Hawkesbury City Council

attachment 5
to
item 73

Amended Jacaranda Development Control Plan

date of meeting:27 April 2021
location: council chambers
and by audio-visual link
time:6:30 p.m.

CELESTINO

JACARANDA DEVELOPMENT CONTROL PLAN

SPINKS ROAD, GLOSSODIA

SUBMITTED TO HAWKESBURY CITY COUNCIL

19 APRIL 2021

List of Figures

1.0 Introduction

This Development Control Plan (DCP) is the Jacaranda Development Control Plan 2020.

1.1 Land to which this chapter applies

This site-specific DCP applies to all land identified within the Jacaranda site. The site occupies approximately 185.3 hectares of predominately rural land bound by Spinks Road to the north and Currency Creek to the south. The site is comprised of several separate land parcels as summarised in **Table 1**.

Table 1 Summary of property details

Address	Lot	Deposited Plan
103 Spinks Road, Glossodia	2	DP533402
103 Spinks Road, Glossodia	52	DP1104504
213 Spinks Road Glossodia	20	DP214753
361 Spinks Road Glossodia	75	DP214752
11 James Street Glossodia	3	DP230943
3 Derby Place Glossodia	44	DP214755
746A Kurmond Road, Freemans Reach	50	DP751637
780A-780C Kurmond Road, North Richmond	1, 2 & 3	DP784300

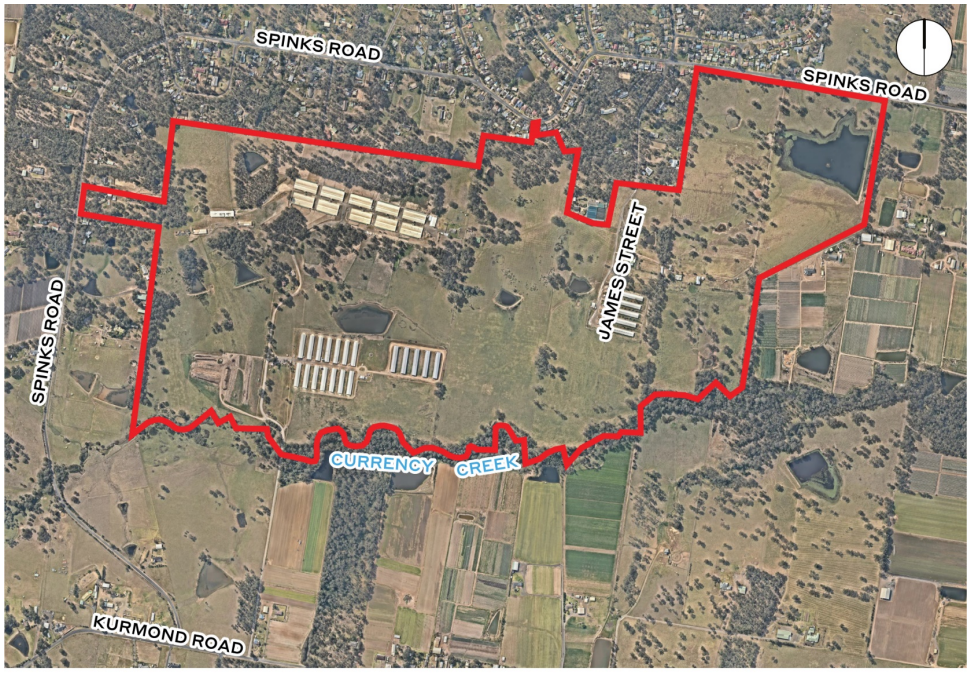


Figure 1 Land Application Map

Source: Ethos Urban

1.2 Relationship to other plans and policies

The Hawksbury Development Control Plan (DCP) applies for all development within the Hawkesbury Local Government Area. This Section of the DCP applies in addition to the remainder of the Hawkesbury DCP and provides development controls for development within Jacaranda.

In the event of an inconsistency between other Parts of the Hawkesbury DCP this Chapter prevails.

1.3 Development principles and outcomes

This Chapter is intended to guide the development of Jacaranda to create a high-quality liveable community.

A key principle of the Proposed Master Plan is to create a highly integrated and multi-use open space network that will deliver improved outcomes in terms of usability, amenity, access and connectivity and maintenance. By providing a variety of active and passive nodes that are linked through nature based conservation areas and parkland trails, the vision is to offer a wider range of community and recreational spaces that will become destinations for both Jacaranda and the wider Glossodia community.

The following principles apply to development in Jacaranda:

- Development meets appropriate standards of character and amenity;
- Jacaranda is highly liveable for residents, with a quality public domain, access to local amenities and services, and is responsive to local environmental conditions;
- Housing is high quality and appropriately diverse to provide suitable housing for a range of households, is pleasant and comfortable to live in and responsive to the site;
- Ecologically Sustainable Development (ESD) principles including water sensitive urban design, climate responsive building design, energy efficiency, and selection/use of recycled materials where appropriate are embedded in the precinct masterplan and development outcomes.
- Significant vegetation and endangered habitats are protected in accordance with the biodiversity certification approval;
- Recreational and conservation lands incorporate areas of high value vegetation that is identified for conservation, and create continuous, high amenity and easily accessible open spaces;
- The subdivision design creates an appropriate interface with adjoining rural and residential areas, and is consistent with the semi-rural character of the area, and is responsive to the topography and ecology of the site;
- The street hierarchy and layout is legible (easy to navigate), responds to the topography, creates permeable connections throughout the site, including direct access to open spaces, and includes higher order collector streets that are suitable for buses.

2.0 Precinct-Wide Controls

This section outlines objectives and controls for matters that apply generally to all development in Jacaranda. These objectives and controls will generally be most applicable to development applications for subdivision and civil works. These objectives and controls apply to all development in all zones across Jacaranda.

Section 3 provides objectives and controls that relate to development specifically within the residential zones, and which relate to lot design and the design of buildings on residential lots.

2.1 The Concept Masterplan

Figure 2 Jacaranda Concept Masterplan

Source: Onecollective

2.1.1 Place and Character

Objectives

O.1 Ensure that development is consistent with the desired character of each precinct within Jacaranda.

O.2 Ensure that development responds to the general topography, natural landscape features, native vegetation, and riparian corridors.

O.3 Consider views to the Blue Mountains and Richmond.

O.4 Encourage a diversity of housing, streetscapes types, and landscape treatments that reinforce the desired character of each precinct and help provide variety within the overall development site.

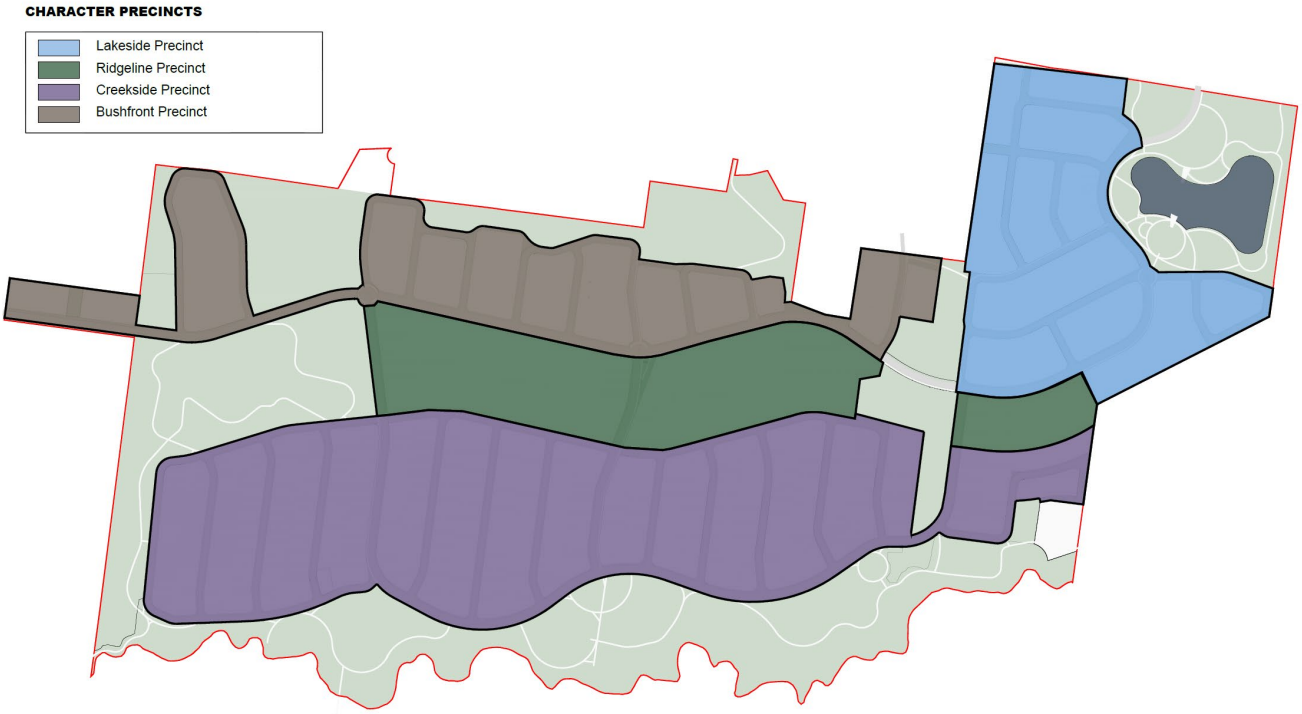


Figure 3 Character Areas Structure Plan

Source: Onecollective

Controls

C.1 The layout of subdivision, public spaces and the street network of Jacaranda is to be generally consistent with the Structure Plan at Figure 2.

C.2 Development within each precinct is to be in accordance with the Desired Character Statements outlined below in Table 2 for each character precinct in Figure 3.

Table 2 Desired Character Statements

A. Lakeside Precinct	The Lakeside Precinct is located at the entry to Jacaranda with a central entry drive that interfaces with and provides a direct connection to Lake Park. The central entry drive creates a unique entry to the community and to Lake Park. Streets are oriented and located to provide direct access and views towards the Lake Park and to facilitate the efficient design of the stormwater system. Lake Park is a space for the Jacaranda and the Glossodia communities to gather and meet – it is a destination. It is the key recreational area in Jacaranda setting the landscape tone of the community. Lake Park offers a variety of recreational spaces, facilities and experiences that improves the recreational and community use. It incorporates viewing platforms, shelters, and other embellishments to provide choice and diversity of recreational activity. A potential café location within Lake Park serves as a key meeting place for the Jacaranda and wider Glossodia community. The Lake Park, the Ridgeline Corridor and Green Connection intersect, acting as a marker at the entry to the Jacaranda community. Lots are oriented to maximise dwelling orientation towards areas of open space and take advantage of views. Landscape elements including street trees establish the character of Jacaranda. The Lakeside Precinct is predominantly a suburban character with a mix of single and two-storey (and in certain circumstances three-storeys where the proposed development does not dominate the streetscape) dwellings set within landscaped lots. Residential development comprises predominantly 1000sqm+ lots but increases to 2000sqm+ lots along the northern, eastern and western boundaries where the site interfaces with Spinks Road and the existing adjoining rural residential neighbours. The residences are modern homes with a touch of country. They feature a mix of clearly defined porches, entry features and verandahs. Consistent building alignments towards the front boundaries and street presence of the built form will add to the local street character around the Lake Park. Front fences along the central entry drive within the Lakeside Precinct are predominately hedging or piers with hedging in between. Landscaped rear setbacks provide a natural buffer zone and transition to adjacent farmland.

B. Ridgeline Precinct	The Ridgeline Precinct is located centrally within Jacaranda and incorporates the south facing land that follows the central ridgeline. The character is defined by a sense of space and a green 'leafy' and rural feel created by larger lots, increased space and trees between homes, and elevated distant views. The residential pattern maximises the space between homes and the opportunity for trees and views between dwellings to reinforce the rural character. Residential development is predominantly 4000sqm+ lots, with the larger lots accommodating the topography of the site. Dwellings do not display a consistent setback to the street – the feeling is more relaxed and driven by individual lot features and landscape elements. Large trees feature prominently within front yards. The residences are large homestead and ranch style homes with simpler roof profiles. They feature a mix of statement entry features and large verandahs. The street character along the central ridge line to the north and local street to the south is predominantly defined by landscape. Buildings are set back from the street according to orientation and topography, creating an open rural feel, without rigid building alignments. Front fences within the Ridgeline Precinct are predominately post and rail with feature landscaping.

C. Creekside Precinct	The Creekside Precinct is located in the southern part of Jacaranda adjacent to Currency Creek and the associated riparian corridor and open space. The character is defined by a sense of greenery and open space created by the Creekside Park setting and surrounding bushland areas and a suburban village type character that is cohesive with the surrounding community. Currency Creek and the extensive open space and parkland features along the riparian corridor are the main focal point and setting for the Precinct, together with the biobanking areas to the west and north of the precinct. Creekside Park incorporates a diverse range of active and passive recreational spaces and features. Landscape treatments provide variety and differentiate it from the other precincts whilst still providing an integrated and cohesive overall character. The road network through the Precinct provides direct linkages and esplanade interfaces to the Creekside Park which maximise access, exposure, and activation of the parkland area drawing residents from the other Precincts. Residences fronting open space have a direct visual connection with the parkland. The subdivision pattern maximises pedestrian and visual linkages to open space contributing to the peri-urban positioning of the community. The Creekside Precinct is predominantly a suburban character with a mix of single storey and two-storey (and in certain circumstances three-storeys where the proposed development does not dominate the streetscape) dwellings set within landscaped lots. Residential development comprises 1000sqm+ lots and will include a variety of lot types and frontages (i.e. park front lots, internal lots, bush front lots) that will add diversity to the precinct. The residences are modern homes with a touch of country. They feature a mix of clearly defined porches, entry features and verandahs. Residents benefit from the close proximity to the three Village Greens along the southern edge of the Creekside Precinct, which create a finer grain of residential clusters and give opportunity for subtle variations in character around the West, Central and East Village Green. Front fences within the Creekside Precinct are predominately hedging or a mix of fencing with hedging.

D. Bushfront Precinct	The Bushfront Precinct is located in the northern part of Jacaranda and incorporates the north facing land that falls from the central ridgeline towards the existing rural residential areas to the north. The Precinct is defined by a sense of space and a green 'leafy' character created by the interface to the surrounding bushland setting and the interface to the lower density rural residential areas. The street network provides esplanade interfaces to bushland and conservation areas. The subdivision pattern maximises pedestrian and visual linkages from within and through the Precinct to the surrounding bushland and conservation areas. Residences are orientated to address the bushland and open space areas The Bushfront Precinct is predominantly a suburban character with a mix of single storey and two-storey (and in certain circumstances three-storeys where the proposed development does not dominate the streetscape) dwellings set within landscaped lots. Residential development comprises predominantly of 1000sqm+ lots but increases to 2000sqm+ lots along the northern boundaries transitioning to existing rural residential neighbours. The residences are modern homes with a touch of country. They feature a mix of clearly defined porches, entry features and verandahs. Consistent building alignments towards the front boundaries and street presence of the built form provide a defined residential edge towards the adjacent bushland, and along the central ridge. Front fences within the Bushfront Precinct are predominately post and rail or modern masonry piers with infill panels.

2.2 Natural Environment Considerations

2.2.1 Contamination

Objectives

O.1 To minimise the risks to human health and the environment from the development of potentially contaminated land.

O.2 To ensure that potential site contamination issues are adequately addressed at the subdivision stage.

Controls

C.1 A Stage 2 Detailed Site Investigation is to be provided in support of all Development Applications for subdivision of Jacaranda.

C.2 Where the site has known contamination, or a Stage 1 Preliminary Site Investigation identifies potential or actual site contamination, a Stage 2 Detailed Site Investigation shall accompany the Development Application.

C.3 A Remediation Action Plan (RAP) may be required by the consent authority in accordance with the recommendations of the Stage 2 Detailed Site Investigation.

C.4 A Site Audit Statement may be required by the consent authority in accordance with the recommendations of the Remediation Action Plan.

2.2.2 Cultural Heritage

Objective

O.1 Ensure that heritage significance is considered for development affecting places of Aboriginal heritage significance.

Controls

C.1 Council may request an Aboriginal Cultural Heritage Assessment to accompany a Development Application should an Aboriginal Heritage Due Diligence deem the proposed development to have potential impacts on Aboriginal heritage.

C.2 In order to ensure work and activities do not harm Aboriginal objects, an Aboriginal Due Diligence Assessment Report must be submitted in support of all Development Applications for subdivision or infrastructure works. Should the Aboriginal Heritage Due Diligence Report indicate that the development may potentially impact on Aboriginal heritage, an Aboriginal Cultural Heritage Assessment to accompany a Development Application

2.2.3 Biodiversity

Objectives

O.1 To conserve the remaining high and very high value native vegetation and biodiversity within Jacaranda.

O.2 To ensure that native vegetation contributes to the character and amenity of Jacaranda.

O.3 To preserve and enhance the ecological values of Jacaranda and ecological links to surrounding areas, protect and rehabilitate CPW and RFER and biodiversity on retained land including the rehabilitation of the riparian corridor along Currency Creek.

Controls

C.1 Development is to be consistent with the Biodiversity Certification for Jacaranda.

C.2 Development Applications nearby or adjacent to retained lands, as identified within the Biodiversity Certification Application, need to include an assessment on any potential impacts to potential impact to remnant CPW and RFEF.

C.3 Off leash dog exercise areas must not directly adjoin the Biobank sites.

C.4 A Construction Environment Management Plan must be prepared in accordance with the BCAR&S requirements and include provisions for pre-clearance and clearance surveys of fauna, dam dewatering protocols, seed collection, and reuse of vegetation material.

C.5 Seed from the native plants to be removed shall be collected prior to any vegetation clearing and used for growing local provenance plants for revegetation at the site including the rehabilitation of Currency Creek riparian corridor and the Biobank sites.

C.6 Native trees approved for removal shall be salvaged for reuse to enhance habitat in the Biobank sites and the riparian corridor along Currency Creek including tree hollows and tree trunks (greater than 25-30 centimetres in diameter and three metres in length), and root balls.

C.7 Asset Protection zones are to be located outside the Biobank sites.

C.8 The proposed RE1 zoned land areas accommodating passive recreational uses and trails adjacent the biobank areas are to be physically separated from biobank areas with suitable fencing.

2.2.4 Flooding

Objectives

O.1 To minimise the flood risk to life and property with the use of land.

O.2 To allow development on land that is compatible with the land's flood hazard.

O.3 To allow development that will not have a significant adverse effect on flood behaviour.

Controls

C.1 Flood prone land within any proposed residential lot shall be identified in the subdivision DA.

C.2 If residential development is to be located within or adjacent to a flood affected area, a finished floor level of habitable rooms above the predicted 1% AEP peak flood level adjacent the property is to be implemented.

C.3 A Flood Report prepared by an appropriately qualified and experienced Hydraulic Engineer should be prepared in support of any application for a subdivision within the Creekside Precinct.

2.2.5 Riparian Corridor

Objectives

O.1 Protect the riparian corridor, water quality, flooding conditions and ecological values of Currency Creek.

O.2 Encourage integration of the public open space network and recreational uses with existing natural habitat.

O.3 Reduce potential land use conflict between Jacaranda and the rural properties immediately south of the Creek currently used for intensive agriculture.

Controls

C.1 A Riparian Buffer Area that averages 40m wide is to be provided along the northern side of Currency Creek generally consistent with Figure 4. The Riparian corridor must be measured in accordance with the guidelines of the Natural Resources Access Regulator (NRAR).

C.2 A Vegetation Management Plan shall be prepared and implemented for the protection, rehabilitation, management and maintenance of the riparian corridor along Currency Creek as part of the development of the site.

