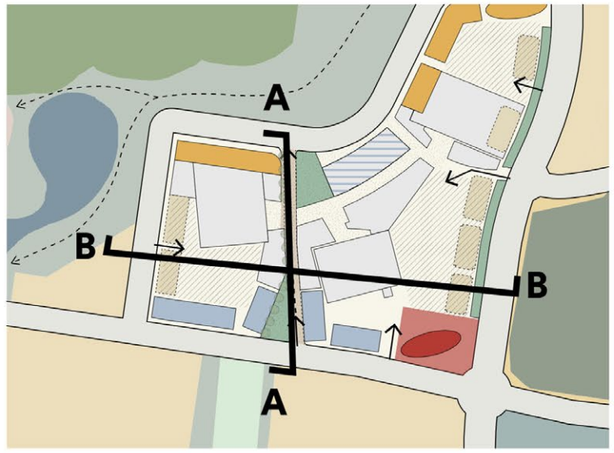
RESIDENTIAL
APPROXIMATELY 200 Dwellings

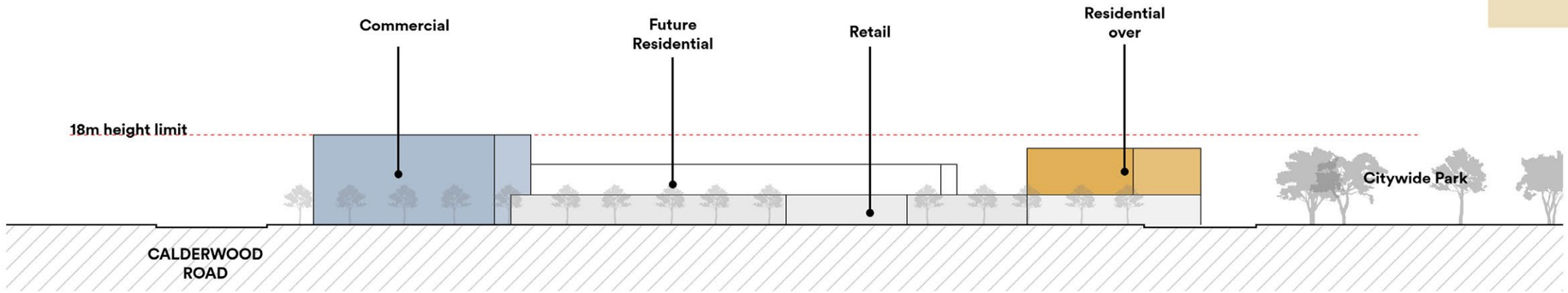
CARPARKING - REQUIRED
RETAIL: 963 spaces
COMMERCIAL: 500 spaces
COMMUNITY: 35 spaces
RESIDENTIAL: 300 spaces

TOTAL CARPARKING SPACES PROVIDED:
1798 spaces forecast to be delivered in this scenario as 675 on grade car spaces, with the balance in multi deck structures

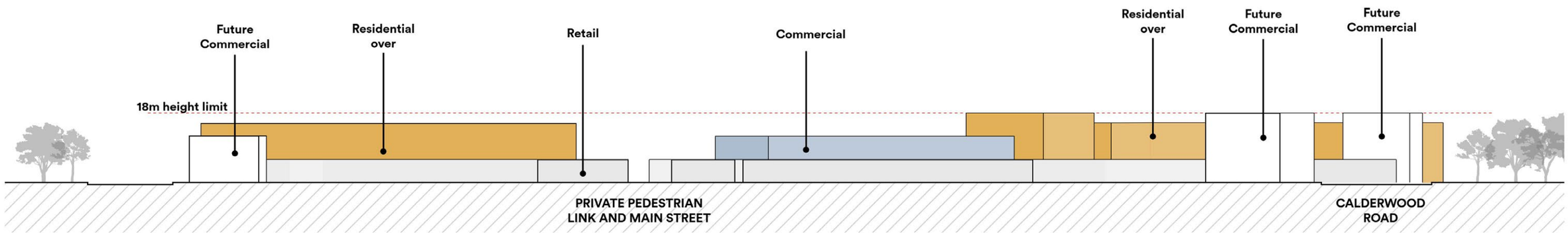


TOWN CENTRE LAYOUT OPTION TWO - SINGLE ENTITY OWNERSHIP MODEL





Section A-A



Section B-B

100m
1:1000@A3 indicative only

3.5 SLOPE SENSITIVE & RURAL LANDS

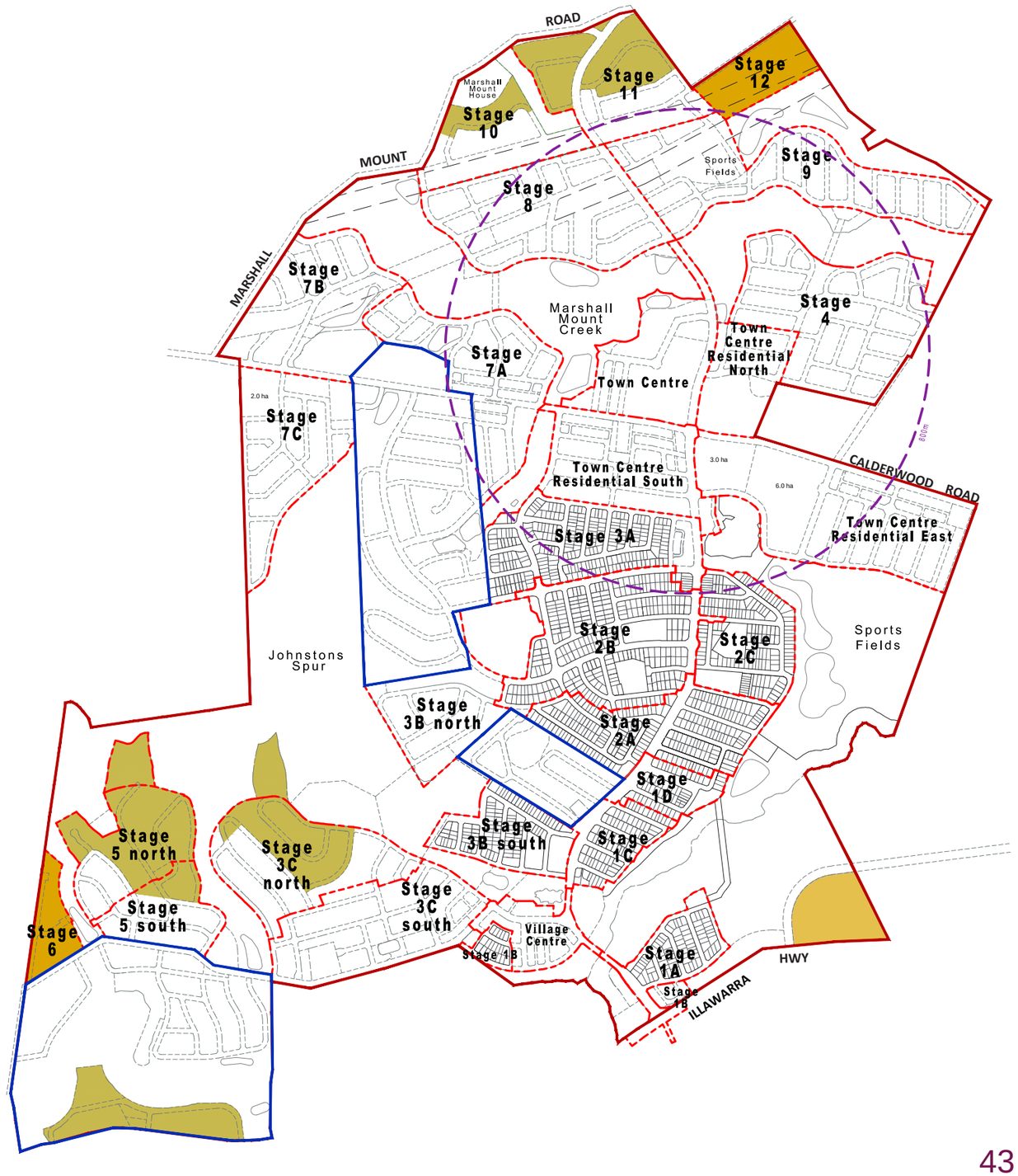
The slope sensitive and rural land comprises land that are too steep for General Residential development. **Figure 26** highlights where these areas are located. The number of dwellings per hectare varies and depends on a site by site basis. The urban design responds to the topography by incorporating:

- Parallel road networks;
- Retaining walls integrated on boundaries; and
- Parks and open space located on steepest lands.

Residential Type	Dwelling Types	Dwelling Numbers
Slope Sensitive & Rural Lands	**Standard Residential** C3-C9	269

NOTE: The Dwelling Types listed above refer to Appendix C of the Revised DCS.

Figure 26: Slope Sensitive



3.6 RETIREMENT LIVING

Retirement living will be provided in a location with appropriate levels of amenity, in either a traditional low rise village or in a vertical living approach.

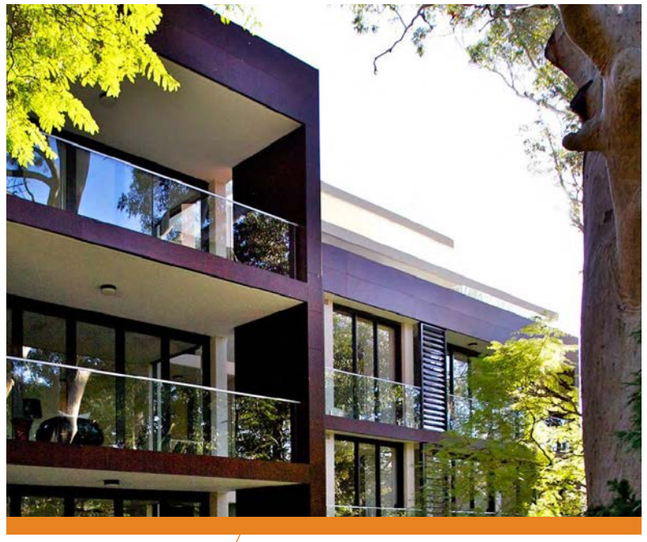
Dependant on market demand, retirement living will be located within the Village Centre Mixed Use, Town Centre Mixed Use, Village Centre Residential, Town Centre Residential and/or General Residential areas. It will replace the dwelling numbers indicated in the overall dwelling breakdown to ensure compliance with the overall dwelling upper limit of 6,000 dwellings.

Retirement Living will be provided as either traditional low rise villages (above) or in a vertical living approach (right).

4.0 SEPP 65 and BETTER PLACED

4.1 SEPP 65

State Environmental Planning Policy No. 65 are applicable for development within the Town Centre and Village Centre. Relate detailed design of apartment dwellings which would be assessed in further approvals.



Apartment Design Guide

Tools for improving the design of residential apartment development

NSW Planning & Environment

Principle 1: Context and Neighbourhood Character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

Principle 2: Built Form and Scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Principle 3: Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

Principle 5: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

Principle 7: Safety

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

Principle 8: Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

Principle 9: Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

4.2 BETTER PLACED

The NSW Architect has prepared Better Placed which is structured to work in many ways, with the purpose of achieving better places for the people of NSW by:

- Advocating the importance of design for better places, spaces and outcomes.
- Supporting industry and government to deliver good design for people.
- Enabling effective design processes to be established and supported in the planning system.

To achieve these outcomes seven distinct objectives have been created for consideration in the creation of place.

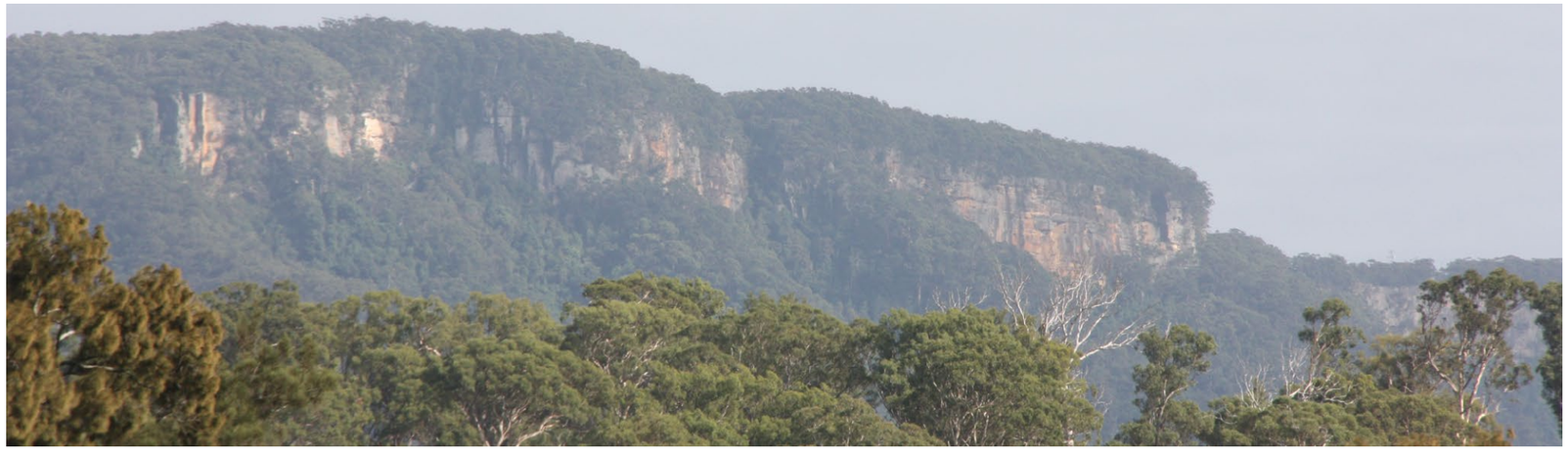
These are discussed below in the context of Calderwood Valley.

4.2.1 BETTER FIT - CONTEXTUAL, LOCAL AND OF ITS PLACE

LOCAL - A building, place or space that relates to an area, or neighbourhood.
CONTEXTUAL - A building, place or space that responds to the context in which it is designed.
OF ITS PLACE - A building, place or space that relates to its surrounds.

The design of Calderwood Valley responds to better fit with the following:

- Calderwood Valley draws upon the natural landscape of the area with key view corridors towards the Illawarra escarpment, Johnstons Spur, Macquarie Rivulet and the wider Illawarra region. Open space corridors are prominent throughout the site including connections from Johnstons Spur down towards the two creek systems running through Calderwood Valley – Macquarie Rivulet and Marshall Mount Creek. Residents will have easy access to these systems creating a sense of place for the area and surrounding neighbourhoods.
- Calderwood Valley is a twenty-minute drive from the heart of Shellharbour with further roadway connections proposed to better connect the development with surrounding areas. The design and layout of the estate is functional and cohesive, allowing natural integration with open space corridors and recreational activities. The layout responds to the natural slope and geology of the site creating larger residential allotments in steeper areas. A point of difference for Calderwood Valley is therefore created by seeking to retain the characteristics that sets the development apart.
- The Illawarra escarpment is a key element to the south and west of the project. Whilst this feature is not within the project site itself, it forms an important view corridor, attraction and sense of place for the Calderwood Valley residents. There are also two heritage places that enhance the character and attachment for residents in the project – Marshall Mount Homestead and the existing cemetery on Calderwood Road. Calderwood Valley also aims to create a sense of identity by connecting residents to the vast amount of conservation and open space areas.



4.2.2 BETTER PERFORMANCE - SUSTAINABLE, ADAPTABLE AND DURABLE

SUSTAINABLE - Relates to the endurance of systems, buildings, spaces and processes – their ability to be maintained at a certain rate or level, which contributes positively to environmental, economic and social outcomes.
ADAPTABLE - A building, place or space that is able to adjust to new conditions, or to be modified for a new purpose.
DURABLE - A building, place or space that is built to be able to withstand wear and pressure.

- The three facets of sustainability (environmental, economic and social) are fundamental elements to the design of the Calderwood Valley project. The layout responds to natural aspects like slope, geology, drainage corridors and solar orientation. This seeks to reduce development, energy and water costs for not only Lendlease but also the residents calling Calderwood Valley their home in the future. Where possible, residential lots are designed with a north/south orientation to maximise sunlight and higher density buildings centralised into two centres to minimise the overshadowing effects. Calderwood Valley is targeting a 6 Star Green Star rating in the future, outlining Lendlease's ambition and intention for a sustainable development.
- Calderwood Valley is like any other long-term, large-scale residential developments in the sense that new technologies and improvements may become available across the lifetime of the project. The framework set for Calderwood at the Concept Plan level allows for the structure to remain in place with flexibility for the delivery.
- The calderwood Valley urban design and place making strategies seek to embrace the local natural features of the communities extensive bushland vegetation and riparian corridors. Focussed environmental management activites including weed removal and vegetation, coupled with robus water cycle and flood mitigation strategies ensure that the new community is durabl and productive over time.

4.2.3 BETTER FOR COMMUNITY - INCLUSIVE, CONNECTED AND DIVERSE

INCLUSIVE - A building, place or space that embraces the community and individuals who use it.
CONNECTED - A building place or space that establishes links with its surrounds, allowing visitors and residents to move freely and sustainably.
DIVERSE - A building, place or space that embraces a richness in use, character and qualities.

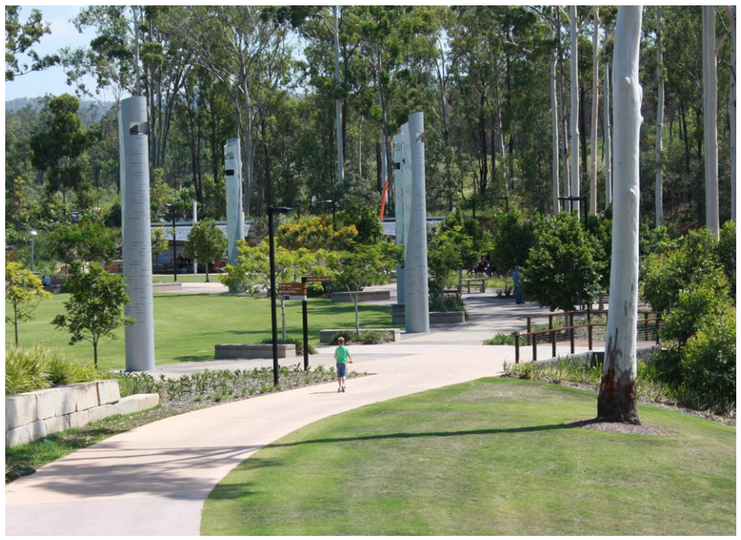
- We propose a diverse range of housing products is incorporated into the development targeting different levels of affordability for future residents. These products range from apartment living and terrace allotments to standard residential homes found in most developments. This improves the social sustainability of Calderwood Valley and promotes a sense of inclusiveness for the community and enhance the strength of the neighbourhood.
- Combining the natural elements of the site with a design that is safe and durable enhances the feel of the Calderwood Valley development and better links it to its residents. With key view corridors, walkability to open spaces and accessibility to a variety of amenities, Calderwood Valley encourages residents to explore the outside surroundings and all that the project has to offer. Whether this be exploring Johnstons Spur, the creek systems or walking between the town and village centres, people should feel a sense of place in discovering new things and getting to know their neighbourhood.
- Different precincts throughout the Calderwood Valley project are intended for a diverse range of uses. These range from core areas such as the town and village centre to lower density housing closer to the natural edges of the site. In between, the project offers medium to high density housing and standard residential allotments creating a wide-ranging community.

4.2.4 BETTER FOR PEOPLE - SAFE, COMFORTABLE AND LIVEABLE

SAFE - A building, place or space that protects its people from harm or risk of harm.
COMFORTABLE - A building, place or space that provides physical and emotional ease and well-being for its people.
LIVEABLE - A built environment which supports and responds to people's patterns of living, and is suitable and appropriate for habitation, promoting enjoyment, safety and prosperity.

Calderwood Valley has been designed to put people first. To be safe, comfortable and liveable the following aspects have been considered in its design:

- Accessibility and connectivity to public spaces and buildings are a key deliverable for safety. Calderwood provides the following:
    1. Neighbourhoods that are supported by convenient public transport options and local services,
    2. Town and Village Centres are serviced by public transport and street infrastructure that provides for a comfortable street amenity for pedestrians and cyclists as well ensuring function for vehicles.
    3. Neighbourhoods, Open Space, Town and Village Centre's, education and employment nodes are linked by walking, cycling, local road and public transport routes.
    4. Streets are interconnected
    5. A diverse open space strategy provides for active and passive recreational opportunities with ease of access.
- The public realm is activated with streets fringing Parks, allowing for buildings to overlook the public spaces.
- Strong sense of place created out of respect for contextual and natural features, provision of housing choice, employment opportunities and transport options promoting diverse population demographics.
- Built form and development patterns respect and respond to climatic elements. Subdivision pattern is orientated where possible along a north-south and east/west access. In some cases this is not achievable due to slope or riparian orientation.
- Neighbourhoods and Villages have equitable access to a variety of open space and community facilities.
- Walkability encourages feet and peddles as an alternative to vehicles.



4.2.5 BETTER WORKING - FUNCTIONAL, EFFICIENT AND FIT FOR PURPOSE

FUNCTIONAL - A building, place or space that is designed to be practical and purposeful.
EFFICIENT - A building, place or space that is constructed and functions with minimal wasted effort.
FIT FOR PURPOSE - A building, place or space that works according to its intended use.

Calderwood Valley provides for land use diversity to meet the changing needs of communities allowing for a mix of living, business and recreational activities. The spatial arrangements consider accessibility, existing and future character of the urban and open space areas and allow for flexibility in land use types by providing a range of housing and commercial opportunities.
The design of Calderwood:

- Responds and respects contextual, topographic,
- Environmental and climatic features.
- Recognizes and promotes the cultural and historic heritage of the site.
- Uses natural features to assist with edge, node and landmark creation,
- Considers the efficient use of infrastructure through appropriate spatial allocation of land uses and appropriately sized land use areas for the development of the built environment.
- Provides diversity in housing = affordable and accessible options,
- Allow for a range of social, recreation and entertainment opportunities,
- Gives access to core community services and facilities, and
- Allows for the provision of education opportunities.