C.3 Within the riparian Buffer Area existing native vegetation is to be retained and rehabilitated. Any installation/construction of the following within the riparian Buffer needs to be consistent with relevant provisions in the NSW Office of Water's Guidelines for riparian corridors on waterfront land'.

- Where clearing is required for infrastructure and servicing
- Where pedestrian and cycle pathways are proposed
- Where pedestrian, cycle, utility and vehicle crossings are proposed.

C.4 The location of infrastructure, servicing, pathways, and crossings is to consider vegetation that is to be substantially retained and protected.

C.5 Recreation and drainage uses within the Riparian Buffer Area are permitted in accordance with the requirements of the Natural Resources Access Regulator (NRAR). These uses are to be sensitively designed and managed and existing native riparian vegetation should not be unnecessarily removed to accommodate them. Development should seek to avoid riparian vegetation removal as a first principle, then limit removal where no impact is not possible. Wetlands and ponds are to be located and designed to be sympathetic to the environment.

C.6 The design and construction of works and activities within a watercourse, including any stormwater outlets is to aim to be as 'natural' as possible yet provide a stable transition from a constructed drainage system to a natural flow regime. A watercourse 'rehabilitation' design philosophy rather than a 'construction' philosophy is to be applied. The design and construction footprint, and the extent of disturbances within riparian corridors is to be minimised while achieving the desired discharge function and outcome.

C.7 Any public open space and drainage infrastructure adjacent to the identified riparian corridors is to be designed to contribute to riparian outcomes by providing landscaping that responds to the hydrological function of the adjacent riparian corridor and contributes to the maintenance or improvement of water quality within the water course.

C.8 Any pedestrian, cycleway or road crossing of Currency Creek must be designed to maintain riparian connectivity and provide fauna passage and be sensitive to the geomorphic functions of the watercourse.

C.9 All Asset Protection zones are to be located outside the riparian corridor along Currency Creek.

C.10 Any pathway lighting in the vicinity of riparian corridor must be designed and constructed to minimise spill over into the riparian land.

C.11 A permanent physical barrier shall be placed at the landward extent of the riparian corridor (such as bollards or a pathway) to prevent damage to riparian vegetation from maintenance activities (mowing, slashing etc) on the adjacent Village Green.

Figure 4 Proposed riparian buffer (average of 40m)

Source: EcoLogical Australia

2.2.6 Stormwater Management

Objectives

O.1 Integrated Water Cycle Management Controls manage waterway health and slow the conveyance of stormwater into Currency Creek through WSUD principles.

O.2 Manage the stormwater from urban parts of Jacaranda to ensure no adverse impacts occur to adjacent, adjoining property or the downstream creek or watercourse environment.

O.3 Facilitate a water management network that integrates with the open space network.

Controls

C.1 Stormwater management is to be designed and implemented with all subdivision DA’s.

C.2 Water Sensitive Urban Design (WSUD) water quality controls implemented to meet the stormwater management objective as outlined in Table 3. Indicative locations are provided in Figure 5.

Table 3 Water quality and environmental flow targets

	Water Quality % reduction in pollutant loads				**Environmental Flows** Stream erosion control ratio
	Gross Pollutants (>5mm)	Total suspended solids	Total phosphorus	Total nitrogen	
Stormwater management objective	90	85	65	45	3.5-5.0:1
'Ideal' stormwater outcome	-	90	85	65	1:1

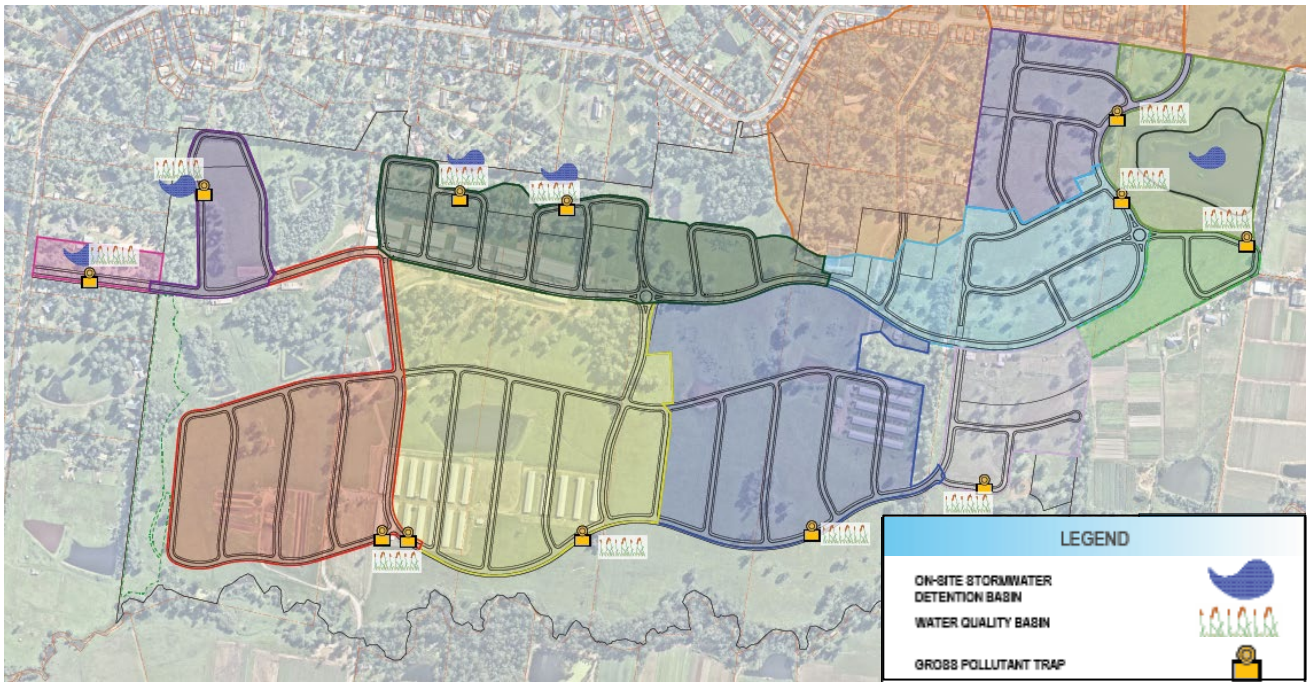


Figure 5 Indicative location and extent of water quality management measures

Source: Orion Consulting

C.3 Stormwater management controls implemented to result in no significant adverse impacts to adjacent or adjoining property.

C.4 Stormwater quality basins are to be located generally in accordance with the indicative locations illustrated in Figure 5.

C.5 Any applications involving alterations to or the construction of basins/dams should include an assessment under the Dam Safety Act to determine whether they will be classifies as a 'declared dam' under Section 4 of the Dams Safety Regulation 2019.

C.6 Details on the collection of stormwater run-off from the roads within the development, keeping the water within the landscape, improving the water quality of the runoff within the development, etc should be provided as part of any development application for subdivision of the subject site.

C.7 The function of water bodies should be clearly specified (e.g. water storage, water quality or recreational purposes) in the Development Application.

C.8 A Geotechnical Report is required to make any recommendation for the filling of existing dams or drainage lines.

C.9 Water quality and environmental flow shall achieve the stormwater management objective in Table 3, as a minimum, and should target the 'ideal' stormwater outcome.

C.10 The detention basins are located to avoid any adverse impacts on native vegetation that is to be retained or areas that are to be rehabilitated with native vegetation.

C.11 Detention basins which directly adjoin the Currency Creek Biobank site are vegetated with suitable local native provenance plant species from the vegetation community that occurs or once occurred in this location.

2.2.7 Bushfire Management

Objectives

O.1 To prevent loss of life and property due to bushfires, by discouraging the establishment of incompatible uses in bushfire-prone areas.

O.2 To ensure adequate fuel management of asset protection zones in accordance with the Rural Fire Service (RFS) fuel management standards.

O.3 To define construction standards that applies to lots within 100m of bushfire prone vegetation.

Controls

C.1 Subject to detailed design at Development Application stage, the indicative location and widths of Asset Protection Zones (APZs) are to be provided generally in accordance with the following:

- are to be located wholly within Jacaranda;
- may incorporate roads and flood prone land;
- are to be located wholly outside of vegetation shown in the Core Riparian Zone of the riparian corridors and biobanks and fuel management not impacting on vegetation within these areas in any way;
- may be used for open space and recreation subject to appropriate fuel management;
- are to be maintained in accordance with Planning for Bushfire Protection (NSW Rural Fire Service);
- may incorporate private residential land, but only within the building setback;
- are not to burden public land; and
- are to be generally bounded by a perimeter fire trail/road that is linked to the public road system at regular intervals in accordance with Planning for Bushfire Protection.

C.2 Reticulated water is to meet the standards contained within Planning for Bushfire Protection. Water supply is to be via a ring main system, engineered to the requirements of Australian Standard AS 2419.1 – Fire Hydrant Installations.

C.3 Vegetation management within public parks and community title areas is to be subject to completion of a Fuel Management Plan that is to be integrated within the Park Plan of Management.

C.4 Landscaping and property maintenance for lots within 100 m of bushland are to be in accordance with measures described in Planning for Bushfire Protection.

C.5 Buildings adjacent to APZs (refer Figure 6) are to be constructed in accordance with the requirements of Appendix 3 of Planning for Bushfire Protection and Australian Standard 3959-2009 - Construction of Buildings in Bushfire Prone Areas.

C.6 Where an allotment fronts and partially incorporates an APZ (refer Figure 6) it shall have an appropriate depth to accommodate a dwelling with private open space and the minimum required APZ. The APZ will be identified through a Section 88b instrument.

C.7 Temporary APZs, identified through a Section 88b instrument, will be required where development is proposed on allotments next to undeveloped land. Once the adjacent stage of development is undertaken, the temporary APZ will no longer be required and shall cease.

C.8 Roads are to be designed in accordance with acceptable solutions as defined within Planning for Bushfire Protection.

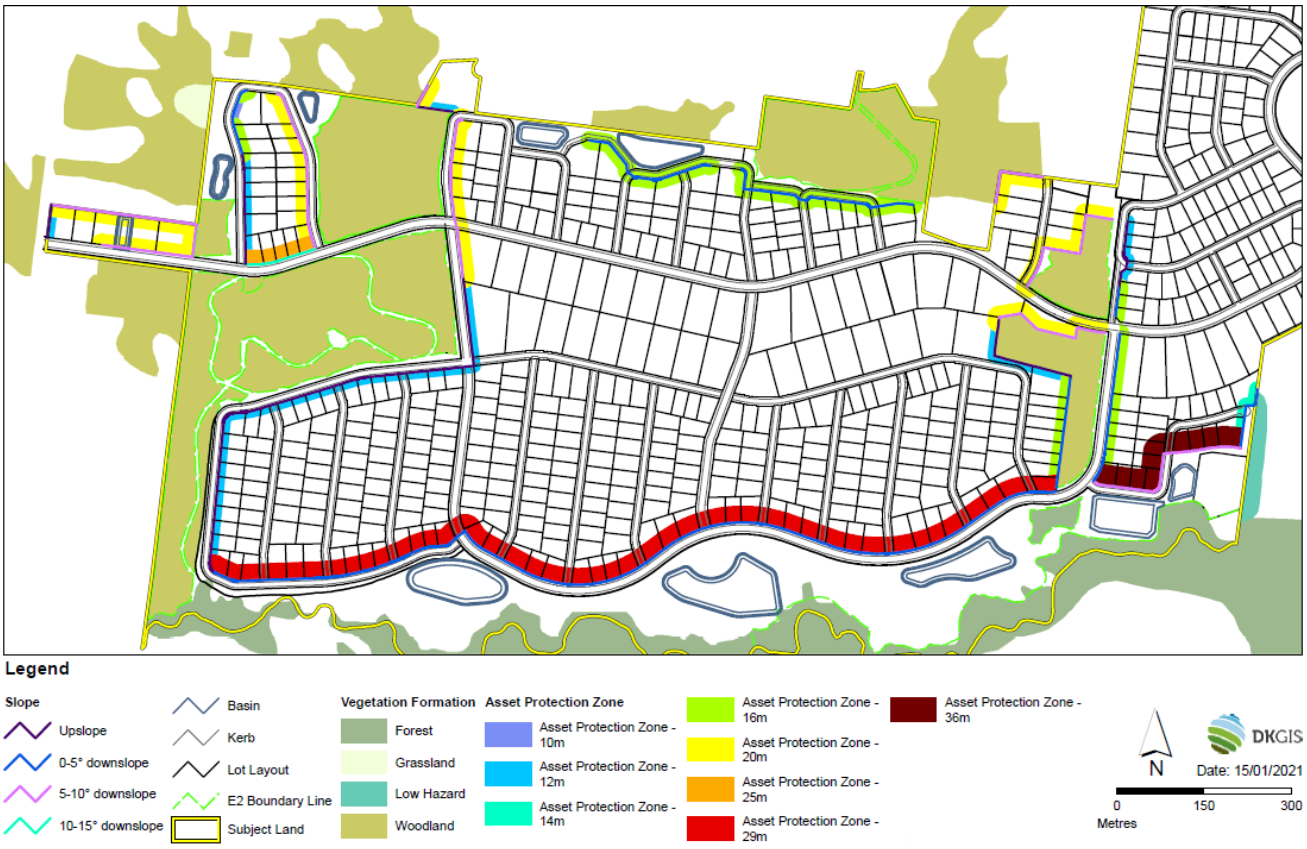


Figure 6 Asset protection zone map

Source: Peterson Bushfire

2.3 Built Environment Considerations

2.3.1 Connectivity

Objectives

O.1 Design a street hierarchy that accommodates pedestrians, cyclists, vehicles, and potential bus routes.

O.2 Provide an integrated and legible street hierarchy that is supplemented by a corresponding hierarchy for pedestrians and bicycles.

O.3 Maximise connectivity between residential areas, community facilities, open space and centres within and external to Jacaranda.

O.4 Create a safe, convenient, and efficient network that integrates with the surrounding network.

O.5 Ensure appropriate connections to the neighbouring Glossodia Village.

Controls

C.1 The locations and alignments of all roads are to be generally in accordance with Figure 7 which meets the above objectives. Where a variation to the network is proposed, the alternative network is to be designed to:

- create a permeable network;
- encourage walking and cycling and minimise travel distances;
- enable buses to travel through the precinct on collector roads;
- maximise connectivity between residential areas and community facilities, open space and centres;
- take account of topography and site drainage, and accommodate significant vegetation;

- optimise solar access opportunities for dwellings through a grid street network that is aligned generally north-south and east-west;
- provide frontage to and maximise surveillance of environmental conservation, open space and drainage lands;
- provide views and vistas to landscape features and visual connections to nodal points and landscape context;
- maximise the effectiveness of water sensitive urban design measures; and
- minimise the use of cul-de-sacs.

C.2 Pedestrian access is to be provided where practical, and preferably in the following locations (see Figure 8)

1. Spinks Road East - connection from Lake Park;
2. James Street - potential connection along existing street;
3. Spinks Road Central - connection through E2 land to Spinks Road;
4. Derby Place - potential connection along existing street; and
5. Spinks Road West - connection from central collector road to Spinks Road.

C.3 Proposed connections outside the site to Glossodia Village are to connect with the main 2.5m off-road pedestrian and cyclist pathways and open space areas within Jacaranda.

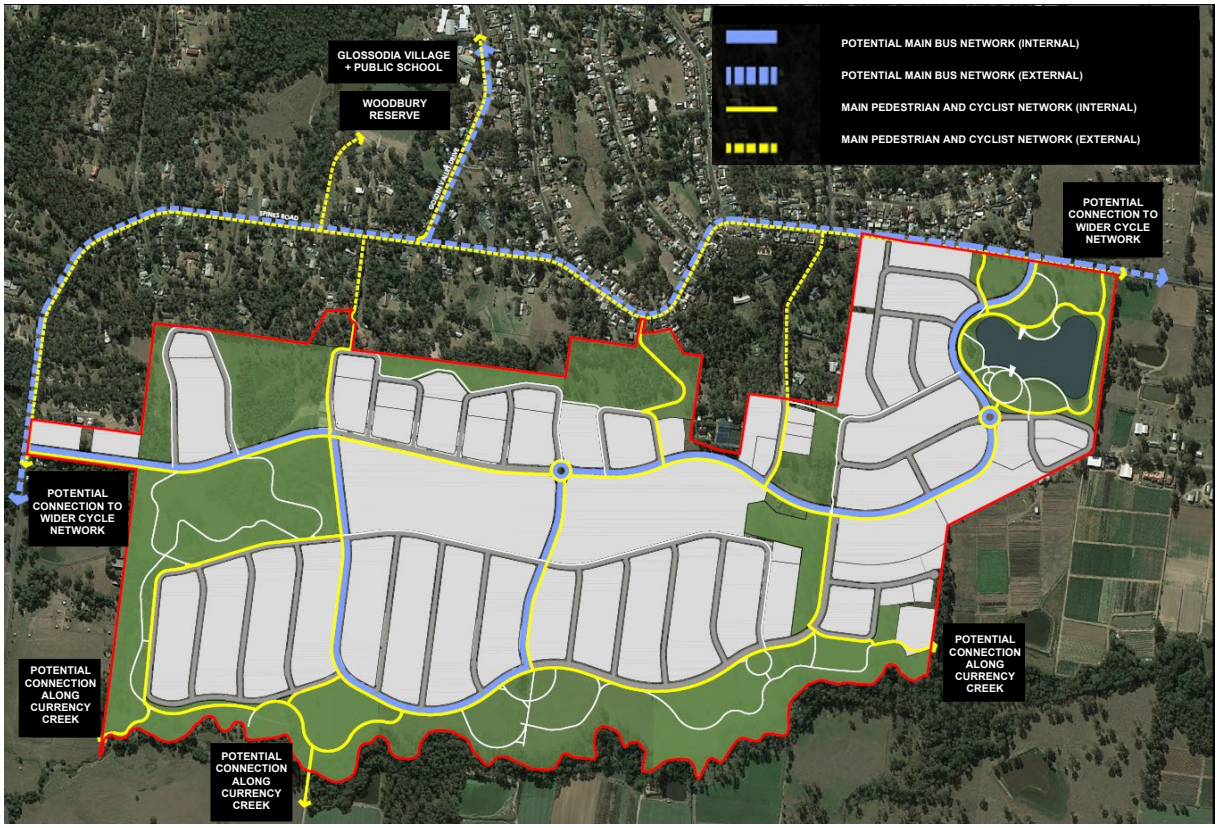


Figure 7 Movement Network
Source: Onecollective

Figure 8 Proposed key pedestrian and cyclist connectivity within Jacaranda and to existing Glossodia community
Source: OneCollective

2.3.2 Open Space and Public domain

Open Space Network
Objectives

O.1 To deliver a combination of conservation and passive and active recreation within an Open Space Network that incorporates the riparian corridor as well as other open space corridors, environmental conservation reserves and parks.

O.2 To provide access to recreation opportunities within 400m for residents

O.3 To retain view corridors to toward currency creek and the Blue Mountains from public spaces on the central ridgeline particularly through the western biodiversity area, eastern biodiversity area and central roundabout areas.

O.4 To ensure recreation areas to be free from burdens/constraints from utility provision e.g. electricity easements. All drainage easements to be excluded from recreation area calculations / mapped differently.

O.5 To protect and conserve remnant native vegetation in the open space/public domain and enhance biodiversity local native vegetation where feasible.

Controls

C.1 The open space network with Jacaranda will incorporate the following key open space features:

A. Village Green

B. Lake Park

C. Passive Recreation Areas

C.2 All streets focus view lines and pedestrian linkages towards parks to maximise visual connectivity

C.3 Open spaces are to be provided generally in accordance with the identified open space and recreation areas shown in Figure 9.

C.4 Shared pedestrian and bicycle pathways are to be provided generally in accordance with Figure 8.

C.5 Development is to be sited and orientated to retain and encourage views to the Village Green and Lake Park.