4.2.6 BETTER LOOK AND FEEL - ENGAGING, INVITING AND ATTRACTIVE

ENGAGING - A building, place or space that draws people in with features that generate interest.
INVITING - A building, place or pace that is welcoming to visitors, community and individuals.
ATTRACTIVE - A building, place or space that is aesthetically pleasing, or appealing.

Calderwood focuses on delivery of a community at human scale. Places that are engaging, inviting and attractive are key outcomes as considered in the design and outlined below:

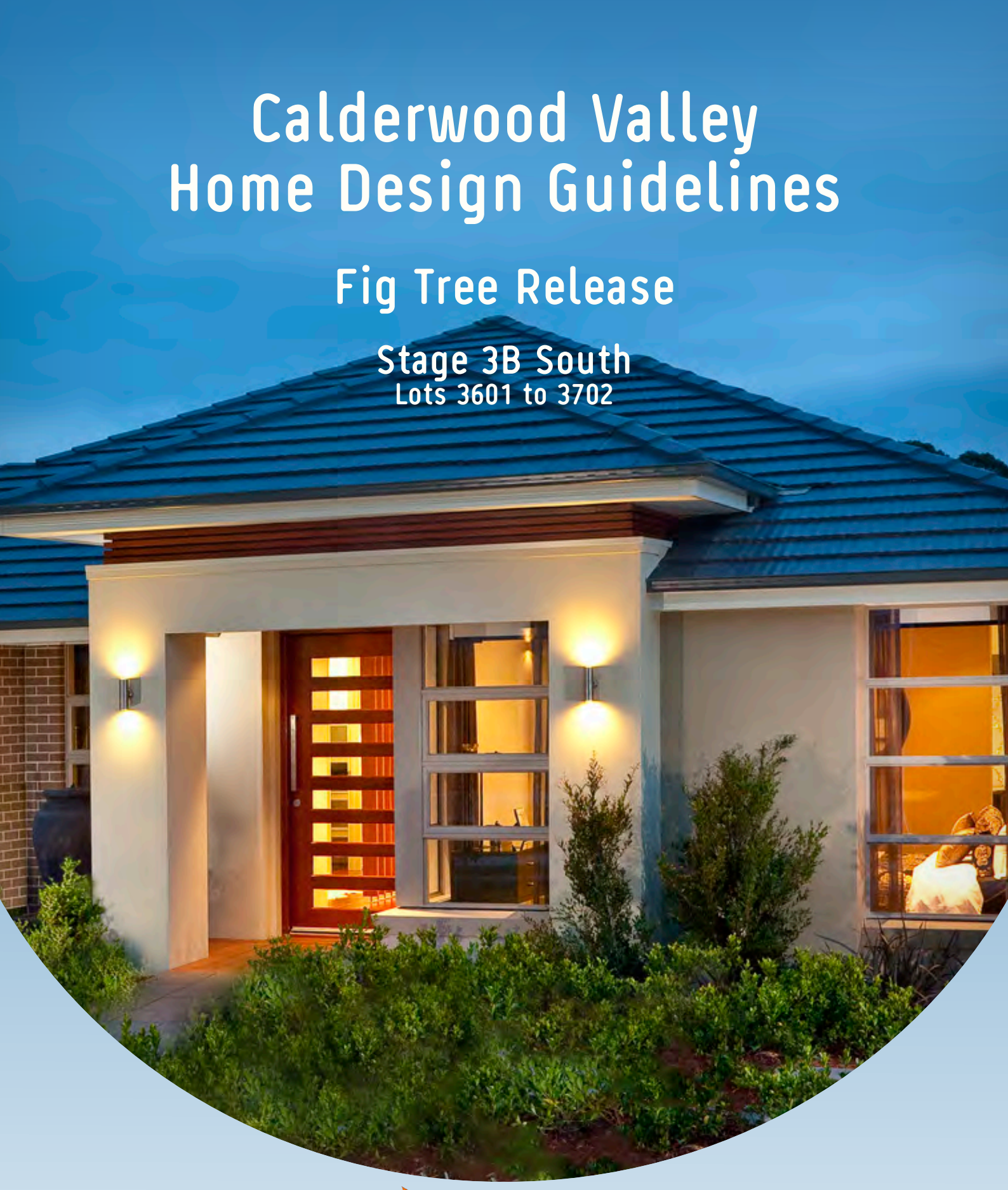
- Activities - The Public Realm in Calderwood Valley provides a myriad of opportunities for activities such as sitting, picnicking, playing, walking, skating, biking, phoning, informal and formal sports, jogging, watching people, eating, drinking, reading, working, etc.
- Architecture - For a vibrant public space it is important that there is a good interaction between the buildings, the outdoor space and the users. The design of the surrounding buildings can play an important role in determining the attractiveness of the public space. Housing fronting open space will overlook Parks with clear entrances. The design of the Town and Village Centres at ground level will ensure that there is a smooth transition between the building (private) and the street (public).
- Accessibility - As mentioned previously Calderwood valley ensures that pedestrians, cyclists and vehicles can easily get to places which makes them inviting. In addition to the accessibility of the various modes of transportation, it is also important that a public space is easy to enter and be discovered. Calderwood Valley ensure this by surrounding destinations with multiple entries through its public realm interface.
- Space for the pedestrian - A public space can only flourish if the pedestrian is the starting point of the design, the facilities and the programming. Calderwood Valley's starting principle in its design for space is its residents and visitors. More people are going to use these public spaces. People get the chance to meet other people.

5.0 APPENDIX A

Calderwood Valley Home Design Guidelines

Fig Tree Release

Stage 3B South
Lots 3601 to 3702



lendlease

June 2018

Community Vision

The Calderwood Valley Community by Lendlease will deliver a place of natural beauty, a community of villages that reflect the local heritage and character of the region. Each neighbourhood will offer a wide choice of affordable living options with safe, inviting streetscapes and individual home designs that promote a sense of belonging.

Connecting the escarpment with the coast, it will take advantage of the natural hills, creeks and bushlands, allowing the community to connect via walkways and open space. Calderwood Valley will become a truly inspirational, connected community that delivers essential facilities to support local social connection, sport and recreation, retail, education and business.

Calderwood Valley will be a quality destination that people will be proud to call home.

CONTENTS

INTRODUCTION

Home Design Guidelines

These Home Design Guidelines set out the minimum requirements for new homes and their front yard landscapes in Calderwood Valley.

They are a condition of your Contract of Sale and apply in addition to any other statutory requirements. All building and landscape designs must be approved by Lendlease prior to obtaining your Building Approval.

Some lots in Calderwood Valley have Special Requirements for the home and landscape; these requirements seek specific outcomes for homes in key locations throughout the community. Lots with Special Requirements are defined on the Building Envelope Plans. These lots require both these Home Design Guidelines and the Special Requirements to be met.

Additional information is included in your Contract of Sale covering the number of dwellings permitted on your lot; plan approval and building times; the period Calderwood Valley Home Design Guidelines apply; site maintenance requirements prior to building; and Lendlease supplied fencing where applicable.

If you have any questions regarding the requirements in these guidelines contact Lendlease on 1300 733 245 or at calderwood@lendlease.com to see how we can help.

Lendlease encourages diverse and innovative design at Calderwood Valley. Any application that is not in accordance with the Home Design Guidelines but exhibits positive community and design outcomes and satisfies the relevant authoritative controls, may be granted approval.

Statutory Requirements

It is ultimately up to the Architect/Designer/Engineer and the Registered Building Surveyor/Energy Consultant to ensure that the home design complies with all of the statutory requirements related to the construction of the home.

Fibre Optic Connection

At Calderwood Valley, fibre optic cable will be installed into your street, ready for your builder to connect to the home, to provide access to high speed internet, free to air television and telecommunication services.

This service, provided by Opticomm, has specific requirements regarding connections.

Please note that where additional dwellings on a lot are permissible and require separate billing, an additional service will be required.

These requirements are available from the Lendlease Sales Office. For more information visit www.opticomm.net.au or contact 1300 137 800.

DESIGN APPROVAL PROCESS

You must receive Design Approval for your home and landscape plans from Lendlease prior to obtaining any relevant Building Approvals. Assistance is available to help you through each step of the approval process. Call Lendlease on 1300 733 245 or email calderwood@lendlease.com.

1 Design your home

While designing or selecting your home, work through the Calderwood Valley Home Design Guidelines with your selected builder or architect.

2 Submit plans for design approval

Complete the Design Approval Form and Checklist on pages 17 and 18 of this document and submit it with your plans through the Lendlease Builder Hub at www.lendleasebuilderagenthub.com.au

You must obtain your Design Approval no later than 12 months after the settlement of your land.

3 Receive design approval

Lendlease will assess and approve your plans once they meet the standards set out in this document. Assuming all required information is supplied and the design complies with these guidelines and any other applicable special requirement, approval should take no more than two weeks.

4 Building application

Provide a stamped copy of your Lendlease Design Approval as part of your Building Approval Application to your Building Certifier and local authorities.

5 Construction

Prior to and during construction your lot should be well maintained and free of rubbish.

Construction of your new home and driveway must commence within 12 months and be completed within 24 months of the settlement date of your land.

6 Moving in

Once you have completed your home and driveway and have obtained a Final Building Approval you can move in.

Your front garden must be landscaped including turf to verges and well maintained in accordance with your covenant approval within 3 months of moving in.