C.6 Where practical and safe, existing native trees should be retained in open space zones. The retention of trees is to be considered in the context of other considerations within this DCP and the existing condition of the trees. Practical is a measure of assessing the retention of trees against sensible and orderly development including the alternate development controls proposed in the draft DCP including achieving a balance of cut/fill across the site. Safe is a measure of assessing the existing condition of the trees as assessed by an arborist.

C.7 Adequate drinking fountains shall be provided at appropriate locations within the public domain in accordance with the Local VPA.

C.8 Permeable/porous materials and finishes are to be used for pedestrian pathways within the open space network.

C.9 Timber look aluminium to be used for park furniture.

C.10 Off leash dog exercise areas must not directly adjoin the Biobank sites.

C.11 Areas within the Village Green are to be planted with local native species from the relevant local native vegetation communities to improve the habitat value, including:

- land adjacent to the riparian corridor to increase the width of the corridor to improve resilience and connectivity along the creek and habitat provided by the riparian corridor
- the informal creek side passive areas
- the proposed WSUD / bio-basins.

Figure 9 Open Space Network

Source: Onecollective

Parks and Playgrounds

Objectives

O.1 Provide a variety of recreation spaces, facilities and experiences that improve recreation outcomes.

O.2 Design public open spaces based upon multiple use principles that provide a range of recreational opportunities and improve maintenance outcomes.

O.3 Maximise connectivity and movement between key recreational and natural assets.

O.4 Implement measures to mitigate the urban heat island effect.

Controls

C.1 Parks and playgrounds should incorporate the following elements as detailed in the Voluntary Planning Agreement:

- Active recreation areas utilising open grassed areas for informal games
- Passive recreation areas to encourage enjoyment of the natural environment
- Play spaces, both structured and natural, with reference to the NSW Government “Everyone Can Play” Guidelines. Type will be dependent on location
- Shelters including picnic facilities, where appropriate
- Pathways and landscaping

Table 4 Village Green

A. Village Green	**Character** • A natural parkland area that is linear in nature, relates to the Currency Creek Riparian Vegetation and utilises suitable stormwater controls. • An integrated and easily connected pedestrian and cyclist experience between the Village Green, creekline and wider open space network to encourage walking, cycling and improve accessibility, connectivity, and safety. **Controls** • Design the Village Green as a series of connected nodes that provide a greater spread, diversity and choice of usage and help to activate the Currency Creek frontage. • The Village Green is to comprise the following: a) **The Main Central Green** – Provide a centrally located node for recreational activity and community gathering. b) **Secondary Nodes** – Provide smaller nodes linked to the main central green – providing more recreational diversity and choice and help to activate the creekline environments. c) **Creekline Setting** – Provide nature-based cycling and walking paths and passive recreation areas integrated with the creekline setting that increase the amenity and recreational diversity of the Village Green. • The Village Green parkland includes: a) Riparian corridor revegetation to strengthen the environmental value of the creek. This revegetation is to be bordered by a walking trail that provides connection to the natural attributes of the place b) The Main Central Green that will provide children's play, amenities, appropriate car parking and a space for informal community sports and games. c) Secondary smaller spaces at either end that provide access to informal open spaces.

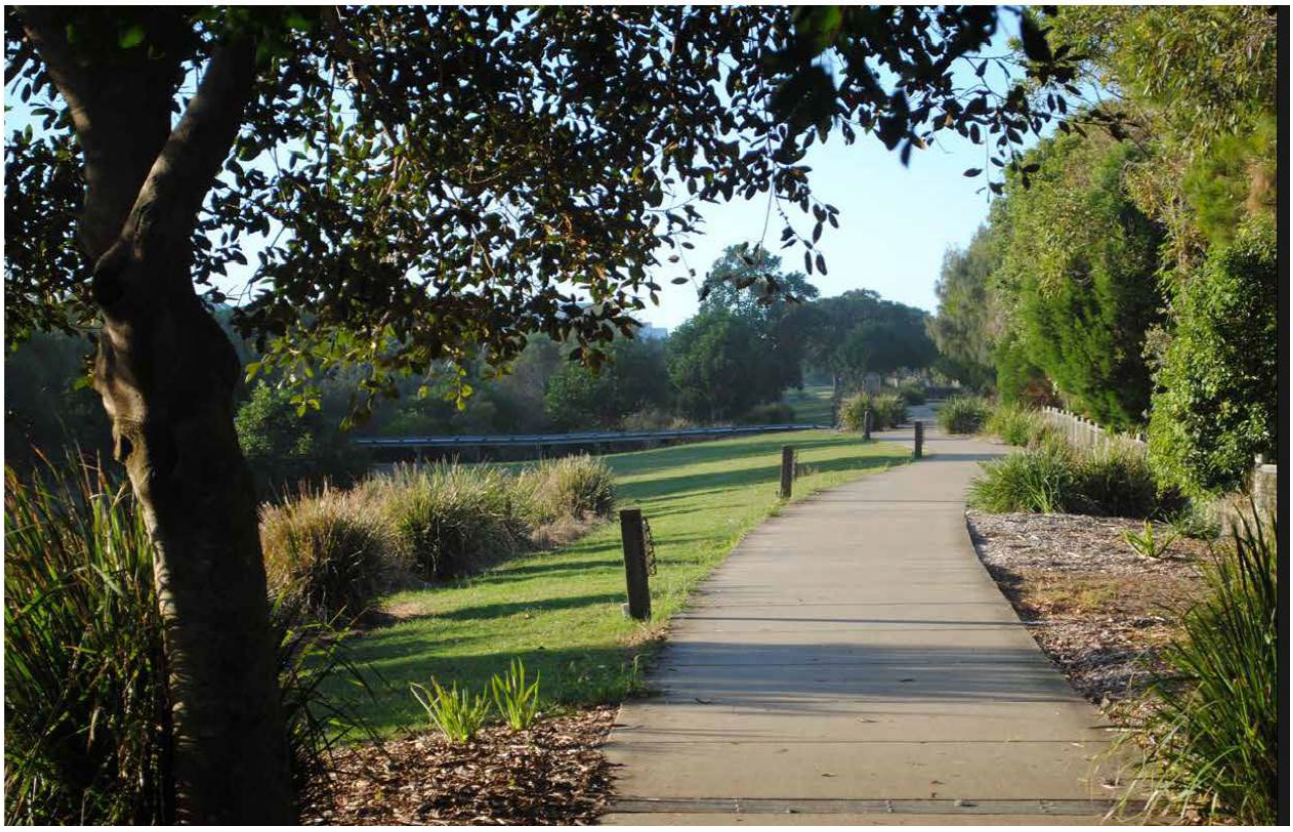


Figure 10 Meandering Path

Source: Taylor Brammer Landscape Architects

Figure 11 Children's Play

Source: Taylor Brammer Landscape Architects

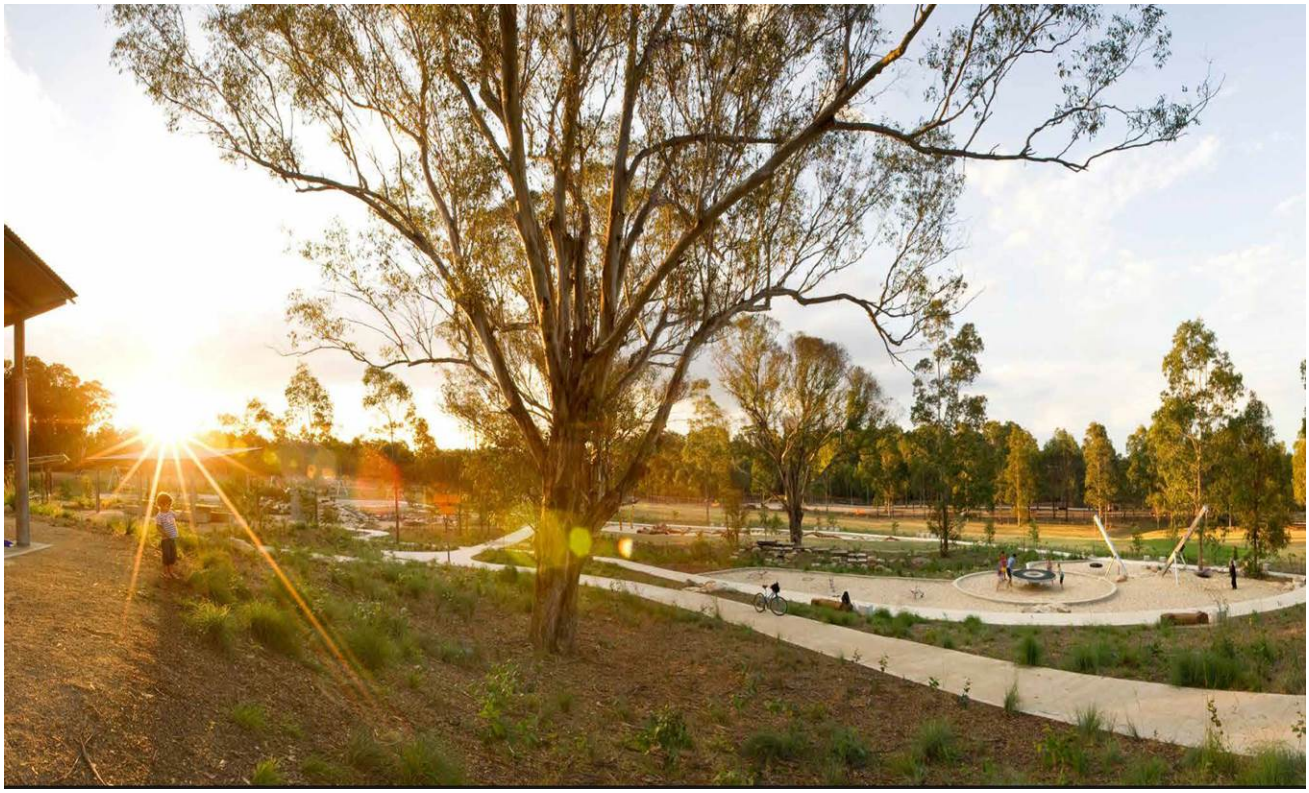


Figure 12 Riparian Landscape

Source: Taylor Brammer Landscape Architects

Figure 13 Picnic Shelter

Source: Taylor Brammer Landscape Architects

Table 5 Lake Park

B. Lake Park	**Character** • Create a unique entry to the community • Provide a central entry drive that helps to activate the Lake Park and provide a more diverse range of recreational nodes and experiences. • Create a pedestrian friendly street interface between the Lake Park and adjoining residential to improve safety, accessibility and connectivity. • Offer a greater variety of recreation spaces, facilities and experiences that improves recreational and community design outcomes. • Creation of a unique entry park that utilises the adjacent water body and remnant trees across the site. • Establish identity of Jacaranda using planting themes/signage/ fencing/walling recognising the rural character and history of the place. **Controls** • Introduce water safety measures such as benching where appropriate. • Improve biodiversity and ecology by retaining existing trees within the open space where possible and improving Lake water quality. • Provide active and passive uses in the Lake Park. • Provide a safe and attractive edge treatment to the lake. • Encourage a range of uses with the Lake Park such as community markets, children's play, dog park, outdoor performance exercise areas. • Provide tree lined avenues to reinforce the sense of entry. • Integrate stormwater controls within the Lake Park. • Provide a continuous pedestrian link around the lake that connects the various functions. • Provide structured semi mature planting to establish spaces that provide shade to mitigate the urban heat island effect and create day one impact. • Remnant native vegetation should be retained and protected consistent with the Biodiversity Certification Assessment Report and Strategy. • Establish habitat areas for native fauna around the lake. • Off-leash dog areas are prohibited directly adjacent to the lake.

Figure 14 Community Health & Well-Being

Source: Taylor Brammer Landscape Architects

Figure 15 Relationship to Water

Source: Taylor Brammer Landscape Architects

Figure 16 Community Events

Source: Taylor Brammer Landscape Architects

Table 6 Passive Recreational Areas

C. Passive Recreational Areas	**Character** • Existing woodland and remnant trees retained and valued for biodiversity. • Pedestrian access is established with a series of meandering informal paths. • Provide spaces (nodes) that encourage recreation while being sympathetic to the biobank areas. • Views and vantage points to toward Currency Creek and the Blue Mountains. • Offer outlooks and passive recreation spaces, facilities and experiences that improve recreational outcomes. **Controls** • Provide carefully located walking trails through the parkland. Footpaths to be constructed of permeable materials. • Provide a series of interpretive signs in accordance with the biobank agreement • Provide informal sitting areas in locations to appreciate the best views and natural features. • Incorporate additional supplementary planting to parkland edges. • Consider interface with biobank areas. • Provide viewing areas, outlooks and vantage points to enjoy mid distant views. • Ensure landscaping treatments retain views. • Provide passive recreation nodes, including children's play spaces, shelters and furniture, is easily accessible, visible and low maintenance. • Provide hard concrete edge to recreation nodes to define edge between biobank zones and recreation areas. • Recreation areas need to be designed to consider long term maintenance and environmental sustainability.

Figure 17 Passive Recreation Nodes

Source: One Collective

Figure 18 Pathways through Conservation Areas

Source: Taylor Brammer Landscape Architects

2.3.3 Tree Retention Investigation

Objective

O.1 To protect and retain Cumberland Plain Woodland within the site shown ‘remnant canopy’ and ‘degraded’ within the R5 zoned land in Figures 19 and 20 where feasible on individual lots.

.

Controls

C.1 Where practical, safe, and suitable for the tree's long-term health, high-quality Cumberland Plain Woodland should be retained on residential lots in the R5 Large Lot Residential zone.

C.2 High-quality Cumberland Plain Woodland are to be individually assessed by an arborist prior to subdivision with an arborist report required for each DA. Individual trees considered to provide significant habitat and amenities are to be retained and incorporated into lots wherever practicable. The retention of trees is to be considered in the context of other considerations within this DCP and the existing condition of the trees.

C.3 Where trees with significant habitat are identified to be removed, the tree hollows and tree trunks shall be relocated to the Riparian Corridor and/or Biobank Areas to improve habitat.

C.4 Where high-quality Cumberland Plain Woodland trees are removed, they will be replaced at a ratio of at least two new trees for each tree removed.

Figure 19 Tree Retention Investigation

Source: Orion Consulting

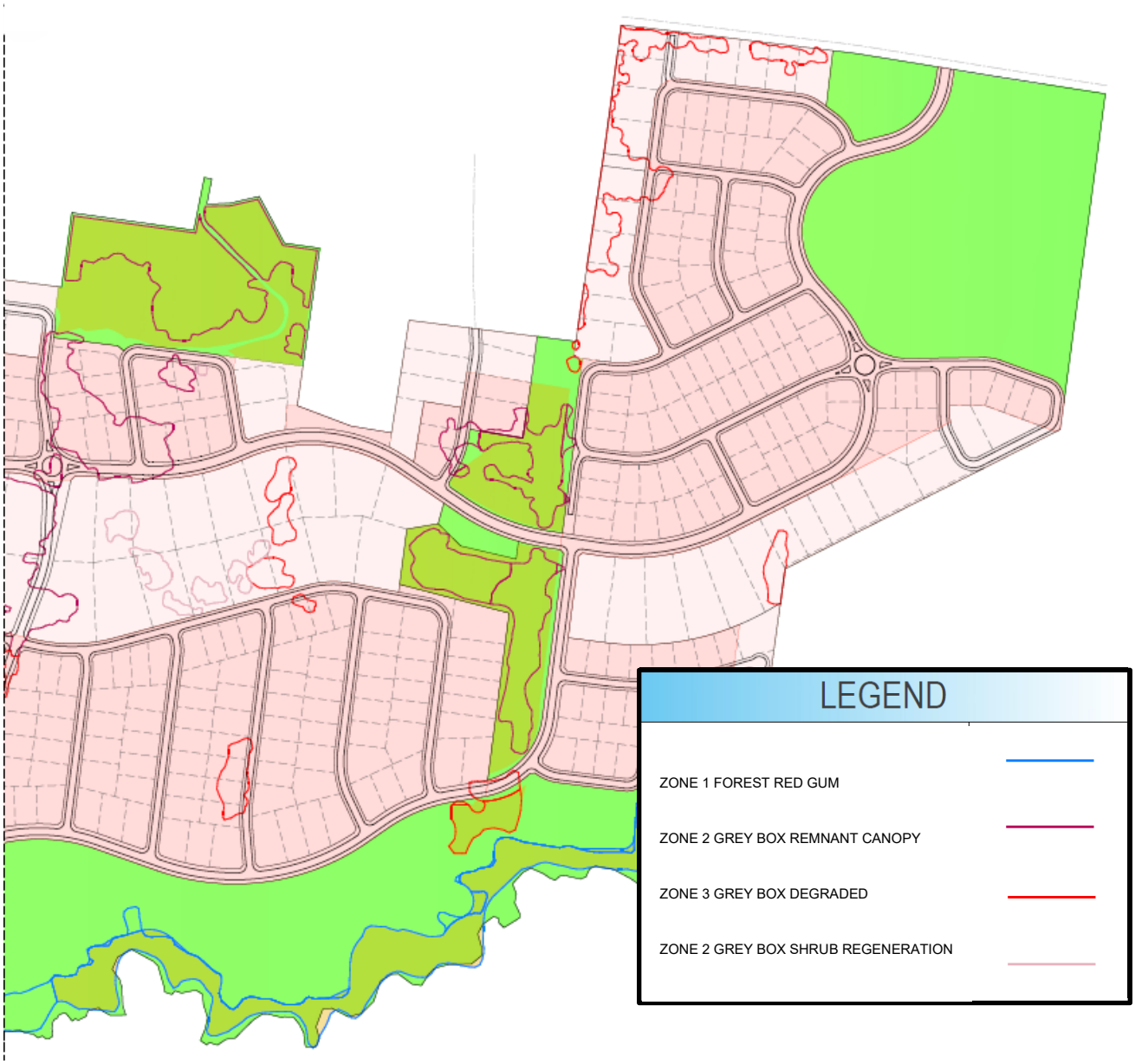


Figure 20 Tree Retention Investigation

Source: Orion Consulting

2.3.4 Sustainability and Resilience

Objectives

O.1 To maximise the benefits of tree canopy and greener streets to residential lots.

O.2 To minimise energy and water usage and greenhouse emissions and encourage the adoption of renewable energy initiatives.

O.3 To prevent and minimise the impacts of urban heat island effect.

Controls

C.1 Street trees and landscaping within residential lots are to maximise solar access to dwellings during winter, and shade during summer. Deciduous species are preferred for the northern sides of dwellings to maximise the climatic and amenity benefits of trees and provide for adequate solar access to dwellings and private open space.

C.2 All lots within Jacaranda shall be connected to the recycled water system for non-potable uses.

C.3 Solar (PV) system installation is required on all non-residential buildings/structures.

C.4 All dwellings shall have roofing materials with a solar absorptance value of 0.70 or less.

C.5 Subdivision applications are to demonstrate measures intended to mitigate the urban heat island effect.

2.3.5 Infrastructure and Utilities

Objective

O.1 To permit appropriate infrastructure provision.

Control

C.1 Ideally, no utilities are to be permitted within riparian areas. If necessary, they may cross riparian areas but not run the length of riparian areas and should be underground.

C.2 Infrastructure and utilities are to be in accordance with biobank requirements.

C.3 Drainage infrastructure should be on separate lots to recreation areas to facilitate categorisation as operational land.

C.4 All electricity within the subdivision is to be underground.

C.5 A reticulated recycled water system is to provide recycled water from the proposed Glossodia Local Water Centre for domestic non-potable uses such as toilet flushing, washing machines, garden irrigation and car washing. Recycled water may be used in public parkland for irrigation of lawns and gardens provided there is no direct impact to biobank sites and biodiversity values.

2.3.6 Subdivision Staging

Objective

O.1 To provide for logical sequencing of development.