DESIGN REQUIREMENTS

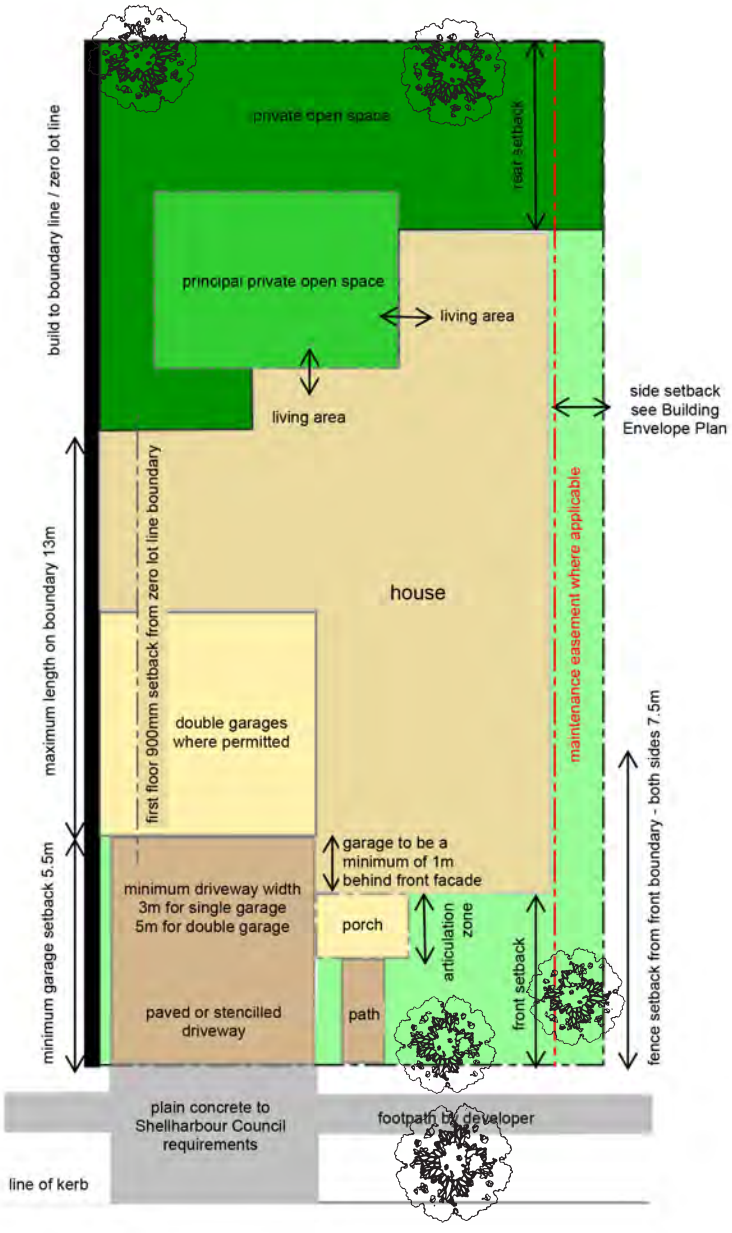
This section outlines the minimum requirements for your home and front yard landscape.

Setback Plans

Building Envelope Plans are created for each lot in Calderwood Valley. Your Building Envelope Plan shows the minimum setbacks from each boundary of your block.

When you lodge for Building Approval, the approving authority must ensure your home complies with the Building Envelope Plan, so be aware of them as you design or select the home for your lot.

Contact Lendlease should you require any further information regarding setbacks.



Building on the Boundary

If your Building Envelope Plan shows you are able to build on the boundary, please ensure your designer/builder checks the relevant planning controls to determine the maximum length you can build on the boundary.

You can only build a single storey component of your home on the boundary. We allow a setback of between 50mm and 200mm to allow for roof drainage and to ensure no part of your home overhangs your neighbours property.

Any second storey construction must be setback a minimum of 900mm from the boundary.

A maintenance easement of 900mm is created on the adjacent property to ensure you have the ability to maintain the portion of your home built on the boundary should it be required. Please refer to the 88b document in your Contract of Sale which sets out the terms and restrictions when building on the boundary and your rights and obligations regarding access to the maintenance easement.

A Drop Edge Beam is required for all construction when you are building on the boundary. This must extend 650mm below natural ground level to allow for the maximum cut/fill of 500mm in the adjacent property as per the terms of the 88b document in your Contract of Sale.

If you choose not to use the build to boundary option, you must setback your home 900mm minimum from the side boundary.

Contact Lendlease should you require any further information regarding building on the boundary.

Façade Design

Great streets include well designed homes and high quality front yard landscaping complementing each other.

Single & Double Storey homes

- All homes must include articulation between the alignment of the front wall and the garage on the primary frontage. The minimum garage setback is 1 metre behind the front wall.

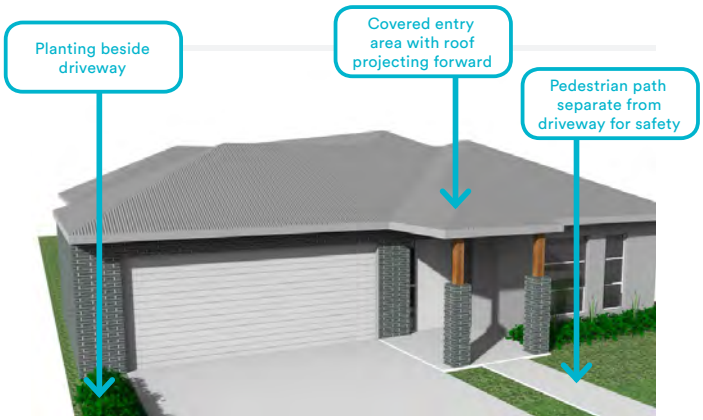
Other elements to consider include:

- Windows facing the street work best when they complement the house style and make up at least 20% of the front façade.
- Roofed elements such as extended eaves, entries and verandahs forward of the front wall as well as recessed windows and doors, give your house a sense of depth.
- Windows which overlook the street and public open space should be from habitable rooms, such as living areas and bedrooms, in order to provide passive surveillance and take advantage of any views over open space.

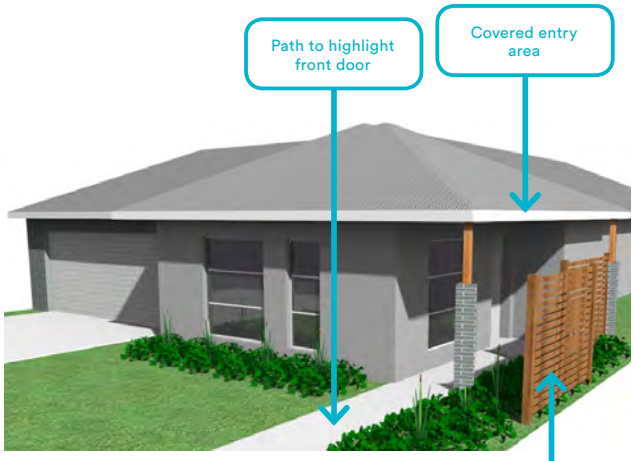
Entry

Good home design is welcoming to residents and visitors.

- The approach to your front door must be prominent and visible to the street, covered by a porch / verandah or portico with a roof that extends forward of the house roof.



Typical approach to entry

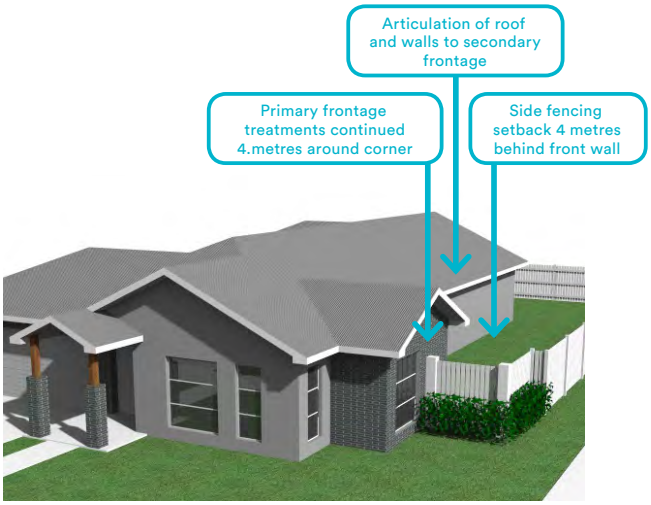


Typical side entry

Corners and Park Frontages

Homes on street corners or adjacent to parks and public open space must address all street and park frontages.

- For the house elevation facing a secondary street, the first 4 metres of the side of the house must feature articulation which includes a broken roofline and walls, continuation of the front facade's main materials, detailing and windows.
- We encourage homes on park frontages to address the park frontage by providing verandahs, decks and patios that face the park.



Home on corner lot

Subdivision of Lots

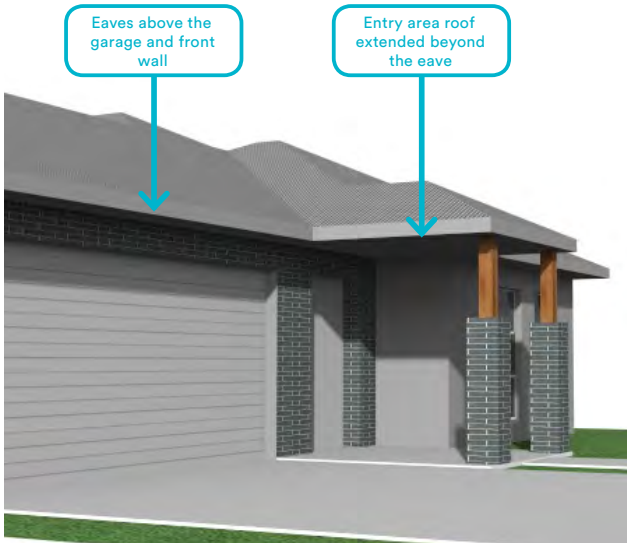
No lots are to be subdivided except where permitted on specific allotments as indicated on the Building Envelope Plan (BEP).

The developer will provide one connection point for water, sewer, electricity and telecommunications to each property only.

Eaves

Eaves enhance the look of your home, boost energy performance and have a positive impact on the quality of the streetscape. Eaves must be provided to all facades of your home.

- Your home must incorporate 450mm minimum width eaves excluding fascia and gutter. 300mm eaves excluding fascia and gutter are permitted only where a single storey home is proposed on a lot that is 12.5metres wide or less.
- Eaves are required to extend forward over garage doors.
- Eaves are not required to sections of façade finished to a boundary or parapet.
- Mixed width eaves are not permissible on the same floor level

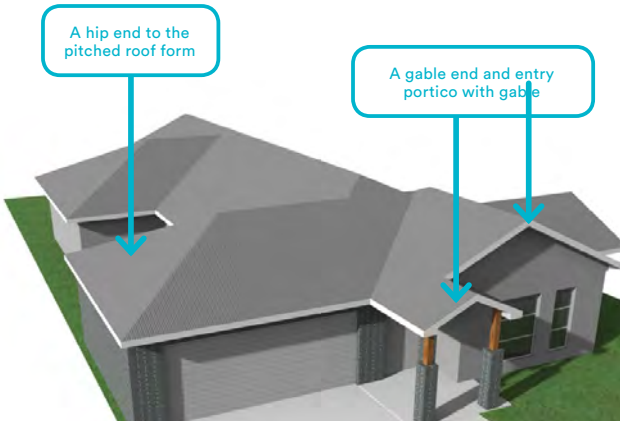


Eaves on the primary frontage of a home

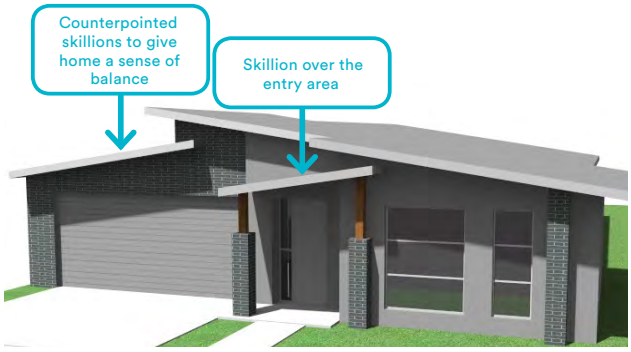
Roof Pitch and Form

The roof on your home is a significant part of the visual presence that your home contributes to an attractive streetscape.