Control

C.1 The staging of subdivision within Jacaranda is to occur from east to west and generally in accordance with Figure 21. Staged applications must demonstrate that appropriate access to infrastructure and services is available and that construction works aim to mitigate environmental harm.

C.2 Sub-staging is permitted.

C.3 Out of sequence staging will be required to demonstrate appropriate access to infrastructure and services for residents.

Figure 21 Indicative Staging Plan

Source: OneCollective

2.3.7 Development Yield

Objective

O.1 To limit the development capacity of Jacaranda.

Control

C.1 A maximum of 580 lots at Jacaranda.

C.2 Lot yields per stage are to be generally in accordance with Table 7.

Table 7 Lot Yield

STAGE	YIELD RANGE
A	150 - 160
B	140 - 150
C	155 - 165
D	115 - 125

3.0 Controls for Development in the Residential Zones

3.1 Urban Design

3.1.1 Street Hierarchy, Layout and Design

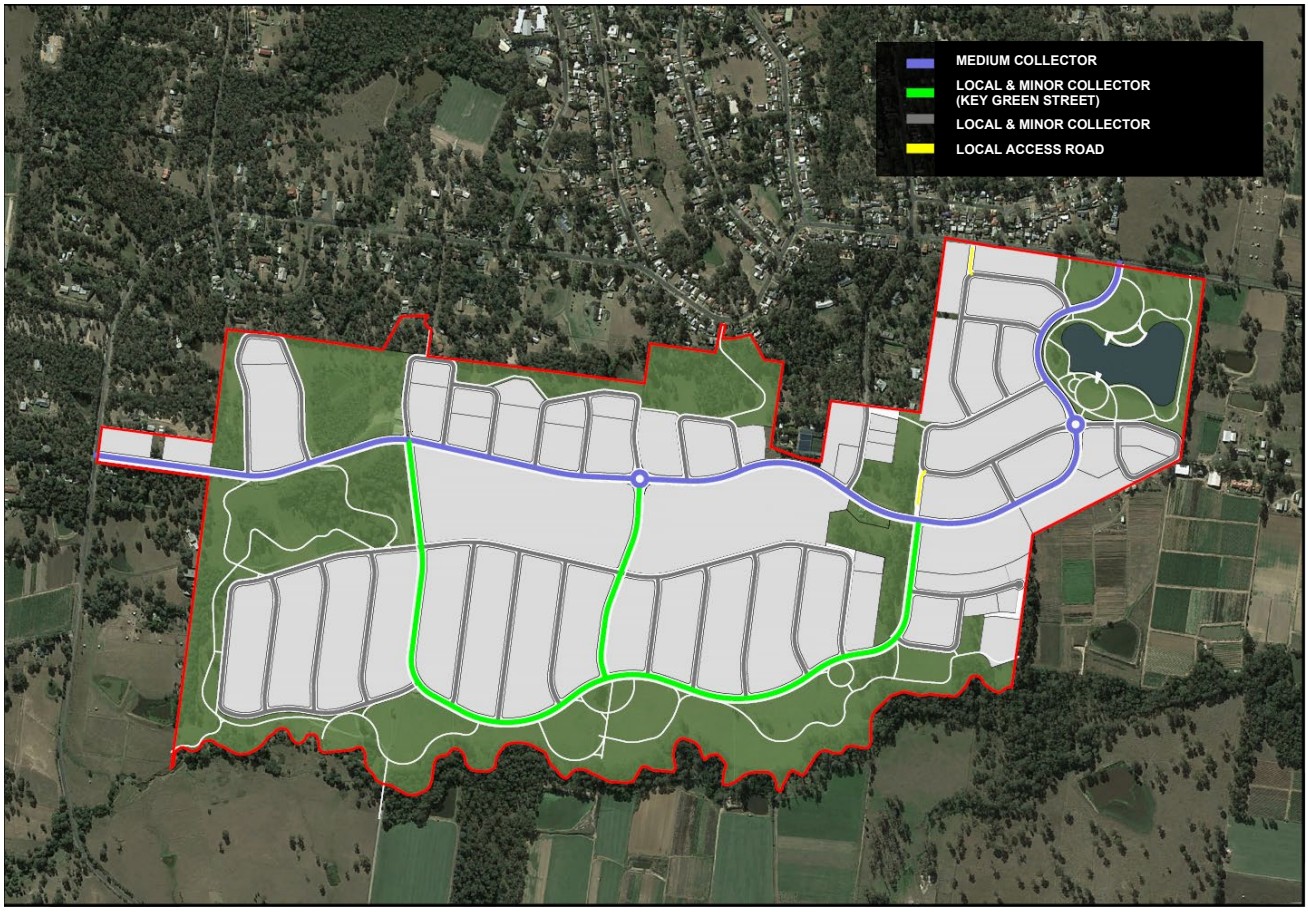


Figure 22 Street Hierarchy Plan

Source: OneCollective

Objectives

O.1 Establish a hierarchy of interconnected streets that give safe, convenient, and clear access within and beyond Jacaranda.

O.2 Contribute to the creation of an interesting and attractive streetscape.

O.3 Where possible take account of topography and site drainage and accommodate significant vegetation.

O.4 Provide intersections, traffic and where appropriate, parking lanes that naturally calm traffic.

Controls

C.1 The design of streets, roundabouts and intersections is to be consistent with the relevant typical street sections shown at Figures 23 to 26. Where streets adjoin open space the verge width can be reduced to 1m width.

C.2 Streets within Jacaranda are to function as one of the following typologies within the transport network hierarchy:

A. Medium Collector: The main access routes into and out of Jacaranda, distributing traffic throughout the site, and providing for potential bus routes, with off-road pedestrian and cyclist paths.
B. Local & Minor Collector (Key Green Street): Linking the collector roads to residential areas.
C. Local & Minor Collector: Providing local property access with provisions for pedestrians, cyclists, and vehicles.

D. Local Access Roads: Providing an off-road route for pedestrians and cyclists connecting or passing through open space areas and linking residential areas to parks and conservation zones.

C.3 Alternative street designs for local streets and access ways may be permitted on a case by case basis if they preserve the functional objectives and requirements of the design standards.

C.4 The construction and operation of temporary access roads is permitted where necessary to ensure that access to residential properties is provided in the early stages of development. Temporary access roads are to remain in operation only until such time as the road network has been developed to provide permanent access to all properties.

C.5 Where four-way intersections are proposed, traffic is to be controlled, where appropriate, by roundabouts, median strips, or signage.

C.6 Bus routes, if required, are to be located on Medium Collector roads to ensure that most residents are within walking distance of a bus stop.

C.7 Establish safe crossing points across Medium Collector roads for pedestrians and cyclists

C.8 Pedestrian footpaths shall be at least 1.5m wide to facilitate easy and convenient pedestrian movements and should be constructed on at both sides of Local & Minor Collector Roads and Local Access Roads.

C.9 Barrier kerb is required for all streets.

C.10 A Traffic report is required for subdivision Development Applications.

C.11 Driveways from lots are not permitted with direct access to Spinks Road. Access to lots is to be from the internal road network.

C.12 All footpaths and shared pathways within the main pedestrian and cyclist network to be constructed with concrete.

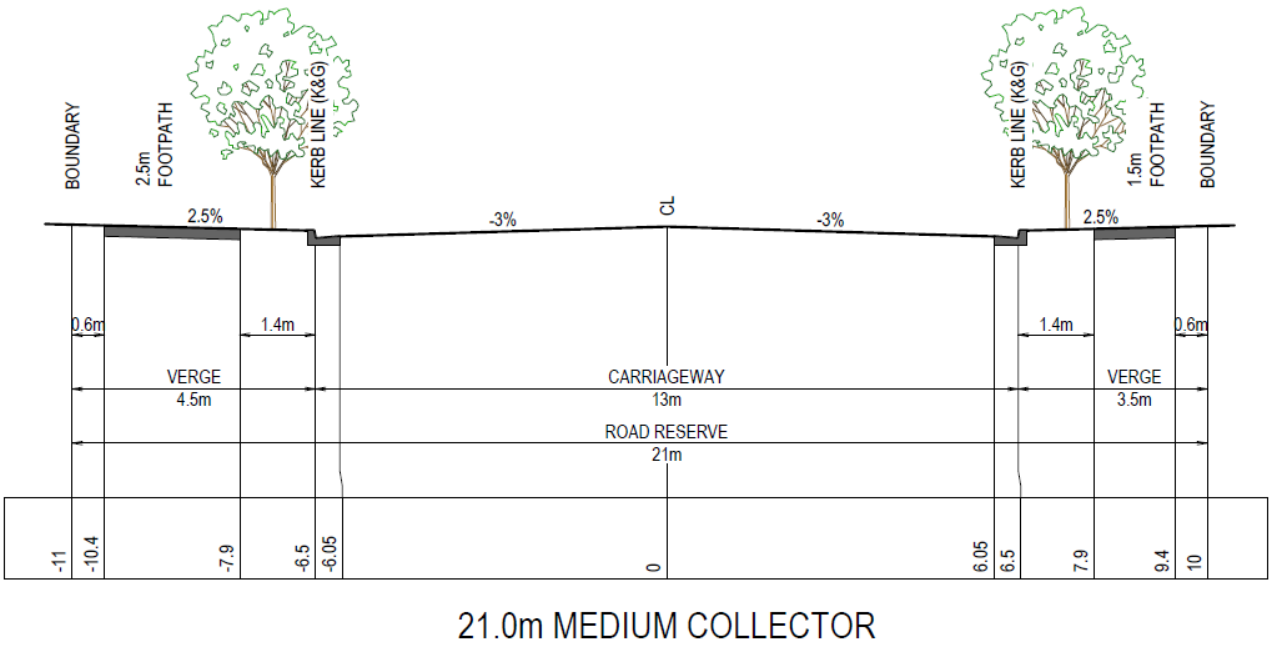


Figure 23 Typical Cross Section – Medium Collector Road

Source: Orion Consulting

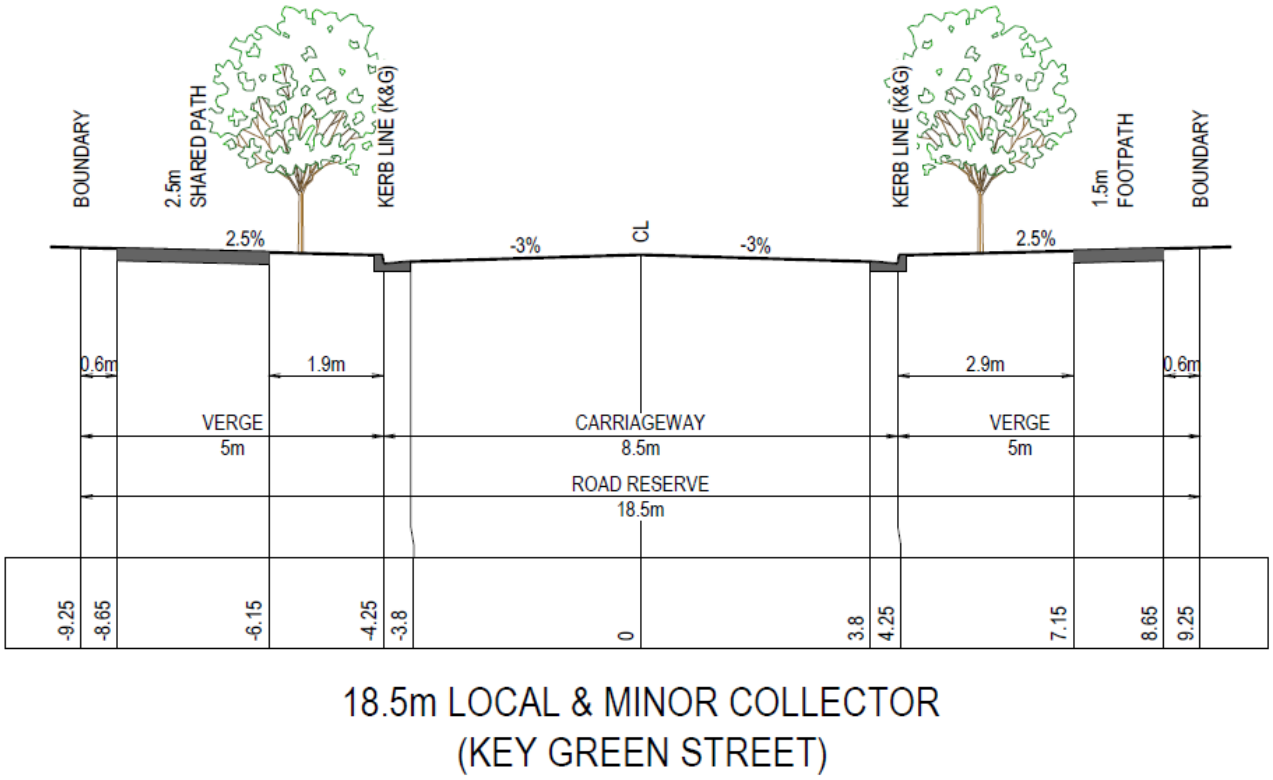


Figure 24 Typical Cross Section – Local & Minor Collector (Key Green Street)

Source: Orion Consulting

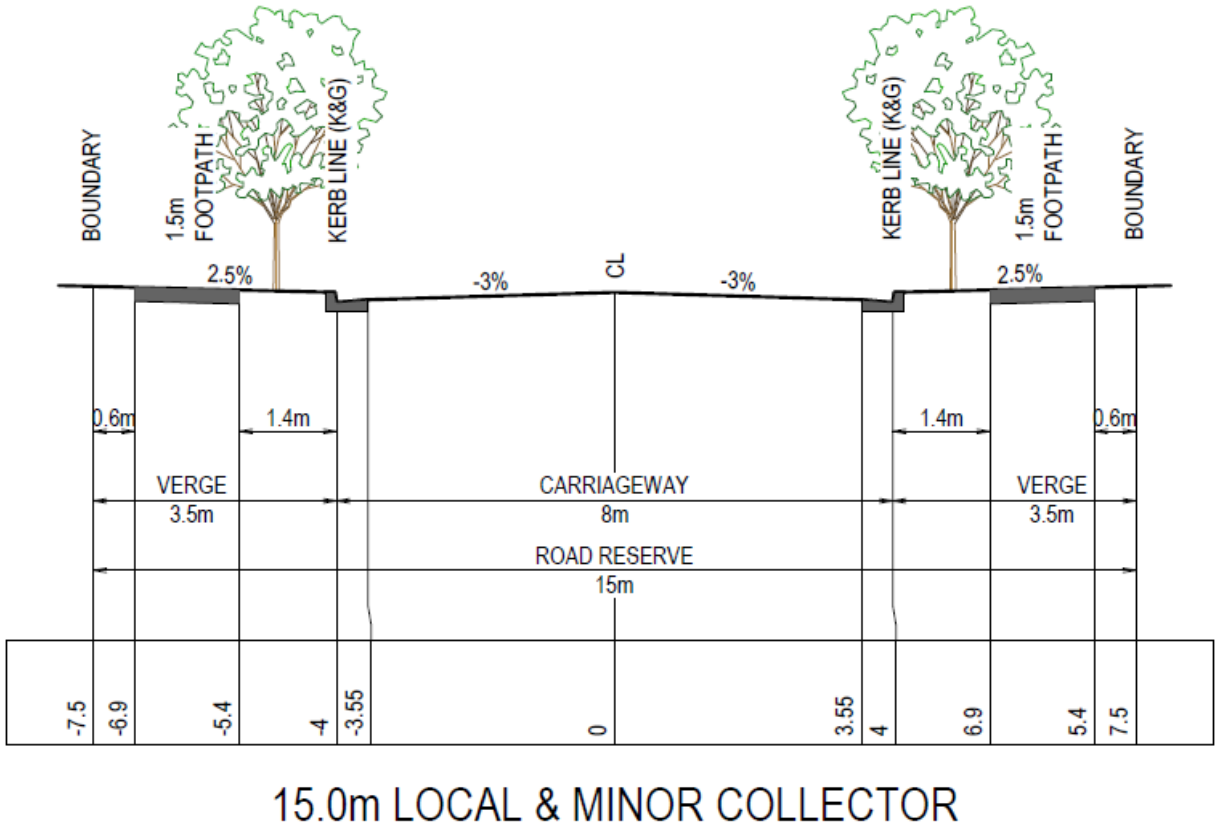


Figure 25 Typical Cross Section – Local & Minor Collector

Source: Orion Consulting

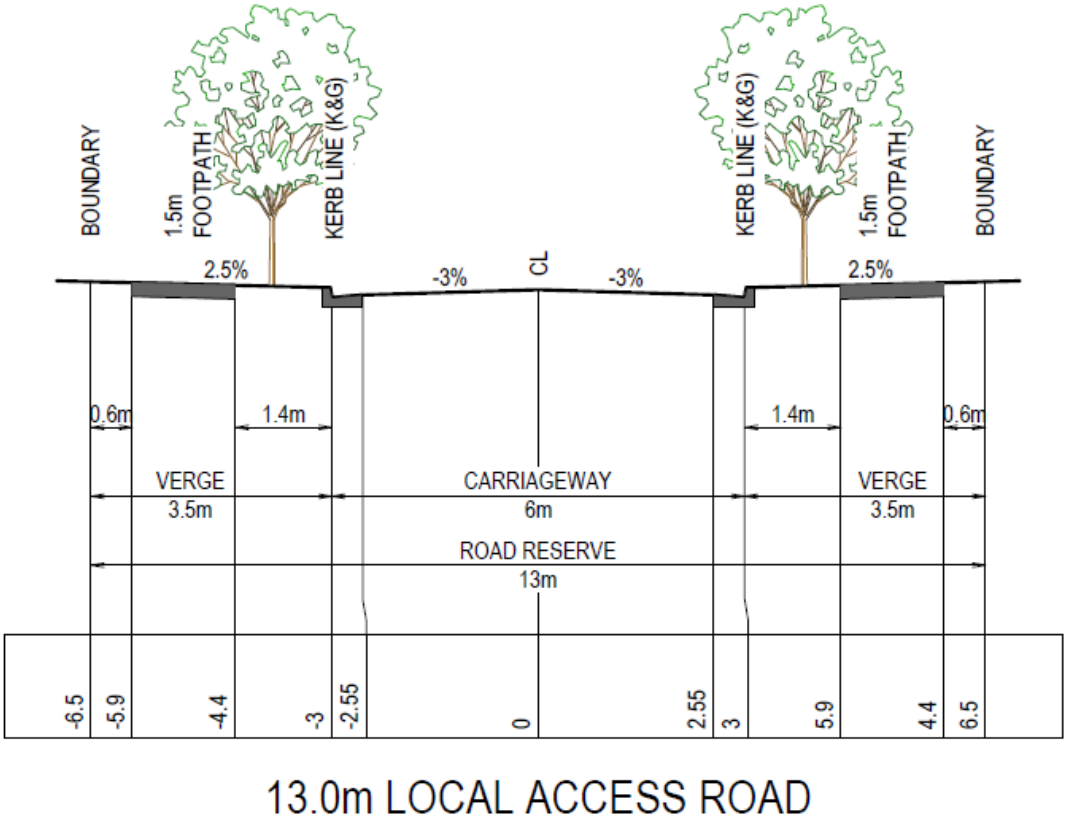


Figure 26 Typical Cross Section – Local Access Roads

Source: Orion Consulting

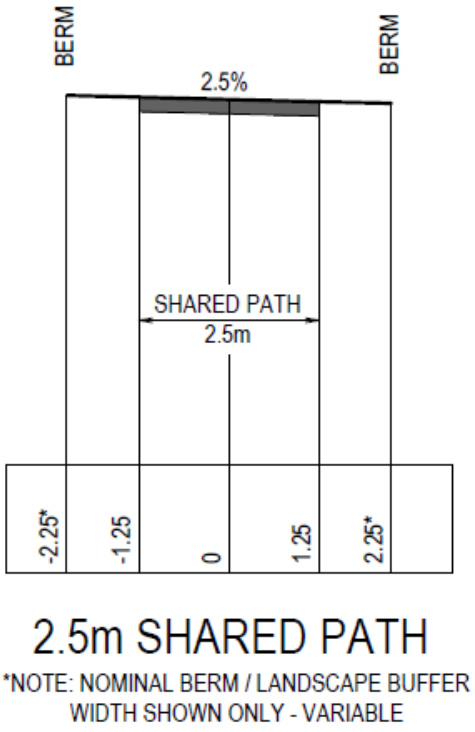


Figure 27 Typical Cross Section – Pedestrian/Cycle Link

Source: Orion Consulting

3.1.2 Streetscape Character

Objectives

O.1 Create a ‘semi-rural style village’ that respects and integrates with the character of the existing Glossodia Village whilst reflecting contemporary urban design and architecture principles.

O.2 Streetscapes are designed to complement the semi-rural character of the site and retain existing local native trees and other native species where feasible to reflect a green ’leafy’ feel.

O.3 Seek opportunity for existing native trees to be retained where feasible within front setbacks and between houses on R5 zoned lots to create a more open and greener character.

.

Controls

C.1 Retaining walls, side fencing, rear fencing heights and materials are to reflect the character of the sub-precinct.

C.2 Buildings are to be designed and sited to reflect the desired character of the sub-precinct it is located within, as identified by Figure 3 and described within Table 2.

C.3 Building design is be compatible with the semi-rural character of the area and may incorporate contemporary expressions of design elements.

C.4 External fixtures must not detract from the appearance of the building or the streetscape.

C.5 Articulation must extend forward of the minimum front building line setback by up to 2m (articulation zone) for feature elements to enhance façade articulation and design. Acceptable building elements within the articulation zone include:

- entry feature or portico
- awnings or other features over windows
- eaves and sun shading structures
- window box treatment
- bay windows or similar features
- balconies, verandas, pergolas, or the like

C.6 Wrap around verandas are permitted so long as they are compatible with the semi-rural character of the site.

C.7 External wall materials are to be limited to weatherboard or plywood sheeting, rendered and bagged masonry, stone, glass, metal sheeting or uniform face bricks. Other external wall materials that can demonstrate clear sustainability benefits to Council are permitted.

C.8 External colours are to be muted earth and bush vegetation tones. Large areas of primary, vibrant colours are to be avoided.

Figure 28 Typical streetscape character

Source: Onecollective

Figure 29 Typical Jacaranda Home

Source: Onecollective

3.1.3 Street Tree Planting, Lighting and Furniture

Objectives

O.1 To establish a hierarchy of interconnected streets that give safe, convenient and clear access within and beyond the Precinct.

O.2 To contribute to the creation of an interesting and attractive streetscape.

O.3 To provide cool, green leafy streets to complement the semi-rural character of the site.

Controls

C.1 Street trees are required for all streets. Street planting is to:

- use the preferred species listed in Table 8;
- be consistently used to distinguish between public and private spaces and between different classes of street within the street hierarchy;
- provide an attractive and interesting landscape character without blocking the potential for street surveillance.
- minimise risk to utilities and services;
- be durable and suited to the street environment and, wherever appropriate, include endemic species;
- maintain adequate lines of sight for vehicles and pedestrians, especially around driveways and street corners; and
- provide appropriate shade in summer and solar access in winter.

C.2 Where appropriate tree planting shall be considered alongside the off road pedestrian pathways/shared cycleways.

C.3 Signage, street furniture and lighting is to be:

- designed to reinforce the district identity of Jacaranda;
- coordinated in design and style;

- located to minimise visual clutter and obstruction of the public domain; and
- of a colour and specification agreed with Council.

C.4 Root director W Series or equivalent is to be installed in either RDW600 for new trees on local streets or RDW900 for new trees on Collector Roads.

C.5 The electrical network shall be underground.

C.6 Street tree spacing shall be modified to avoid conflict with driveways, utilities and street lighting.

C.7 Subdivision applications are to demonstrate measures to mitigate the urban heat island effect.

C.8 Street trees are to provide a vertical height clearance of 4m for vehicles at maturity.

C.9 Permeable driveways for individual dwellings are preferred. Driveways are to be identified and agreed at the subdivision DA stage in coordination with the street trees and solar passive design.

C.10 Timber look aluminium to be used for street furniture.

Table 8 Indicative Street Tree Species List

Medium Collector Road

BOTANICAL NAME	COMMON NAME	MATURE HEGHT	SPREAD	SPACING	PLANTING SPACE (ROOT WELL)
Acer 'Crimson Sentry'	Crimson Sentry	7m	4m	8-15m	5-7m3
Acer freemanii	Autumn Blaze	13m	10m	8-15m	5-7m3
Acmena smithii	Creek Lilly Pilly	15m	3m	8-15m	5-7m3
Backhousia citriodora	Lemon-scented Myrtle	12m	4-6	8-15m	5-7m3
Cupaniopsis anacardioides	Tuckeroo	15m	3-5m	8-15m	5-7m3
Fraxinus 'Cimmaron'	Cimmaron Ash	13m	8m	8-15m	5-7m3
Jacaranda mimosifolia	Jacaranda	15m	15-25m	8-15m	5-7m3
Magnolia 'Exmouth'	Magnolia 'Exmouth'	12m	5m	8-15m	5-7m3
Magnolia 'Little Gem'	Little Gem	6m	3m	8-15m	5-7m3
Pyrus 'Aristocrat'	Ornamental Pear	11m	7m	8-15m	5-7m3
Pyrus 'Chanticleer'	Ornamental Pear	11m	6m	8-15m	5-7m3
Waterhousea floribunda	Weeping Lilly Pilly	8m	5m	8-15m	5-7m3
Zelkova serrata 'Green Vase'	Green Vase	14m	10m	8-15m	5-7m3

Local & Minor Collector (including Key Green Street)

BOTANICAL NAME	COMMON NAME	MATURE HEGHT	SPREAD	SPACING	PLANTING SPACE (ROOT WELL)
Acer freemanii	Autumn Blaze	13m	10m	8-20m	3-5m3
Acmena smithii	Creek Lilly Pilly	15m	3m	8-20m	3-5m3
Backhousia citriodora	Lemon-scented Myrtle	12m	4-6	8-20m	3-5m3
Cupaniopsis anacardioides	Tuckeroo	15m	3-5m	8-20m	3-5m3
Elaeocarpus eumundi	Quandong	7m	2m	8-20m	3-5m3
Fraxinus 'Cimmaron'	Cimmaron Ash	13m	8m	8-20m	3-5m3
Ginkgo biloba	Maidenhair Tree	12m	5m	8-20m	3-5m3
Hymenosporum flavum	Native Frangipani	8m	6m	8-20m	3-5m3
Livistona australis	Cabbage tree palm	30m	0.5m	8-20m	3-5m3
Magnolia 'Exmouth'	Magnolia 'Exmouth'	12m	5m	8-20m	3-5m3
Melaleuca decora	Paperbark	9m	5m	8-20m	3-5m3

Pyrus 'Chanticleer'	Ornamental Pear	11m	6m	8-20m	3-5m3
Pyrus nivalis	Snow Pear	8m	5m	8-20m	3-5m3
Syzygium australe	Lilly Pilly	8m	6m	8-20m	3-5m3
Tristaniopsis laurina 'Luscious'	Water Gum	10m	3-8m	8-20m	3-5m3
Ulmus parvifolia	Chinese elm	13m	12m	8-20m	3-5m3
Waterhousea floribunda	Weeping Lilly Pilly	15m	7m	8-20m	3-5m3
Zelkova serrata	Green Vase	14m	10m	8-20m	3-5m3

Local Access Road

BOTANICAL NAME	COMMON NAME	MATURE HEGHT	SPREAD	SPACING	PLANTING SPACE (ROOT WELL)
Acer freemanii	Autumn Blaze	13m	10m	8-20m	3-5m3
Backhousia citriodora	Lemon-scented Myrtle	12m	4-6	8-20m	3-5m3
Cupaniopsis anacardioides	Tuckeroo	15m	3-5m	8-20m	3-5m3
Elaeocarpus eumundi	Quandong	7m	2m	8-20m	3-5m3
Fraxinus 'Cimmaron'	Cimmaron Ash	13m	8m	8-20m	3-5m3
Ginkgo biloba	Maidenhair Tree	12m	5m	8-20m	3-5m3
Hymenosporum flavum	Native Frangipani	8m	6m	8-20m	3-5m3
Magnolia 'Exmouth'	Magnolia 'Exmouth'	12m	5m	8-20m	3-5m3
Melaleuca decora	Paperbark	9m	5m	8-20m	3-5m3
Pyrus 'Chanticleer'	Ornamental Pear	11m	6m	8-20m	3-5m3
Pyrus nivalis	Snow Pear	8m	5m	8-20m	3-5m3
Syzygium australe	Lilly Pilly	8m	6m	8-20m	3-5m3
Tristaniopsis laurina 'Luscious'	Water Gum	10m	3-8m	8-20m	3-5m3
Waterhousea floribunda	Weeping Lilly Pilly	8m	5m	8-20m	3-5m3
Zelkova serrata	Green Vase	14m	10m	8-20m	3-5m3

Figure 30 Streetscapes are to have a green leafy character and outlook

Source: Celestino

3.2 Residential Design

3.2.1 Character

O.1 To provide for the housing needs of the community within a low-density residential environment that responds to the surrounding land use and landscape context.

O.2 Promote well-designed buildings that make a positive contribution to the streetscape and amenity of the neighbourhood.

O.3 Encourage a form of housing that is low in scale and complements the rural and bushland character of the site and neighbourhood.

O.4 Ensure development makes the best use of a site's natural and other positive features, and considers amenity, streetscape and energy efficiency at the outset.

O.5 The materials and finishes selected for dwellings should harmonise with the natural environment and respond to the existing character of the existing Glossodia Village.

O.6 Has a distinctive Australian, contemporary rural appearance and character.

O.7 Protect the natural character of adjacent rural or ecological zones and existing natural features and landscape.

O.8 Maintain a sense of openness and rural character in areas proposed for residential development.

Controls

Character

C.1 Residential development is to be consistent with the character of each of the precincts as outlined in Table 2.

C.2 The scale of new development is to be consistent with the desired future character and of a residential scale that allows the natural environment to visually dominate.

C.3 Dwellings on R2 zoned lots are to address the public domain and to reinforce a sense of security and community. In particular main entry doors and windows of habitable rooms should face the street.

C.4 While the natural character and landscape visually dominate, the building form and setback of dwellings on R2 zoned lots contribute to the street character.

C.5 The natural character and landscape visually dominate the street character on R5 zoned lots.

C.6 Passive solar design principles should be governing the design of homes within Jacaranda.

C.7 All development proposals should consider the urban heat island effect and should propose suitable measures to minimise such as permeable surfaces, light coloured roofs and a high percentage of mature tree canopy cover considering different constraints for example Planning for Bushfire Protection, ongoing maintenance costs, allowing for developable building envelopes for purchasers and passive solar design.

3.2.2 Lot Size

Low Density Residential Zone (R2)

Objective

O.1 To provide for the housing needs of the community within a low-density residential environment that responds to the surrounding land use and landscape context.

Controls

C.1 The minimum average lot frontage is to be 20m.

C.2 The minimum average lot depth is to be 40m.

Large Lot Residential Zone (R5)

Objectives

O.1 To provide residential housing in a rural setting while preserving, and minimising impacts on environmentally sensitive locations and scenic quality.

O.2 To minimise conflict between large lot residential uses and adjoining land uses.

Controls

C.1 The minimum average lot frontage is to be 30m.

C.2 The minimum average lot depth is to be 50m.