- For your roof to be in balance with your home and others in the street, the pitch of a hip or a gable is to be a minimum of 22 degrees. The pitch of a skillion roof is to be between 7 and 15 degrees. Other roof forms can also be considered where they complement the architectural intent of the home and contribute positively to the streetscape.



Hip and gable approach to a roof



Skillion roof form

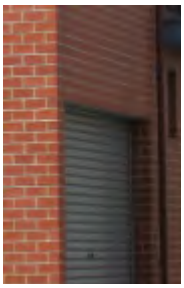
Building Materials

Building materials that complement the architectural style of your house add greatly to its streetscape appeal.

- Your front façade must include at least two different wall materials or finishes that draws attention to your home's entry and reduces the visual impact of the garage door.
- The minimum size of eck of the materials must be at least 2sqm in area.
- Unfinished materials including block work, highly reflective or unpainted plain materials are not permitted. All external surfaces are to be in a finished state (painted or coated) prior to the occupation of your home.
- Steel roofing materials of any profile cannot be used as the predominant wall material of your home.

Other elements to consider include:

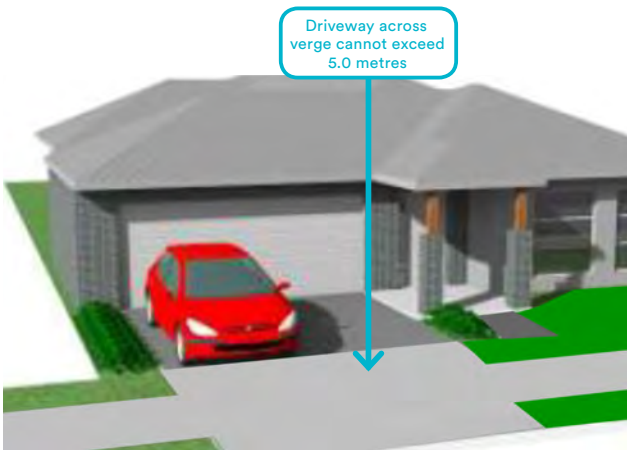
- Highly reflective window tints detract from the look of your home and should not be used to any street facing frontages.
- Built elements in the landscape such as fences, courtyard walls and letter boxes should use materials that complement those in your home.



Garages and Driveways

Garages and driveways can have a negative impact on the street when they dominate the home and landscape.

- Driveways and the garage must be installed in the location nominated on your Building Envelope Plan
- Driveways and paved areas within your property cannot exceed a distance of 300mm wider than your garage door.
- Driveways cannot exceed 3 metres for a single garage or 5 metres for a double garage. Driveways must be offset at least 300mm from your side boundary.
- Your driveway must be complete before you occupy your home.
- Acceptable driveway materials include, pavers or stone, concrete or clay pavers, stamped or stencilled concrete, coloured finished concrete or any combination of these elements.
- The driveway located between the property boundary and the street kerb (verge) must be constructed from plain concrete only. This is a Council requirement.
- Lendlease installed footpaths (if applicable) must remain in place and left in plain concrete.
- Panel lift or panel glide garage doors are required to the main frontage. Roller doors are not permitted.
- Garage doors on the primary frontage should be no wider than 50% of the width of the building frontage.
- Triple garage configurations are not permitted unless the lot is 1500sqm or larger.



Letterboxes

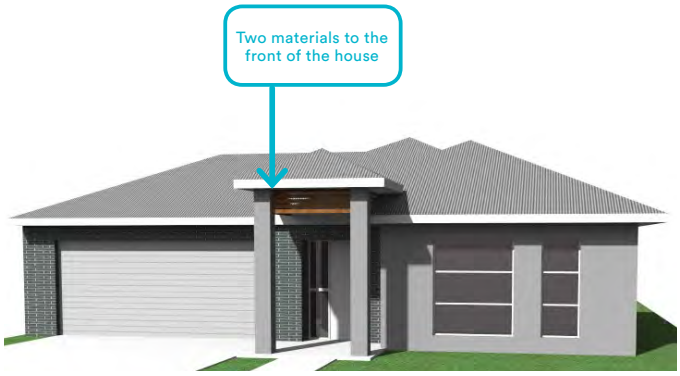
- Letterboxes are to be of solid coonstruction and must complement your home. Letterboxes on metal posts are not permitted.
- If you choose to install a front fence, letterboxes must be integrated into the fence design.

Colours

In keeping with the bushland setting of Calderwood Valley, Lendlease encourages a neutral colour palette including the use of materials derived from natural components such as brick, timber and stone cladding, and recycled materials for landscaping, such as recycled brick and stone.

All homes at Calderwood Valley must provide details of the selected colour scheme at the time of application to ensure compliance with the criteria outlined below. Any significant variation to these colours will need to be justified on architectural merit and approval will be at the discretion of Lendlease.

All homes that sit above the Australian Height Datum (AHD) of RL50 must use a colour palette sympathetic to the surrounding bushland. Black and dark colours are not permissible.



Roof Coverings

- Metal roofs must have a Solar Absorptance (SA) rating of no more than 0.60 and tiled roofs must have a Solar Absorptance (SA) rating of no more than 0.80, as classified by the Building Code of Australia. The below selection provides an overview of the different SA ratings for reference purposes. Product-specific ratings are readily available from the suppliers' website
- Metal and tiled roofs must be selected from the range of sample colours below. Black tiles or metal roofs are not permissible.

Selecting a light or medium colour will also reduce the amount of incoming solar radiation and may help you save energy costs on additional heating and cooling of your home.

Black, red, blue or green roofs are not permitted.

Garage Doors

- Garage Doors must be selected from the range of Colorbond colours below or comprise a timber-look finish.

Roof & Garage Door Colours

Colorbond Colours or equivalent

Surfmist (SA 0.318)

Shale Grey (SA 0.433)

Dune (SA 0.466)

Windspray (SA 0.58)

Wallaby (SA 0.64)

Classic Cream (SA 0.32)

Paperbark (SA 0.42)

Evening Haze (SA 0.43)

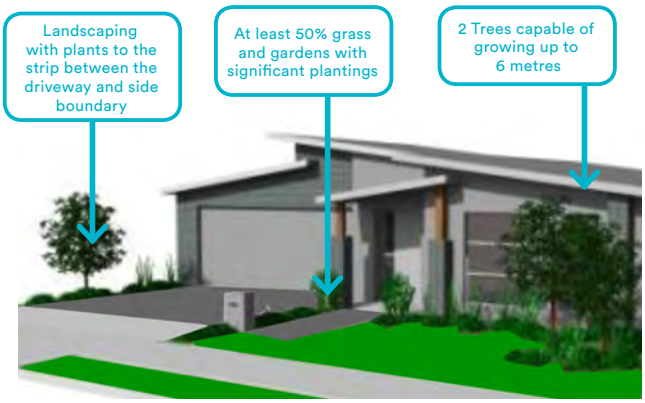
Cove (SA 0.54)

Gully (SA 0.63)

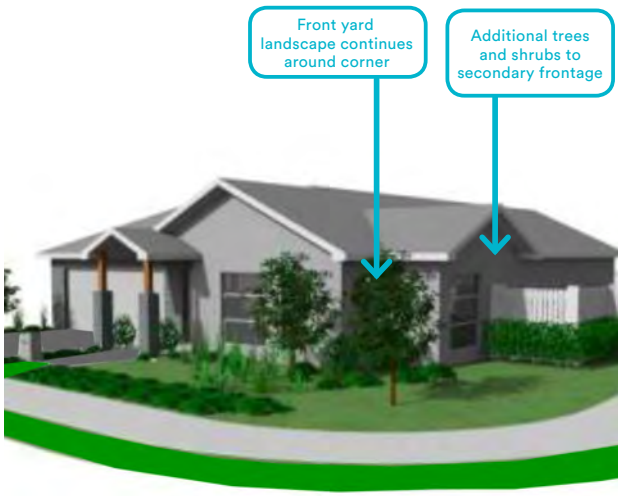
Front Landscape

Quality front landscaping enhances the positive impact your home will have on the streetscape.

- Your front yard, including the Council owned verge, must be landscaped within 6 months of moving into your home. Note: In some instances you may be required to complette the landscaping to your front yard to obtain an Occupation Certificate.
- A separate front path must be provided from the front boundary to your entry to ensure that all pedestrians can enter your home safely and not via the driveway.
- A minimum of 50% of your front yard must be landscaped with grass and garden beds (and cannot be all concrete and hardstand). A significant portion of this area must include gardens with trees or shrubs capable of growing to 3 metres tall and are at least 600mm high when planted.
- Trees that have been retained within your property and on the street verge cannot be removed unless approved by Lendlease and Council.
- On corner lots, planting including trees and shrubs must be provided to both street frontages.
- A minimum of 2 medium trees must be provide to the front and 2 to the rear garden. Trees are to be a minimum of 1 metre when planted and capable of growing to between 4 metres and 6 metres. This requirement is in addition to any street trees planted by Lendlease.
- A planting strip is required between the driveway and the side boundary.
- A planting strip is required between the driveway and separate front path.
- Artificial grass is not permitted in the front yard or where visible from the street.



Typical front yard showing 50% softscape

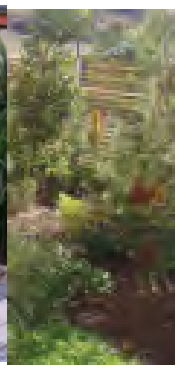


Typical landscape secondary frontage

Other elements to consider in your landscape include:

- Select plants that are suitable for your lifestyle, the local climate and your lot. Advice on plant selection can be found in the Landscape Design Guide, available from the Calderwood Valley Sales and Information Centre.

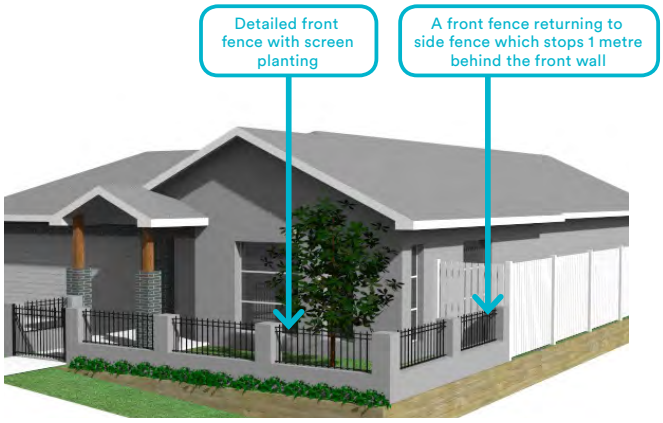


Fencing

Fencing that is well designed has a positive impact on your home and street. Generally it is preferred that your landscape flows from the street to the front of your home, however, if fencing forward of your home creates usable outdoor space, you may choose to fence the space in a way that adds quality and activation to the street.