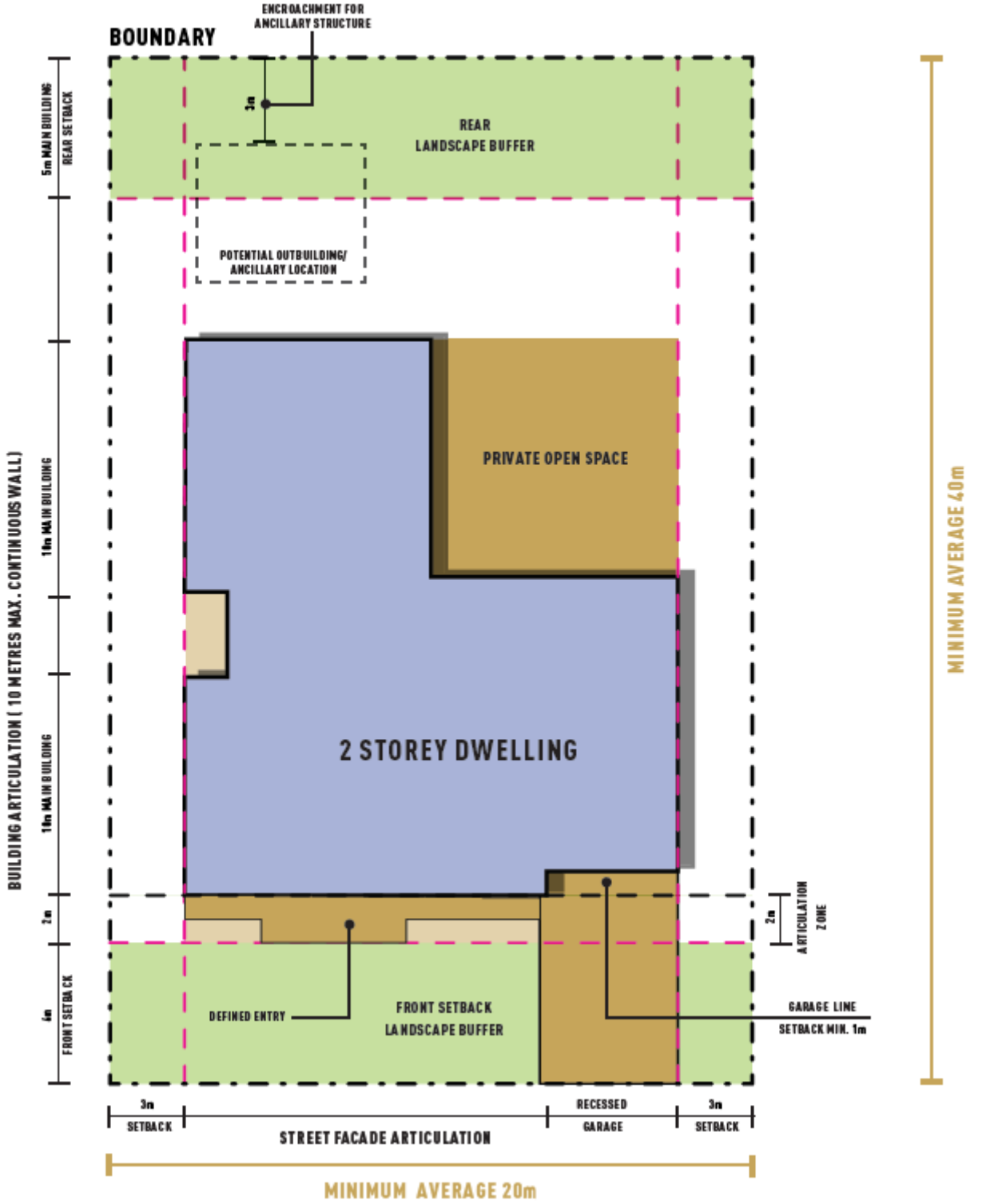


Figure 31 Typical R2 Low Density Residential lot type and character

Source: Jackson Teece

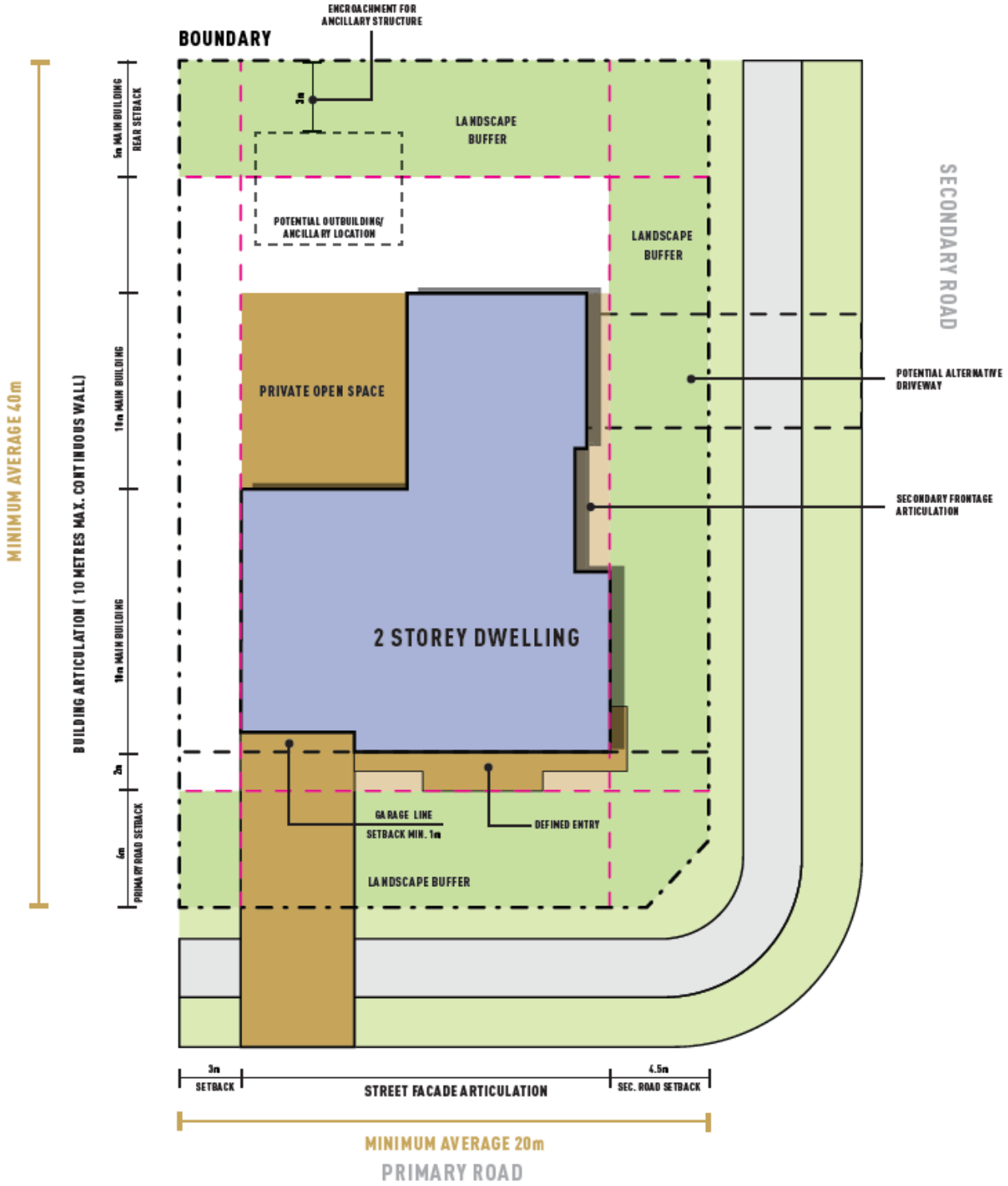


Figure 32 Typical R2 Low Density Residential corner lot type and character

Source: Jackson Teece

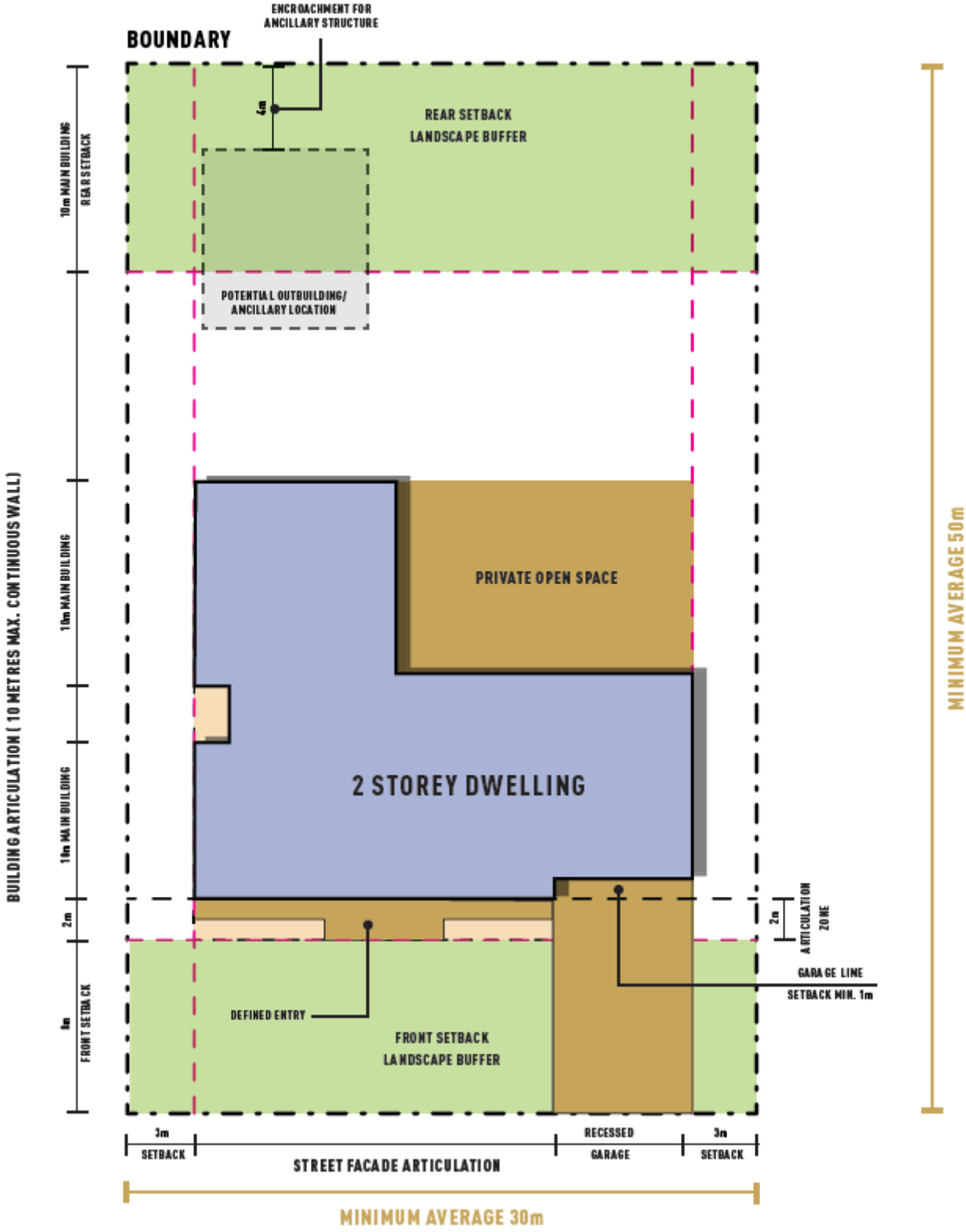


Figure 33 Typical R5 Low Density Residential lot type and character

Source: Jackson Teece

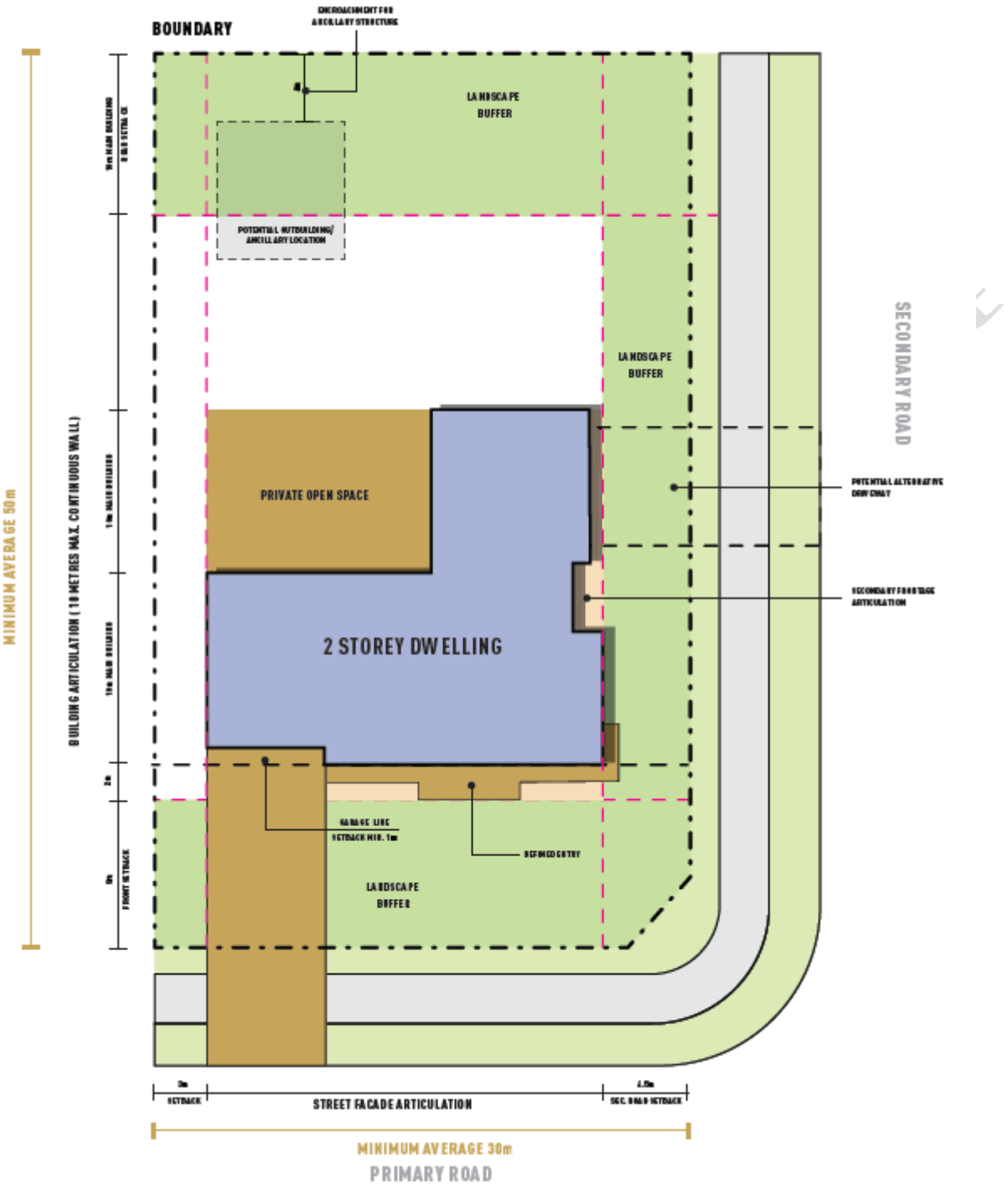


Figure 34 Typical R5 Low Density Residential corner lot type and character

Source: Jackson Teece

3.2.3 Built Form

Objectives

O.1 To ensure that built form responds to the public domain.

O.2 To encourage ecologically sustainable development.

Controls

C.1 The building entry is to be visible from the street and clearly defined in built form.

C.2 Buildings are to include articulation elements such as patios, verandahs, eaves, pergolas, balconies, balustrades, porticos. These structures may encroach up to 2m into the front setback area/articulation zone.

C.3 All rooftop services, vents and lights are to be integrated into roof design.

C.4 Solar roof panels are permitted and encouraged

3.2.4 Siting & Setbacks

Objectives

O.1 To enable the integration of built and landscape elements to create an attractive, visually consistent streetscape.

O.2 To allow some flexibility for residences to achieve better orientation for sun, shade, wind and neighbouring development, and better use of allotments to create private open space and courtyards.

O.3 To encourage simple and articulated building forms.

O.4 To ensure garages do not dominate the streetscape.

Controls

C.1 Dwellings are to be consistent with the front setback controls and principles in Figures 31 & 32 for Low Density Residential or Figures 33 & 34 for Large Lot Residential. The Height Planes in Part D Chapter 1 Section 1.3 do not apply to dwellings at Jacaranda.

C.2 Within the R2 zone dwellings may be sited beyond the prescribed front and secondary street setback to a maximum of 2m. A consistent building/street alignment is expected.

C.3 Within the R5 zone dwellings are generally to address the public domain and to reinforce a sense of security and community on smaller lots.

C.4 Within the R5 zone dwellings may be sited beyond the prescribed front and secondary street setback. No consistent building/street alignment is expected.

C.5 Site planning should be designed to provide opportunity to plant at least two trees within each residential lot and some trees within the public domain.

C.6 A site analysis should support any Development Application for a dwelling house to assist in design decisions based on site conditions and surrounding context and assess the impacts of the development on the site and its surroundings.

C.7 The key issues to be considered in the site planning and layout include:

- Privacy for occupants and the maintenance of neighbours' privacy and amenity.
- Sufficient solar access and natural ventilation to provide a comfortable and energy efficient living environment for residents and neighbours.
- Location and design of dwellings to avoid adverse impacts on adjoining properties in terms of overshadowing.
- Well located and useable private outdoor areas for residents.
- The street character is maintained through setbacks, separation and height, driveway, and car parking location.
- Circulation and access suitably located for the development and the locality.

- Design and construction suitable to the slope of the land, minimising the need for cut and fill and considering any geotechnical constraints.
- Minimising tree removal by locating the development to retain existing vegetation, if appropriate
- Safety and surveillance of the development and the locality is maximised.
- Location of bush fire asset protection zones.

C.9 Dwellings on corner lots:

- Are to address both the street frontages through design and landscaping.
- The feature articulation element (porch/verandah) must wrap around the corner 2m behind the front building line at a depth that is equal to the articulation element adopted along the front facade.
- The feature articulation element on the secondary frontage may encroach in the side setback no more than 2m.
- Wall material variation and colours should extend to the side fence return on the secondary street frontage.
- Landscape features and planting should continue around the corner.
- The façade facing the secondary street frontage should be articulated to avoid long walls and provide a variety of materials.
- Setbacks on corner lots should be consistent with the setbacks identified in Figures 32 & 34.
- The garage can be accessed from either road frontage, subject to compliant sightlines and distances from intersections and adjacent driveways.

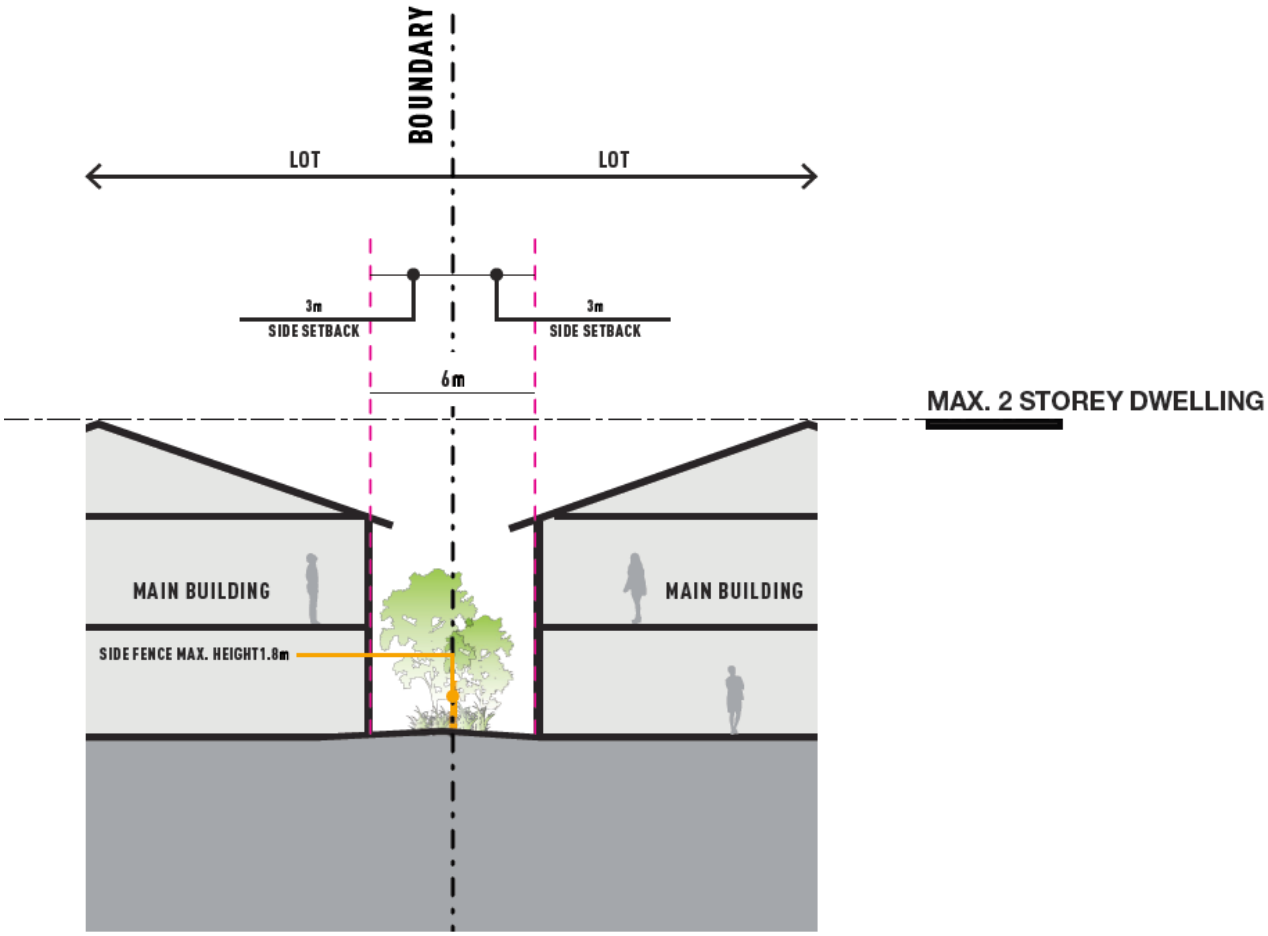


Figure 35 Site Section Lot Interface

Source: Jackson Teece

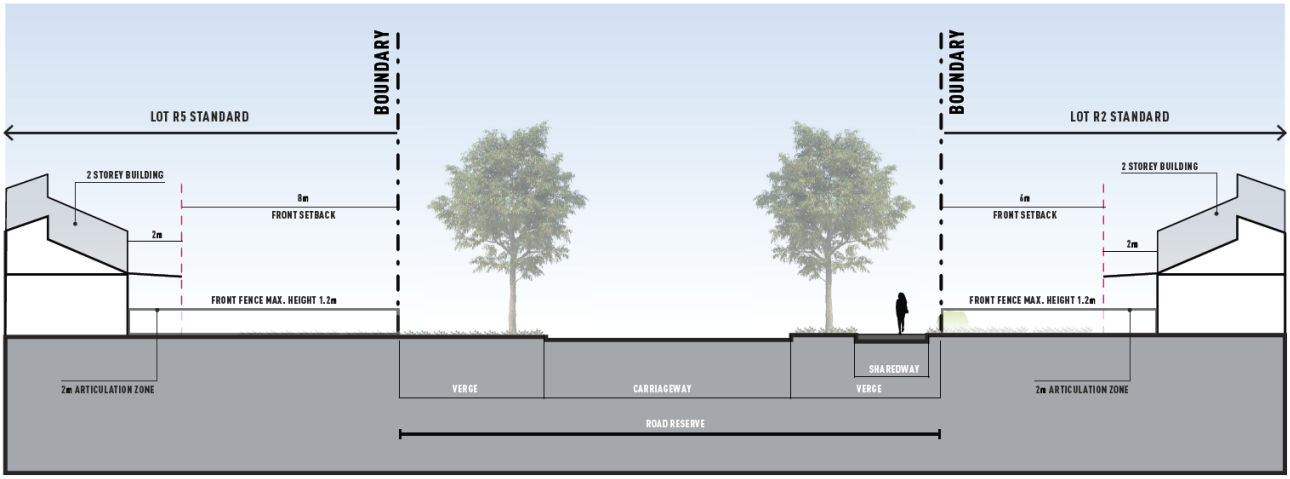


Figure 36 Typical Streetscape Section

Source: Jackson Teece

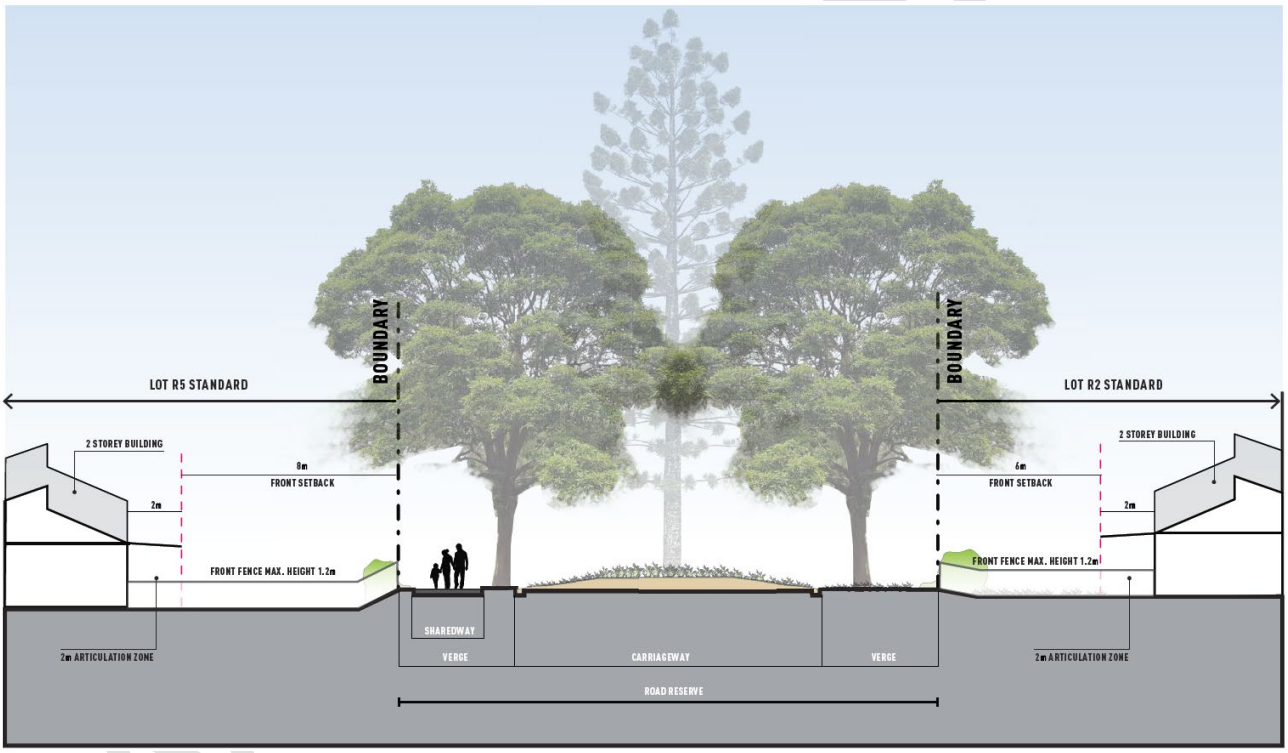


Figure 38 Typical Streetscape Section - Sloping

Source: Jackson Teece

3.2.5 Height of Buildings

Objective

O.1 Provide for appropriate height commensurate with the site constraints and opportunities where potential impacts can be mitigated.

Control

C.1 The maximum height is two storeys except where it can be demonstrated that a third storey does not dominate the streetscape or unreasonably overshadow adjoining properties and the topography of the site is appropriate as demonstrated in Figure 39.

C.2 Basements are not included in the calculation of building height where they do not exceed 1.2 metres above finished ground level.

3.2.6 Private Open Space

Objective

O.1 Lot design considers the private open space needs of future residents.

Controls

C.1 Each dwelling is to be provided with an area of Private Open Space that contains an area of Principal Private Open Space (PPOS).

C.2 The size and location of the PPOS is to be determined having regard to dwelling design, allotment orientation, adjoining dwellings, landscape features and topography as illustrated in Figures 42 & 43.

C.3 The PPOS should be directly accessible from living rooms and be located behind the building line.

C.4 At least 50% of the area of the required PPOS should receive solar access for at least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June).

3.2.7 Sloping Sites

Objectives

O.1 Ensure built form responds to the topography of the site.

Controls

C.1 Slab-on-ground construction is not suitable for steeply sloping sites due to excavation, retaining and waterproofing requirements.

C.2 On sloping sites, the footprint of the building should be broken into appropriately sized sections to reduce the extent of cut and fill required.

C.3 Cut or fill should be limited to 1.2m in height /depth from the natural level of the land. Where this is impracticable on steep sites the design for split levels should be considered to follow the topography.

C.4 Under croft spaces are to be designed and constructed so that:

- They are finished with even grades.
- Services, storage areas and cut/fill surfaces should be concealed from view by battens or other screening.

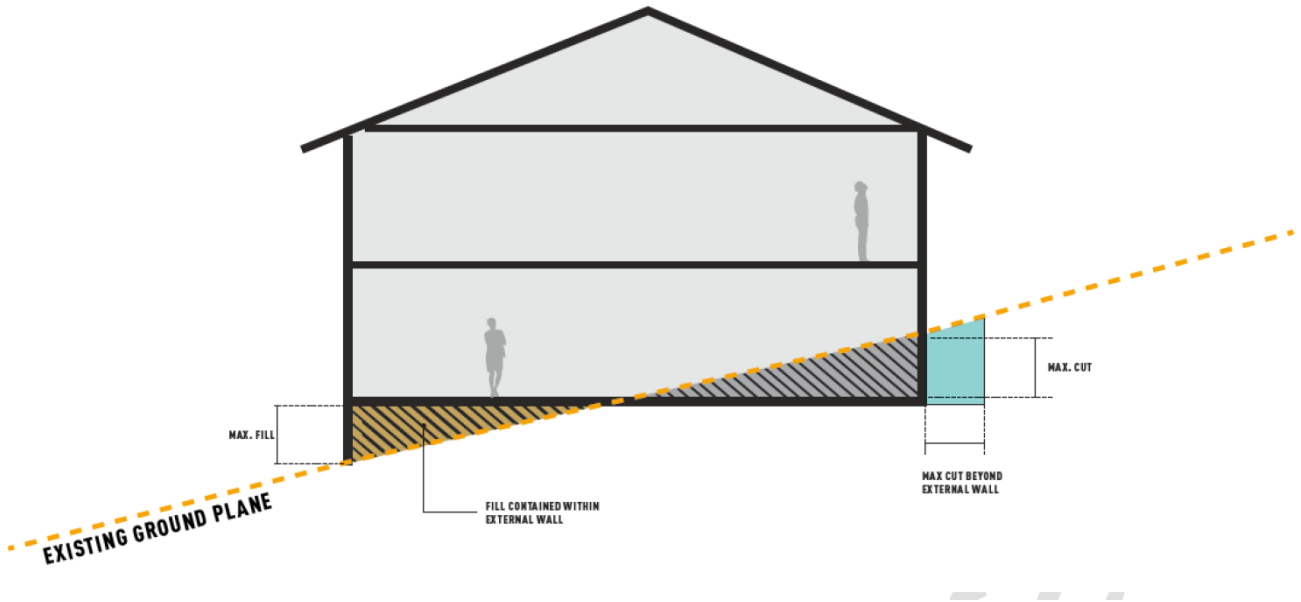


Figure 39 Cut & Fill

Source: Jackson Teece

3.2.8 Garages, Parking and Site Access

Objectives

O.1 To control the number, dimensions, and location of vehicle access points to reduce the visual impact of garages, carports, and parking areas on the streetscape.

O.2 To provide safe, secure, and convenient access to parking within garages, carports and parking areas, with casual surveillance of private driveways from dwellings and from the street.

O.3 To minimise conflict between pedestrians and vehicles at the junction of driveways and footpaths.

O.4 To provide predominantly on-site parking for residents.

Controls

C.1 Carports and garages should be constructed of materials that complement the colour and finishes of the main dwelling.

C.2 Garages and carports are to be set back a minimum 1.0m behind the building line.

C.3 On corner lots the garage can be accessed from either road frontage, subject to compliant sightlines and distances from intersections and adjacent driveways.

C.4 Driveways should be a maximum of 3.0m wide at the front boundary and located a minimum of 1.0m from the side boundary.

C.5 Permeable/porous materials and finishes including gravel, paving and the like are to be used for residential driveways.

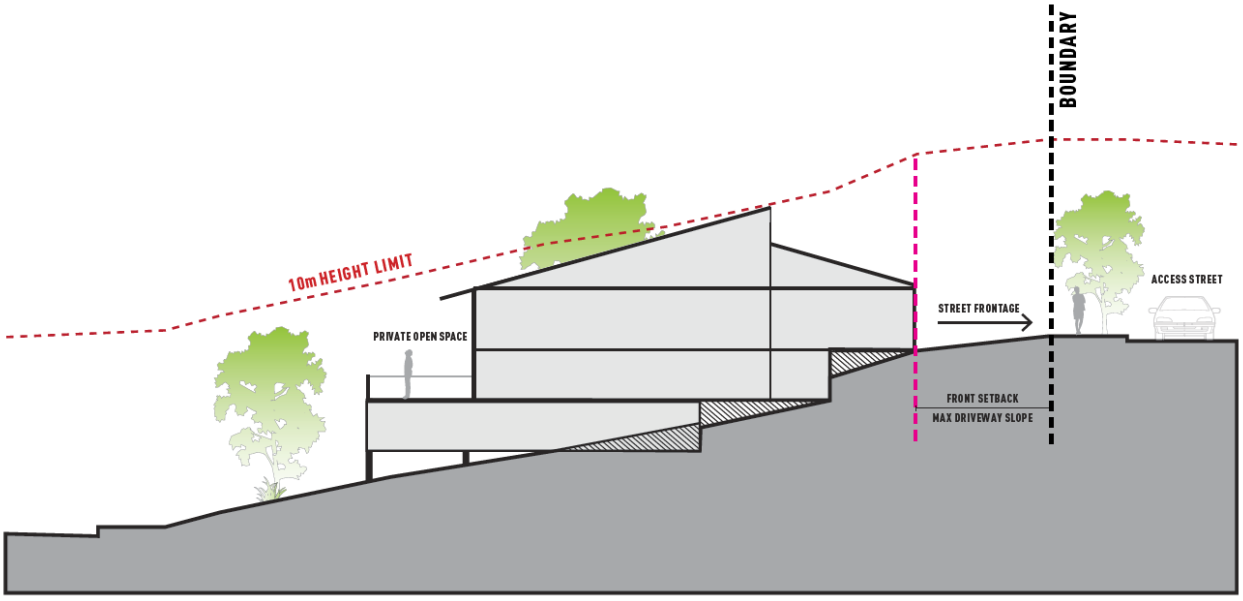


Figure 40 Three Storey Dwelling on Sloping Sites

Source: Jackson Teece

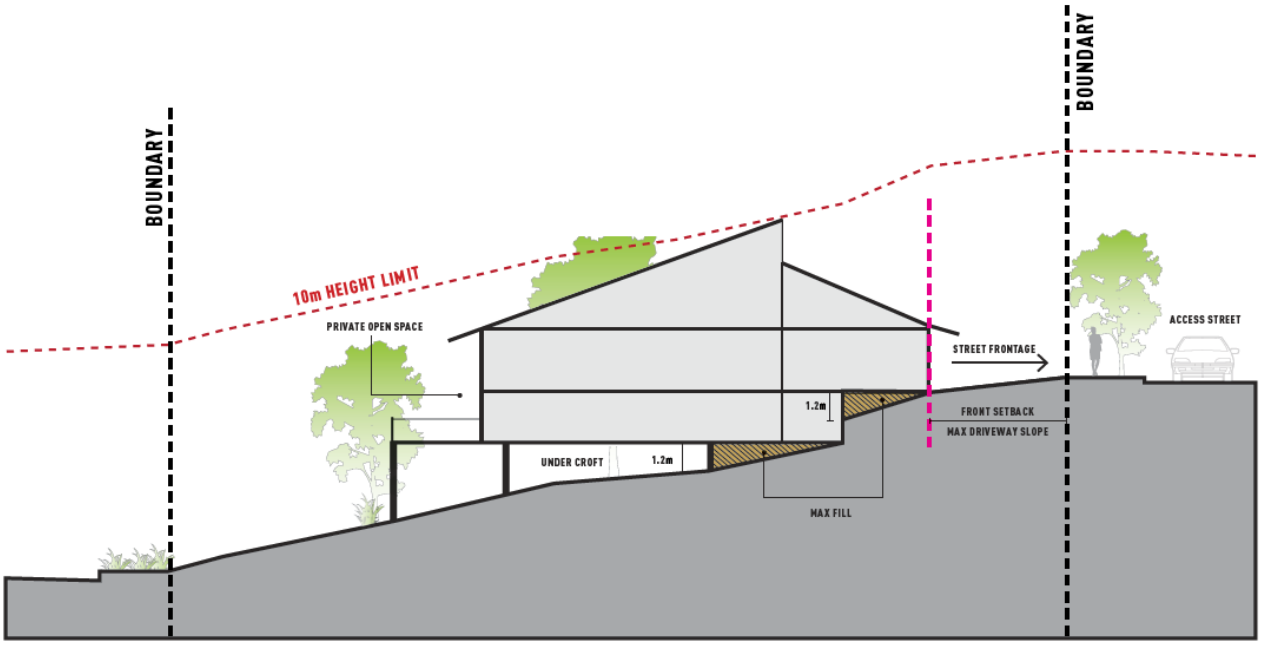


Figure 41 Sloping Site

Source: Jackson Teece

3.2.9 Amenity, Privacy and Security

Objectives

O.1 All areas in a development should be clearly recognisable as private, common, or public space.

O.2 Ensure a superior built form outcome for future residents.

Controls

C.1 Landscaping should promote privacy of dwellings and private open space areas.

C.2 Building siting and windows are to ensure visibility to the street from the front of the dwelling house.

C.3 Dwelling houses on corner allotments should address both public frontages.

C.4 The location, planning and orientation of buildings are to maximise solar access, natural light and privacy to dwellings and assist with the achievement of BASIX requirements.

C.5 Houses are to be designed to have good natural cross ventilation with well-considered placement of windows to draw breezes through the house.

C.6 Sustainable energy solutions are encouraged to minimise greenhouse gas emissions.

C.7 Buildings should be sited and designed to ensure that the performance of existing rooftop solar energy systems on dwellings on adjoining lots are not compromised.

3.2.10 Landscaping

Objectives

O.1 Ensure the vision for Jacaranda to be a landscape-led development is achieved through landscaping on private property in conjunction with the public realm.

O.2 Utilise landscaping to create effective microclimates to future proof the new community.

Controls

C.1 Front and side setbacks are to incorporate planting and landscaping elements to facilitate a predominantly landscaped streetscape setting.

C.2 Residential development within the R5 Large Lot Residential zone should aim to retain significant trees where possible within landscaped and private open space areas. Significant trees are those trees referred to by Clause 5.9 of the LEP and will be subject to an arborist report at DA stage.

C.3 On lots larger than 4,000sqm a minimum of four trees are required (three min 45L and one min 100L, and/or including retained native trees). At least two trees are to be in front of the front building line.

C.4 On lots smaller than 4,000sqm a minimum of three trees (two min 45L and one min 100L, and/or including retained native trees), are required. At least one tree is to be in front of the front building line.

C.5 The plant selection for Jacaranda is to consider:

- The plant selection list identified in Appendix A where practicable.
- The topography of the site, in particular ridgelines and valleys.
- The use of locally indigenous species and exotic species, where available and suitable to the character and amenity of the site.
- The suitability of planting, and potential impacts on residential solar access and safety for residents, vehicular traffic, and pedestrians.
- the management of soil salinity, groundwater levels and soil erosion.

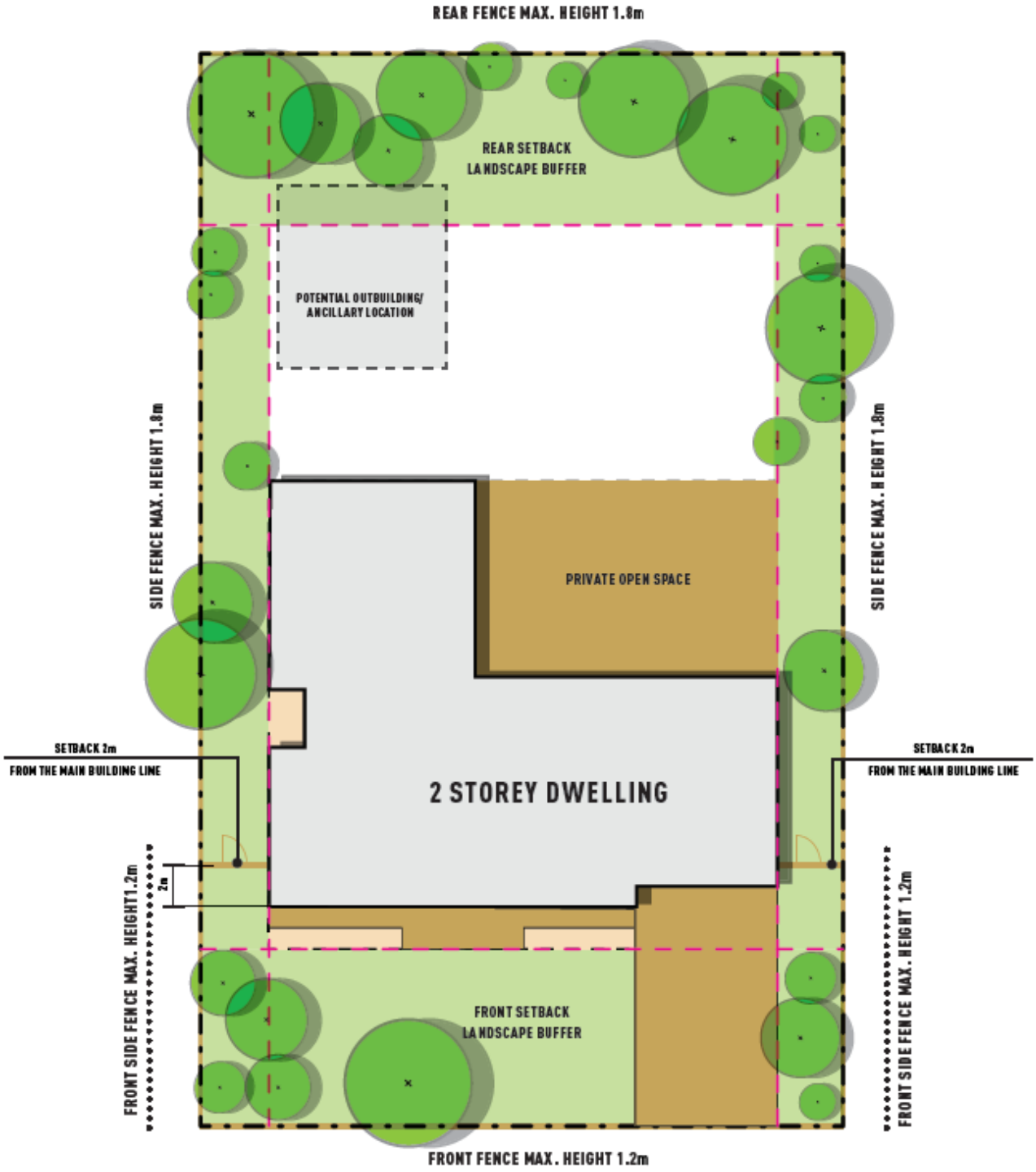


Figure 42 Landscape & Fencing

Source: Jackson Teece

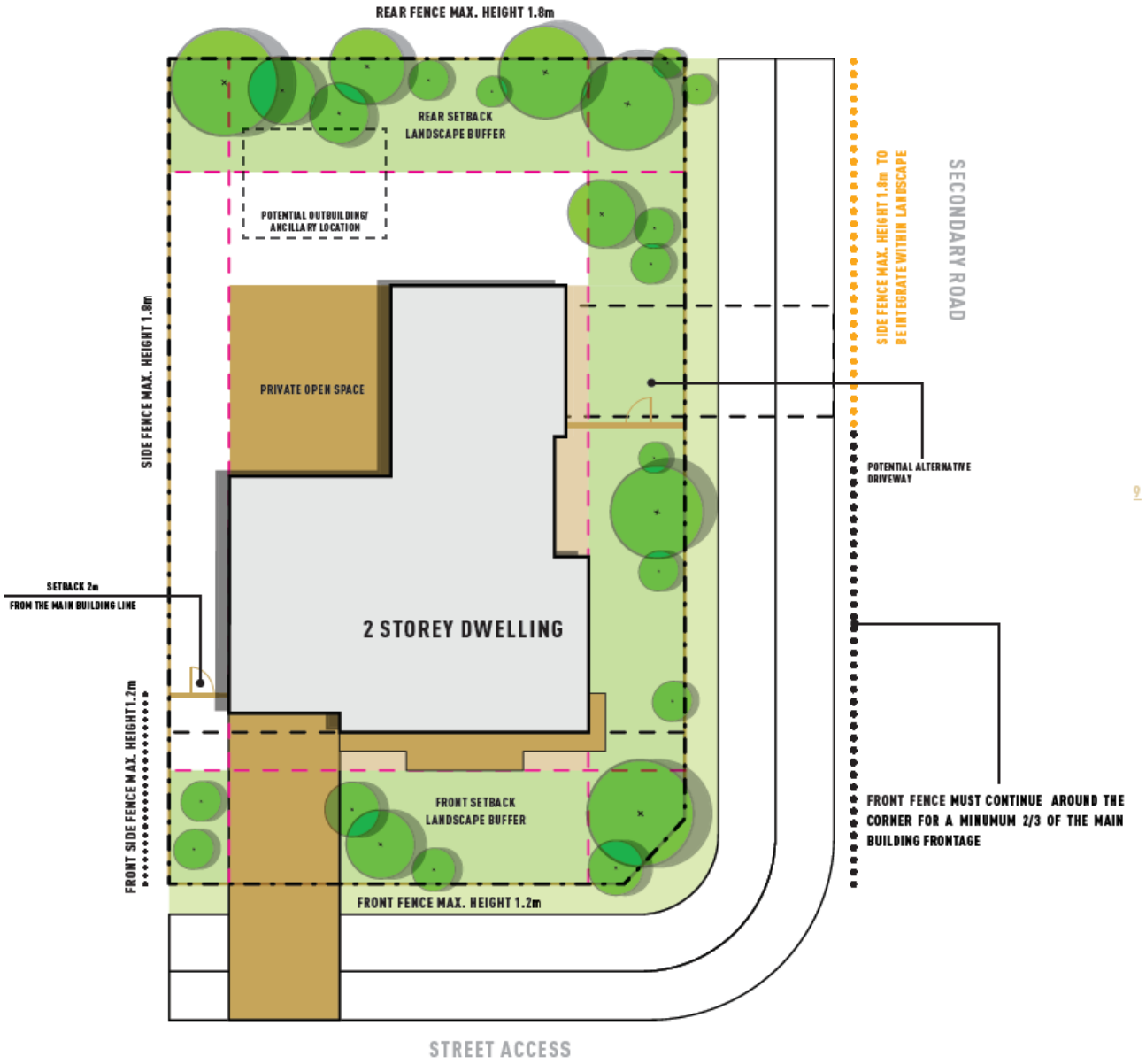


Figure 43 Landscape & Fencing – Corner Lot

Source: Jackson Teece

3.2.11 Residential Landscape Plan

Objectives

O.1 Landscape design is considered during dwelling design.