All fencing is subject to Council requirements and Lendlease approval.



Typical front fencing - standard lot

Side & Rear Boundary Fencing

Corner Lot Fencing

Front fencing where desired forward of your home is required to be:

- A maximum height of 1.2 metres when including retaining.
- The minimum acceptable front fencing specification is 100mm x 100mm metal posts with flat bar metal palisade infill. The infill must be at least 50% transparent .
- Acceptable materials also include painted or stained timber with expressed posts and panels that are either paling, metal flat bar or pool fence panels up to 1.2 metres high. Heritage reproduction styles (pickets) are not permissible.

Fencing fronting a secondary frontage or public open space is required to be:

- Maximum height 1.8 metres including retaining.
- The corner lot fencing specification is 100mm x 100mm square hollow section (SHS) Colorbond posts, with either vertical or horizontal slats in either H4, treated, dressed and painted pine, mod wood or metal in a colour to complement your home. Slats are to be spaced at between 5mm and 10mm. All posts and rails are to be installed internally to face the lot, leaving a smooth finish to the external face of the fencing. This style must return to the dwelling.
- Corner Lot fencing must finish a minimum of 4 metres behind the front wall of your home.
- The side and rear boundary style of fencing is not permitted in this location.

Internal Boundary Fencing:

- Maximum 1.8 metres high in Lysaght 'Smartascreen' or equivalent profile in Woodland Grey Colorbond Colour. Always consult your neighbour prior to installation.
- Fencing not visible from the street should match the standard fence as specified above.
- This fence must finish 7.5m from the front boundary of the home and return to the side wall of the home. Where a front fence is proposed, the side fence height must drop at the front building line of the home to the front fence height.

Build to Boundary fencing:

- Where you have the ability to build on the boundary, any side fencing must terminate at the rear of the construction proposed on the boundary. The fencing must not be installed in front of any portion of the home built on the boundary to allow access for maintenance.

Fencing by Lendlease:

- Where indicated on the Building Envelope Plan, Lendlease will build feature decorative fencing along open space boundaries, project boundaries and high profile lot boundaries. This fencing cannot be altered, removed, damaged or modified in any way without prior written approval by Lendlease.

Retaining Walls

Retaining walls that face the street need to have a positive impact on the quality of the streetscape and ensure car and pedestrian access to and from the block and along the street is safe. Acceptable retaining wall materials are natural stone, coloured concrete sleepers and rendered or feature block walls.

Treated pine sleepers are not permissible.

- Retaining walls visible along street or public open space frontages cannot exceed 500mm in height.
- A planted strip of minimum width 500mm must exist between any terraced retaining walls.
- Retaining walls must not unduly affect the natural light and ventilation to adjoining lots.
- In some instances Lendlease has undertaken fencing and retaining to improve the buildability of your lot and allow you to comply with these guidelines. These fences and walls cannot be modified without approval from Lendlease.

Retaining walls forward of the house

Ancillary Elements and Structures

- Rubbish bins shall be stored where they are not visible from the street or a permanent built screening structure or enclosure is to be provided.
- Solar panels and their frames visible from the street or public open space should follow the roof pitch to minimise visibility and bulk.
- Meter boxes, gas meters , A/C units, rainwater tanks, satellite dishes, clotheslines and other services should be located in the least visually obtrusive location, away from public view from the street, or be screened or coloured to match the adjacent wall finish. They must not be located within the articulation zone on corner lots.
- Sheds or storage of boats, caravans or similar should not be visible from the street or public open space.
- Any shed over 12sqm in size requires Lendlease and Council approval. The shed must be in a colour to match the side and rear boundary fencing - Colorbond 'Woodland Grey' and must be setback a minimum of 900mm from any boundary and must not be visible from the street.

BUILDING ON A SLOPING LOT

Where the slope of the building envelope exceeds 1 metre, split level designs are to be used to address the slope.

The minimum step in a split slab is 340mm - equivlent to two steps (see image below)

For all housing on sloping land, the dwelling must maintain a built form presence (other than the roof) to the street. For example, where your land falls away from the street, the top floor of your home must be above or at level with the street at the highest point of your block.

If your block requires spilt level, alternative building methods such as elevated construction, split slab construction, brick build up (DEB) construction or a combination of these are required to minimise the amount of earthworks necessary and the impact on neighbouring land.

- For elevated construction, the underside of flooring must be screened to minimise the visual impact of under floor services. This may be achieved through screening with battens, `battering, landscaping or a combination of both.

Retaining & Earthworks

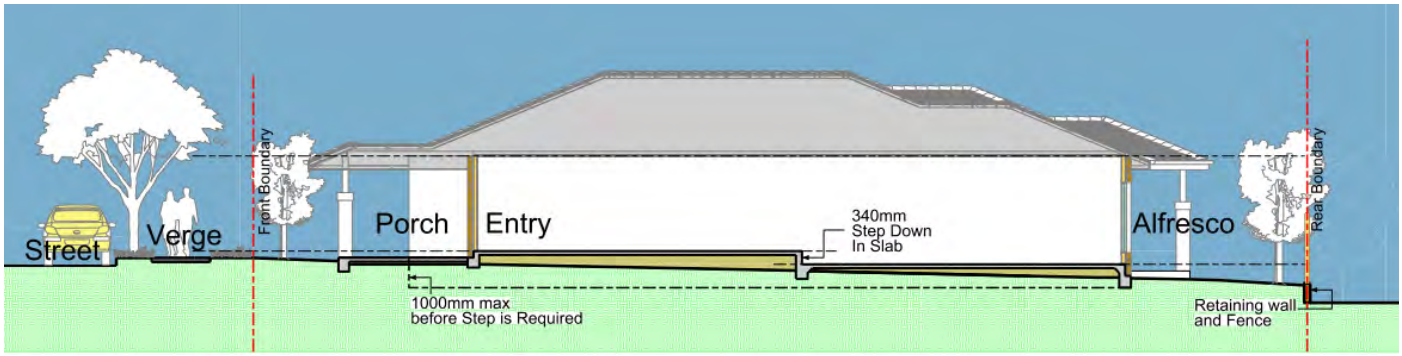
Earthworks and the use of retaining walls must be kept to a minimum and you must consider their impact on adjoining blocks. This will result in a number of benefits including better aspect to potential views, reduced impact on neighbours, existing structures and services (i.e. zero boundary walls, retaining, fencing and neighbouring dwellings) and assisting with drainage.

- Fill is not to be imported or exported to alter the natural surface level of your block prior to commencing earthworks for preparation of a building platform.
- The import or export of fill is acceptable within brick build up (DEB) construction and split level construction.
- Any earthworks on your block should consider equal cut and fill levels.

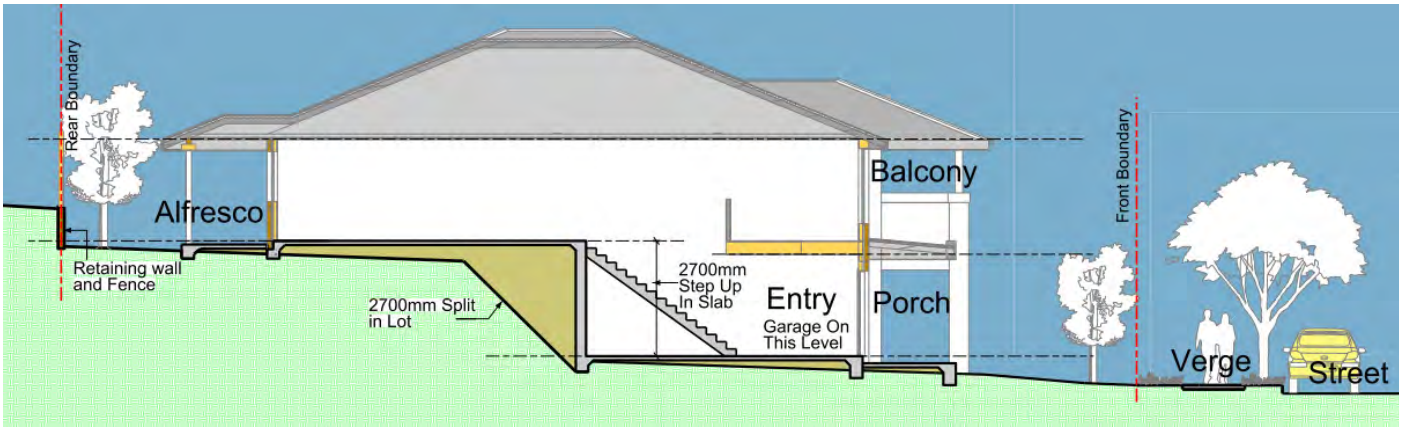
- For lots less than or equal to 450sqm, a maximum of 500mm cut and fill above or below natural ground level is permissible.
- For lots greater than 450sqm, a maximum of 900mm cut and fill above or below natural ground level is permissible.
- All cut and fill is subject to Lendlease approval and where retaining is proposed over 900mm, engineered retaining walls must be provided and approved by Council or Private Certifier.
- Refer to the 88b document, part of your registered lot decription in your contract, where a variance of permissible excavation may be different to the above
- Where side retaining walls protrude forward of the front building wall, they must be tapered to meet the finished ground line.
- Plain masonry blocks are not permitted.
- Retaining walls constructed by Lendlease must not be altered or removed.
- Where a retaining wall adjoins a park or street frontage and a fence is to be located above the wall, the following treatment must be incorporated to improve appearance:

  - 500mm wide landscaped area planted with ground covers and/or shrubs between the wall and the fence

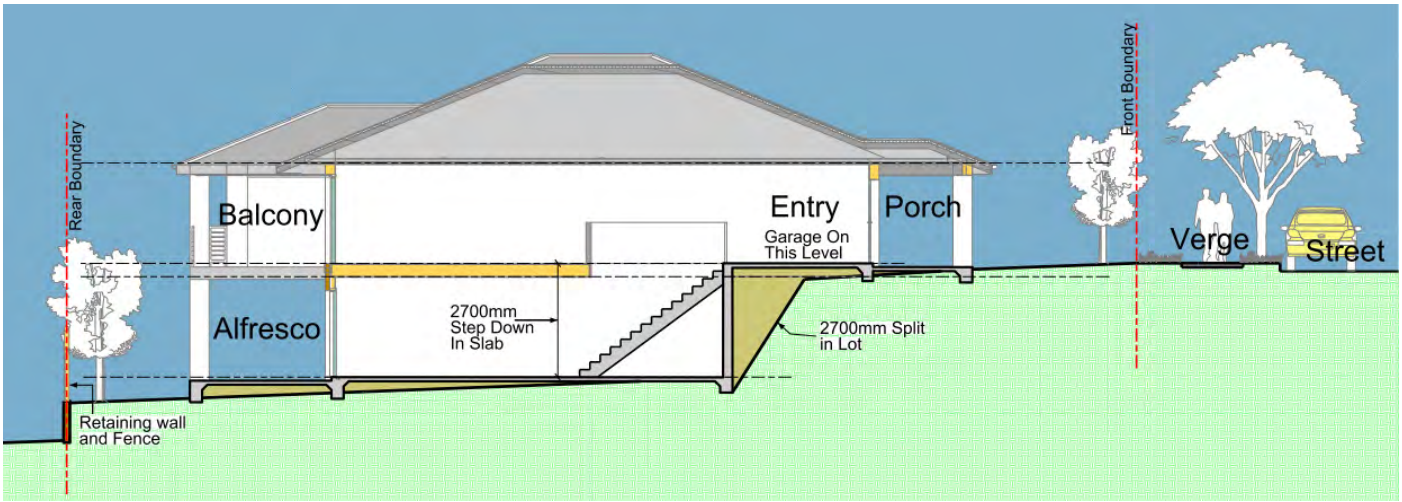
Please call the Calderwood Valley Covenant Officer on 1300 733 245 to discuss your neighbours potential retaining requirements or provide details if available.



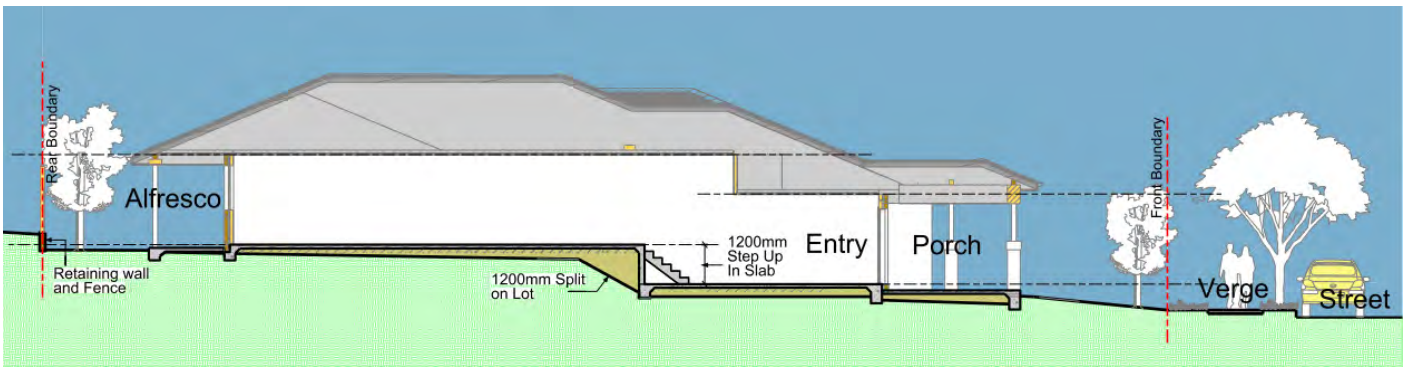
The minimum step in a split slab is 340mm (the equivalent of 2 steps)



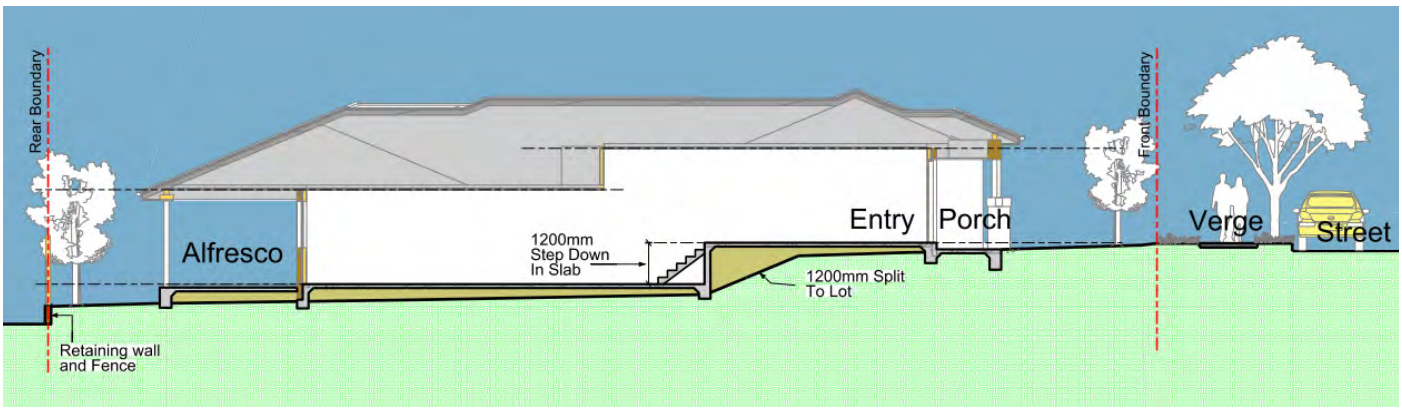
2.7 metre split - step up from front boundary



2.7 metre split - step down from front boundary



1.2 metre split - step up from front boundary



1.2 metre split - step down from front boundary

Bushfire

All development must comply with the NSW Rural Fire Services Planning for Bush Fire Protection Guidelines, Regulation 2008, and 'Planning for Bushfire Protection 2006' (RFS 2006) herin referred to as PBP. Refer to www.rfs.nsw.gov.au.

Lendlease Communities are committed to providing a quality and safe community. A significant element is to ensure that all residential homes are designed and built to minimum bushfire prone standards for safety and durability.

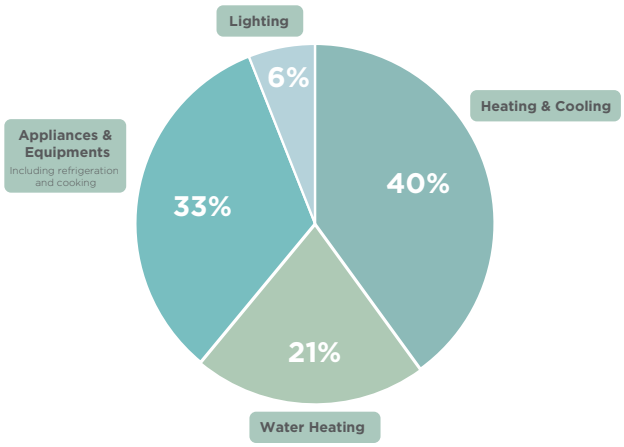
Check your Building Envelope Plan and authority requirements for land identified as bushfire prone land. The Building Envelope Plan will nominate the extent of the Asset Protection Zone (APZ) and Bushfire Attack Levels (BALS) required to be met for any new homes in these locations. You must apply these construction standards when designing your home.

Safety

- Dwellings must be designed to overlook streets and other public communal areas to provide casual surveillance.
- For residential dwellings, roller shutters are not to be used on doors and windows facing the street. Security screens must be designed to complement the architecture of the building.
- Pedestrian and communal areas are to have sufficient lighting to ensure a high level of safety. These areas must be designed to minimise opportunities for concealment.

SMART IDEAS FOR YOUR HOME

This section outlines the optional elements for your home that will assist in reducing your energy bills. Including these features during initial design is more cost effective than retrofitting later. You should talk to your builder about including these money saving ideas in your home.



Graphic showing projected energy use in the residential sector

Source: DEWHA, 2008 Energy use in the Australian residential sector 1996-2020, data projected energy use for 2012

Solar Panels

- Solar panels generate electricity from the sun and reduce the need to buy electricity during sunlight hours.
- Solar photovoltaic panels will need to be on the northern most side of your roof, as directed by the installer.
- The size of the system should match your day time electricity consumption; 1 – 1.5kW would be sufficient for most homes.

Solar Hot Water

- Solar hot water uses the heat from the sun to provide hot water for your home which reduces energy consumption.
- Solar hot water roof collectors will need to be fixed in accordance with the product specifications.
- The size of the system should be based on the size of your household and hot water needs.

LED lights

LED lights can do the same job as a compact fluorescent globe or halogen globe. LED lights use less energy and typically have a much longer life expectancy than other globes.

Heating & Cooling

A home with great natural light and natural ventilation will be easier to heat and cool, more comfortable and cheaper to run. Most of these features can be achieved with little if any extra cost:

- Face key living areas to the north or north east to let in winter sun.
- Shade windows and outdoor areas to protect from the summer sun.
- Keep west and east facing windows small with raised sill heights.
- Place operable windows on either side of your home to capture cooler summer breezes.
- Use reflective and bulk insulation to reflect the sun in summer and hold in heat in winter.
- Use a door to zone off your main living spaces to only heat or cool what you need.

Opportunities for reducing energy bills include:

- Heating & cooling
- Solar panels
- Solar hot water
- Efficient appliances
- LED lights

Efficient Appliances

Energy star ratings assist in comparing the energy efficiency and expected running costs of appliances. Being aware of the energy rating, particularly for the following appliances can help you save later:

- Electric air conditioners with ratings of 2.5 stars or greater.
- Refrigerators with ratings of 3.5 stars or greater.
- Clothes washers with ratings (energy and water efficiency) of 4.5 stars or greater.
- Televisions with ratings of 7 stars or greater.

PLANNING FOR CLIMATE AND COMFORT

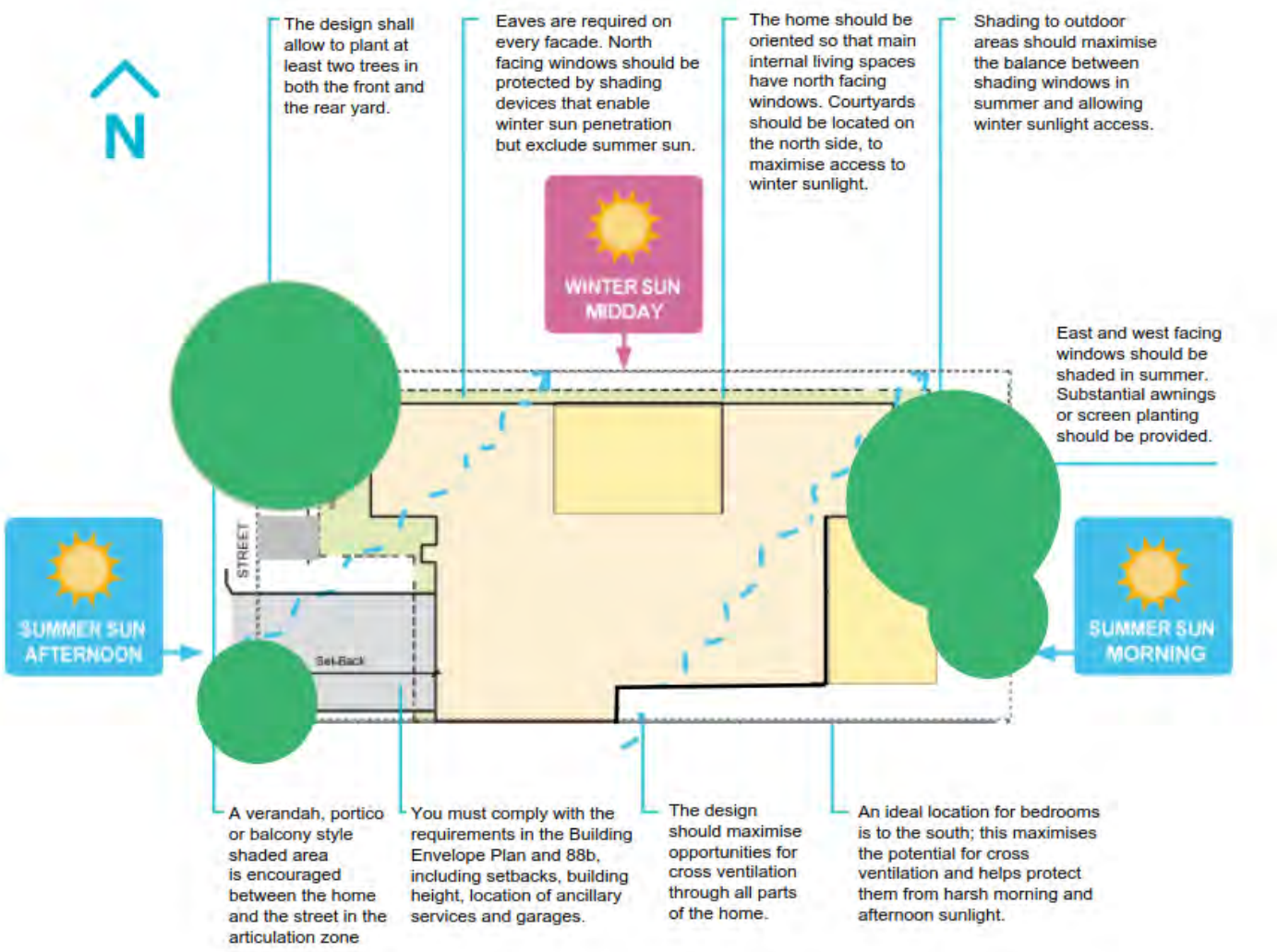
Orientation of your home

Good design considers passive solar design principles that respond to climate conditions to suit the orientation of your lot. The placement of your home on your block can impact the climate and temperature range in your home.

In winter, the midday sun is positioned low on the horizon and can provide a natural source of heat, provided it can enter through north-facing windows. In summer, the sun is positioned low on the horizon during the morning and afternoon, adding unwanted heat to your home, if permitted to penetrate east and west-facing windows.

Consideration should also be given to natural ventilation to improve air quality and thermal comfort within your home in the summer. During that time hot winds generally blow from the east until lunchtime, with cooler south-westerly winds occurring from mid-afternoon onwards. South facing windows are well suited for natural ventilation during the afternoon to relieve your home of hot air and create internal air movement that improves the comfort of your home.

A combination of passive solar heating and passive cooling is desirable and can reduce your energy consumption by up to 40%.



GLOSSARY

- 88b Instrument: Lists restrictions around easements, retaining walls, drainage and other special requirements.
- Building Envelope Plan: sets the design parameters for development on a lot.
- Water Efficiency Labelling Standards (WELS): measures the water efficiency of products.

DESIGN APPROVAL CHECKLIST

The following information and plans need to be submitted with the Design Approval Form. All plans needs to be in A3 format as a minimum. These would normally be prepared for you by your builder or architect. You can submit your application through the Lendlease Builder Hub at www.lendleasebuilderagenthub.com.au

Site Plans at 1:200 scale

These plans must show the home you are seeking approval for including:

- Street address and block details ☐
- Site details, including boundary dimensions and bearings, existing contours, setbacks requirements to all boundaries ☐
- Proposed contours and proposed finished floor levels ☐
- Easements ☐
- Private open space ☐
- North point and scale ☐
- Setbacks to all boundaries ☐
- Building outline and extent of overhangs ☐
- Driveway width, location and materials, including location of existing layback to kerb ☐
- Height and materials of all fences ☐
- Location and capacity of solar panels and solar hot water system ☐
- Location of any rain water tanks and ancillary structures such as sheds, outbuildings, pergolas, gazebos and pools ☐
- Proposed cut and fill and retaining walls including materials to be used and height of walls ☐
- House footprint area and total house internal and covered areas ☐

House Plans at 1:100 scale

These plans must include:

- Room names ☐
- Internal and external dimensions ☐
- Location of meter boxes ☐
- Width and type of garage door ☐
- Elevations of all sides of the home ☐
- An indication of existing and proposed levels ☐
- Location and extent of proposed materials and colours ☐
- Location of any elements placed outside the walls or above the roof such as air conditioning condensers, solar panels, aerials and satellite dishes ☐
- Roof pitch, eave widths, materials and heights ☐

Material and colour schedule

- All external materials and colours in colour ☐

Landscape Design at 1:100 scale

To be prepared by designer, landscaper, horticulturist

- A landscaping plan for all yard areas visible from any street or park must include paved areas, retaining walls fences and required planting including information about species, supplied plant size and location ☐

BASIX Certificate

- A BASIX Certificate which demonstrates that the minimum energy targets have been achieved ☐

DESIGN APPROVAL FORM

Allotment Details

Lot Number:

Street Address:

Village:

Owner Details

Name:

Mailing Address:

Business hours phone:

After hours phone:

Mobile phone:

Email:

Builder Details

Builder Company:

Builder Name:

Builder Contact:

Builder Address:

Postcode:

Business hours phone:

After hours phone:

Builder Contact Mobile:

Builder Contact Email:

Building Structure Details

Has this house been modified in any way from the standard builders plan for this house type and façade?

(Yes, No or Unsure):

Structure Area (m^2):

Number of Bedrooms:

Levels / floors:

Wall Material:

Roof Material:

Roof Type:

Number of car spaces in Garages:

NatHERS rating for home:

Rainwater Tank (Yes or No):

Number of Bathrooms:

Number of Living Spaces:

Gas Appliances:

Solar Panel System Size:

Hot Water System Type:

Air Conditioning percent of home:

Air Conditioning Energy Rating:

LED Lighting installed (Yes or No):

Preferred Contact - Builder or Owner:

Submissions

You can submit your application through the Lendlease Builder Hub at www.lendleasebuilderagenthub.com.au if you are a builder or via email at design@calderwoodvalley.com.

Please ensure the application form includes:

- Design Approval Checklist
- A3 copy of site plan
- A3 copy of full set of building plans including floor plans, roof plan, elevations and landscape plan
- Materials and colour schedule
- Landscape design
- A BASIX Certificate

I/we certify that the information in the attached application is a true and accurate representation of the home I/we intend to construct. In the event that changes are made to the proposed plans, I/we will undertake to re-submit this application for approval of any changes.

Name/s:

Signed:

Date:

LANDSCAPE CHECKLIST

- A landscape plan is to be provided at 1:100 @ A3 by a qualified landscape designer/horticulturalist. ☐
- The plan is to be fully documented with survey details including contours, lot dimensions, kerb, layback, vehicle crossover, retaining walls, surface materials, planting, easements, clothes line, water tank, air-conditioning units and fencing details. Clothes lines, water tanks and air-conditioning units are to be concealed from the street. ☐
- The landscape plan is to show any existing street trees and note that "All existing street trees and verge planting re to be protected during construction. ☐
- A minimum of 70% of the planting is to be Australian natives or water wise planting, and must be clearly indicated in a planting schedule with '*' or similar and the percentage of this planting is to be noted e.g. 0% Australian native, 30% exotic. ☐
- Two trees of mature height between 4m - 6m must be provided in the front yard and 2 trees of similar height in the back yard of the lot. Two of the trees are to be Australian native species. ☐
- A 300mm - 500mm planting strip is required for the length of the following locations; - between driveway and entry path, between driveway and side boundary, along the front boundary (including any part of the secondary street frontage without fencing). ☐
- A separate entry path is required to the front door. This entry path is to be independent of the driveway, and a maximum of 1.8m wide. The entry path can be curved or straight. ☐
- A minimum of 50% of the lots 'total landscaped area' is to be soft or permeable surface. Artificial turf is not to be used in front gardens, on council verge, or where visible from the street. ☐
- Driveways are to be 3m wide for a single garage and 3m - 5m for a double garage. Driveways within the boundary from the front of the garage to the front boundary are to be treated with either stencilled, coloured concrete or pavers. Plain concrete, driveway tracks, turfed or loose pebble/gravel driveways are not permitted. Plain concrete is to be used from the front boundary to the kerb in accordance with Shellharbour Council requirements and must be perpendicular to the kerb with parallel sides. Footpaths are to remain continuous along the street and are not to be interrupted by driveways. ☐
- Garden sheds are to be a maximum of 12m² and a minimum of 900mm from and boundary and are to be concealed from public view. Service locations
- Retaining walls visible from the street should be constructed of; textured or coloured masonry, bricks, blocks or concrete including rendering. This rule also applies to any walls in excess of 900mm. ☐
- Front fencing if provided is to be a maximum of 1.2m high with permeable fill. ☐
- Letterboxes are to be of solid construction and complement the home. ☐
- Internal fencing along rear and side boundaries is to be 1.8m high Lysaght 'Smartascreen' in Woodland Grey or equivalent unless otherwise specified in your building and siting guidelines for your lot. All internal fencing, return fencing to the dwelling and side gates are to be set back a minimum of 7.5m or 2m behind the adjacent façade. ☐
- Any return fencing to the dwelling or side gates over 2.8m long must be either screened by dense height planting or fencing upgraded to slat style fencing or equivalent. ☐
- Secondary corner fencing is permitted for a maximum of 50% of the lot height (measured from the longest side). Minimal additional fencing engths may be considered if justified. ☐
- Corner Lot Frontage Homes on corner lots shall provide a secondary building frontage of 10m minimum. This is to include a broken roof line and building line and suitable glazing. The secondary frontage should be setback 1.5m from the secondary side boundary facing the street, unless otherwise stared on the Building Envelope Plan. ☐
- In addition to the checklist, the landscape plan is to comply wholly with the Calderwood ValleyBuilding and Siting Guidelines included in your contract. ☐

Creating Special Places

For over 50 years Lendlease has been creating communities that define the way Australians like to live. Truly beautiful places planned to maximise the things we love about our unique way of life.

Lendlease has a simple goal – to create better places to live for all. As a leading international property group, we create communities that leave a positive legacy by setting world leading standards for safety, innovation and sustainability. We've created and delivered more than 50 masterplanned communities in Australia and around the world, over the past 50 years.

At Lendlease, our communities are linked by a common interest – doing the right thing leads to a better outcome for everyone. Lendlease design and create new communities across Australia for people to build homes, live, work, shop, play and grow together.

We believe everyone who comes and experiences our places should feel safe within a welcoming community that will grow and prosper into the future.

We lead by example. Across the country, communities that we are responsible for continue to flourish, nurturing the very essence of what we believe for generations to come. These are the places that make us proud.

calderwoodvalley.com.au

1300 733 245

Corner of Escarpment Drive & Brushgrove Circuit

Calderwood Valley NSW 2527

Opening Hours

Sales & Information Centre

Monday, 1-5pm

Tuesday – Friday, 9am-5pm

Saturday & Sunday, 10am-5pm

lendlease