O.2 Landscape species are to achieve a semi-rural character.

Controls

C.1 A Landscape Plan facilitating a semi-rural character is to be submitted with a DA for a dwelling house.

Figure 44 Integration of landscaping within front setbacks

Source: Onecollective

3.2.12 Materials and Colours

Objectives

O.1 Materials and colours are to be compatible with the streetscape and desired character.

O.2 Encourage the use of a variety of materials and colours to provide visual interest, and distinct aesthetic identity to each different neighbourhood precinct.

Controls

C.1 The materials and finishes selected for dwellings should be from a neutral colour palette and respond to the existing natural rural character.

C.2 A mix of different wall materials or treatments, excluding windows, is encouraged on each elevation to create architectural interest.

C.3 All built elements (garages, ancillary buildings, studios, fences, garden and retaining walls and the like) are to be designed to blend into the landscape or be consistent with the colour scheme and/or design of the main building to minimise visual intrusiveness.

3.2.13 Solar Access & Orientation

Objectives

O.1 To provide for a high level of residential amenity including solar access.

Controls

C.1 Buildings should be designed to minimise overshadowing and maximise solar access to any adjoining development and the public domain. Solar access should be maintained for any north facing window of a habitable room of any adjoining residential dwelling and at least 50% of the private courtyard area for a minimum three hour continuous period between 9:00am and 3:00pm for the 21 June, winter solstice period.

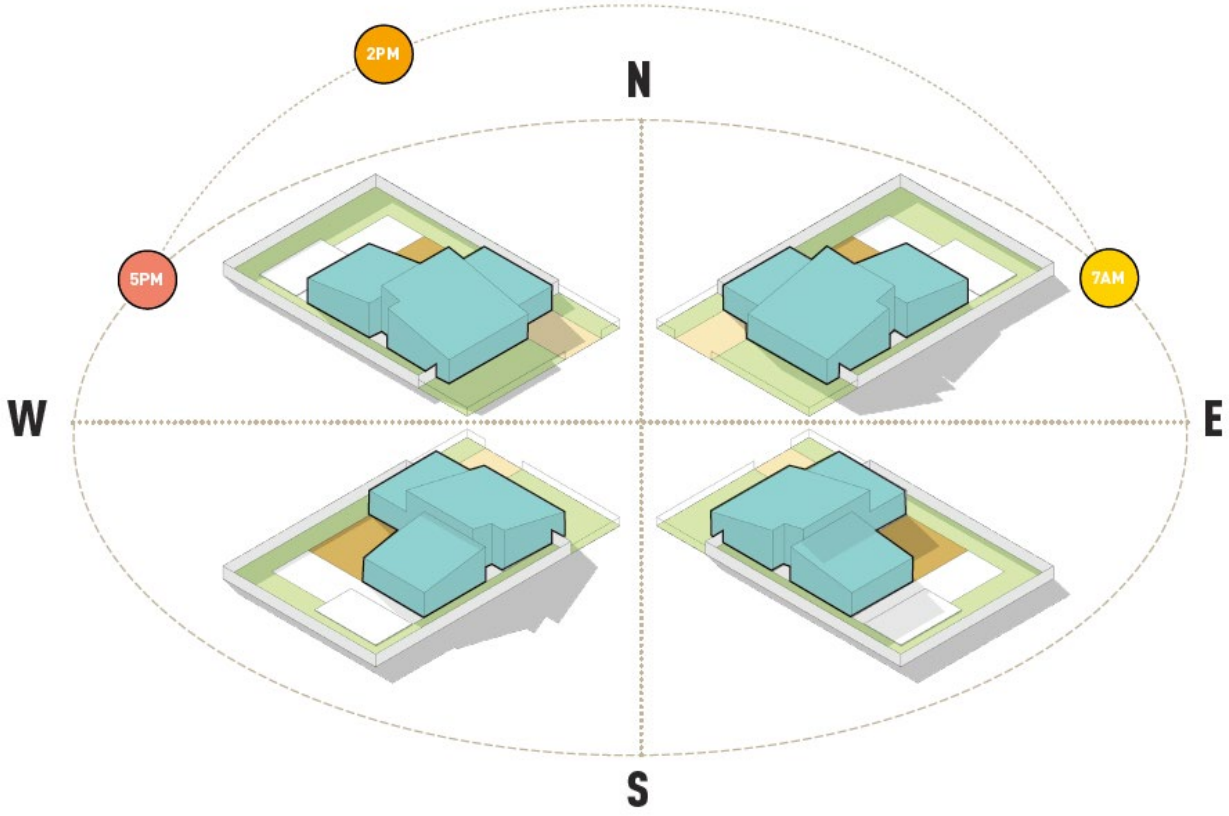


Figure 45 Orientation for Solar Access

Source: Jackson Teece

3.2.14 Numerical Controls for Dwelling Houses and Ancillary Development

Objectives

O.1 To achieve a height and bulk that is compatible with the desired future character of the area.

O.2 To create coherent, attractive streetscapes that engage with the public domain,

O.3 To provide for a high level of residential amenity, including solar access, air circulation, privacy, noise mitigation and appropriate boundary interfaces.

O.4 To provide landscaped open space that softens the visual impact of buildings within the landscape and includes useable private recreation space of sufficient areas and dimensions to cater for the recreational needs of residents.

O.5 To provide adequate and safe on-site vehicle access and parking in a manner that does not visually dominate the street.

Controls

C.1 Dwellings are to comply with the relevant R2 or R5 controls in Appendix C.

3.2.15 Ancillary Buildings

Objectives

O.1 Enable the erection of ancillary outbuildings in a manner that complements the landscape character and any scenic qualities of the locality.

O.2 Reduce the visual dominance of ancillary development on the streetscape.

O.3 Minimise the impact of ancillary development on adjoining land uses.

Controls

C.1 Ancillary buildings design and materials are to be consistent with the primary dwelling house design.

C.2 Ancillary buildings should be sited to minimise tree removal as well as visual dominance and impact on the streetscape.

C.3 Ancillary buildings should be designed to be subordinate in scale and footprint to the primary dwelling house and must be located wholly behind the main residence.

3.2.16 Fences

Objectives

O.1 Appropriately demarcate the public and private domain and provide for surveillance of the public domain.

O.2 Establish appropriate fencing materials and scale commensurate with the rural landscape vision for the community.

Figure 46 Details and materials that reflect the rural style character

Source: Onecollective

Controls

C.1 The front boundary is to be defined by either front fencing 1.2m high (the upper two thirds of the fence must be at least 50% open construction) or mass planting beds of species that have a mature height of 1.2m and should be consistent with the Character Statements in Table 2.

C.2 Side and rear fencing is to be a minimum height of 1.2m and a maximum height of 1.8m high.

C.3 Side fences is to extend to two metres behind the front building line. Side fences on corner lots are to be a maximum height of 1.2m for the front two-thirds of the dwelling length behind the front building line.

C.4 Fencing materials and details must be included in the landscape plans accompanying dwelling applications for approval by Council.

3.3 Non-Residential Design

Objectives

O.1 Enable the appropriate provision of non-residential land uses to serve the needs of the local community.

O.2 Minimise the impacts of non-residential activities on surrounding residential areas.

O.3 Retail activities in residential areas do not detract from the function or viability of nearby centres.

O.4 Ensure the appropriate location of neighbourhood shops.

Controls

C.1 Retail land uses are to be located:

- adjoining land zoned RE1 Public Recreation or that is separated from land zoned RE1 Public Recreation only by a public road, or
- with frontage to a collector road, or
- within 90 metres of public transport stop.

C.2 Shop fronts or front setback land uses are to encourage active and interactive street frontages that are sympathetic to the streetscape with similar materials to adjoining buildings to be used.

C.3 Any area of land between the front property boundary and the building alignment, exclusive of approved driveways and parking areas, is to be landscaped.

C.4 Address and entry points for any residential use on the same allotment of land are to be separate from the retail use access points and be readily identifiable.

C.5 Design of the building frontage, front and side setbacks are to include safe and convenient pedestrian facilities such as weather protection, shade, seating, and landscaping.

C.6 On corner sites, shop fronts are to wrap around the corner.

C.7 Entrances are to be readily visible from the street and well lit.

C.8 Plant and equipment (particularly cooling or heating plant) is to be located to not cause noise annoyance to neighbours.

C.9 Waste storage areas must be designed to minimise visual impact and should be screened and properly positioned to not to attract pests and cause odour problems for neighbours.

C.10 External storage areas are not permitted unless adequately screened from view.

C.11 A food and drink premises is permitted generally in the indicative locations in Figure 47. The exact location of the café or the proposed lot which is going to accommodate a future café needs to be clearly identified in a future staged subdivision application.

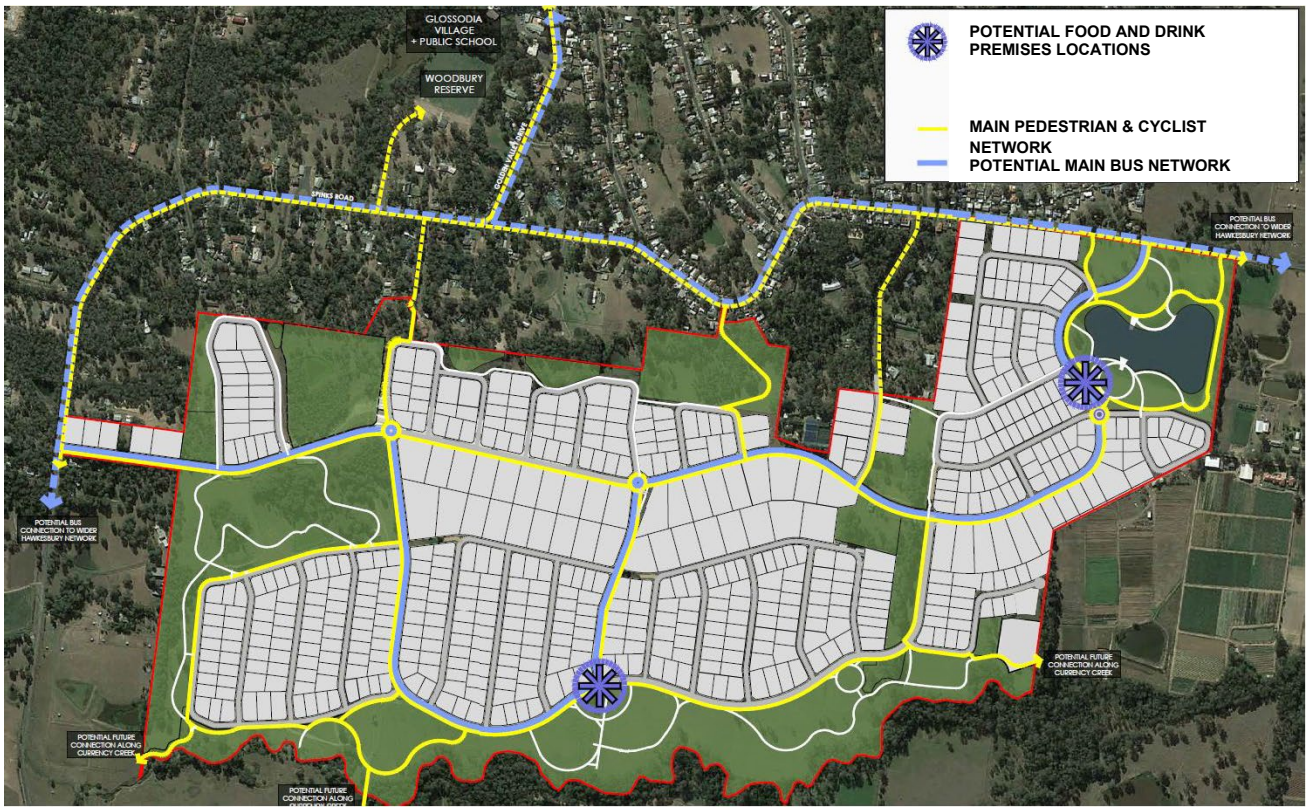


Figure 47 Indicative Food and Drink Premises Locations

Source: Onecollective

4.0 Appendices

4.1 Appendix A- Indicative Landscape Planting Palette

Tree Planting Matrix

Acer 'Crimson Sentry'

Acer 'Autumn Blaze'

Acmena smithii

Backhousia citriodora

Brachychiton acerifolius

Ceratopetalum apetalum

Cupaniopsis anacardioides

Elaeocarpus eumundi

SPECIES	LOCATION								
	Entrance and Signage	*Collector Road*	*Local Streets and Access Roads*	*Green Streets*	*Parks & Open Space: Space Definition*	*Parks & Open Space: Shade*	*Parks & Open Space: Display/Marker*	*Transition Open Space (Riparian)*	Riparian
Acer 'Crimson Sentry'	X							X	
Acer freemanii 'Autumn blaze'	X		X						
Acmena smithii	X			X		X			
Backhousia citriodora	X	X	X		X			X	
Brachychiton acerifolius	X	X					X		
Ceratopetalum apetalum								X	
Cupaniopsis anacardioides		X	X						
Eucalyptus amplifolia								X	
Eucalyptus tereticornis									
Eucalyptus eugenioides						X			X
Elaeocarpus eumundi			X		X			X	
Eucalyptus globoidea						X			

Eucalyptus tereticornis

Ficus rubiginosa

Fraxinus 'Cimmaron'

Gingko biloba

Hymenosporum flavum

Jacaranda mimosifolia

Lagerstroemia indica

Livisona australis

SPECIES	LOCATION								
	Entrance	*Collector Road*	*Local Streets and Access Roads*	*Green Streets*	*Parks & Open Space: Space Definition*	*Parks & Open Space: Shade*	*Parks & Open Space: Display/Marker*	*Transition Open Space (Riparian)*	Riparian
Eucalyptus paniculata						X		X	
Eucalyptus saligna						X		X	
Eucalyptus tereticornis					X	X		X	X
Ficus coronta						X		X	
Ficus rubiginosa						X		X	
Fraxinus 'Cimmaron'	X		X				X		
Ginkgo biloba			X				X		
Hymenosporum flavum			X						
Jacaranda mimosifolia	X	X					X		
Lagerstroemia indica							X		
Livistona australis				X			X	X	

Magnolia 'Exmouth'

Melaleuca stypheloides

Pyrus 'Chanticleer'

Pyrus nivalis

Syzigium australe

Toona ciliata var australis

Waterhousea floribunda

Zelkova serrata 'Green Vase'

SPECIES	LOCATION								
	Entrance	*Collector Road*	*Local Streets and Access Roads*	*Green Streets*	*Parks & Open Space: Space Definition*	*Parks & Open Space: Shade*	*Parks & Open Space: Display/Marker*	*Transition Open Space (Riparian)*	Riparian
Magnolia 'Exmouth'	X		X	X			X		
Magnolia 'Little Gem'	X	X					X		
Melaleuca decora			X			X		X	X
Melaleuca styphelioides					X			X	X
Melaleuca quinquenervia					X			X	
Pyrus 'Aristocrat'	X								
Pyrus 'Chanticleer'	X	X	X						
Pyrus nivalis	X		X				X		
Syzygium australe			X		X				
Syncarpia glomulifera						X		X	X
Toona ciliata var. australis						X		X	
Tristaniopsis laurina 'Luscious'			X		X			X	
Ulmus parvifolia				X		X	X		
Waterhousea floribunda	X	X	X	X		X		X	
Zelkova serrata	X	X					X		

4.1.1 Shrub and Understorey Planting Matrix

Provide form and texture to add more contrast and scale in urban and entry areas while reinforcing character in open space and rainforest areas. Passive surveillance principles need to be considered in design. A diversity of leaf form, shape, texture, colour and scale are vital in providing an innovating, uplifting and illuminating residential community.

Acacia cognata

Bauera rubioides

Berberis thunbergii

Callistemon citrinus

Convolvulus cneorum

Cordyline australis

Cyathea australis

Dicksonia antarctica

SPECIES	*LOCATION*			
	Lake Park	*Entry*	*Village Parks*	*Riparian*
Abelia x grandiflora	X		X	
Acacia cognata			X	
Azacia binervia				
Baeckea virgata			X	
Bauera rubioides			X	
Berberis thunbergii		X		
Callistemon citrinus			X	
Callistemon linearis			X	
Callistemon salignus			X	
Callistemon viminalis			X	
Camellia sasanqua	X			
Casuarina glauca 'Cousin It'	X		X	
Convolvulus cneorum		X	X	
Cordyline australis	X	X		
Cordyline stricta	X			
Cordyline terminalis	X			
Correa alba	X			
Cyathea australis	X		X	
Daviesia ulicifolia			X	
Dicksonia antarctica	X		X	
Dodonaea viscosa	X			
Dodonaea triquetra	X			
Doryanthes excelsa	X	X		

Callistemon viminalis

Camellia sasanqua

Choisya ternata

Cordyline stricta

Doryanthes excelsa

Grevillea 'Superb'

Leacadendron 'Safari Sunset'

Loropetalum chinensis

SPECIES	*LOCATION*			
	Lake Park	*Entry*	*Village Parks*	*Riparian*
Gardenia augusta	*X*	*X*		
Grevillea 'Superb'			*X*	
Hakea dactyloides			*X*	
Hebe elliptica			*X*	
Indigophera australis	*X*			
Kunzea ambigua			*X*	
Lavandula stoechas	*X*	*X*		
Leptospermum petersonii			*X*	
Leucadendron 'Safari Sunset'			*X*	
Loropetalum chinensis			*X*	
Melaleuca nodosa			*X*	
Melaleuca thymifolia			*X*	
Michelia figo	*X*		*X*	
Murraya paniculata	*X*		*X*	
Nandina domestica	*X*		*X*	
Notelaea venosa			*X*	
Photinia glabra			*X*	
Photinia x fraseri			*X*	
Pittosporum tobira			*X*	
Pittosporum revolutum				
Rosmarinus officinalis	*X*	*X*		
Russelia equisetiformis	*X*			
Strelitzia juncea	*X*			
Teucrium fruticans			*X*	
Viburnum odoratissimum	*X*			
Viburnum tinus			*X*	
Westringia fruticosa	*X*		*X*	
Westringia 'Wynyabbie Gem'	*X*			

4.1.2 Climbers Planting Matrix

Species used to introduce an element of colour and texture at height.

SPECIES	*LOCATION*			
	Lake Park	*Entry*	*Village Parks*	*Riparian*
Bougainvillea glabra		*X*		
Hardenbergia violacea			*X*	
Hibbertia scandens			*X*	*X*
Kennedia rubicunda				*X*
Pandorea pandorana 'Snowbells'		*X*		
Parthenocissus tricuspidata	*X*	*X*		
Rosa species	*X*	*X*		
Trachelospermum jasminoides	*X*			

4.1.3 Grasses Planting Matrix

Grasses act as transitional elements embracing both the more manicured spaces and the vital riparian zones.

SPECIES	*LOCATION*			
	Lake Park	*Entry*	*Village Parks*	*Riparian*
Aristida ramosa			*X*	*X*
Austrodanthonia racemosa var. racemosa				*X*
Bothriochloa decipiens				*X*
Carex appressa			*X*	
Chloris divaricata var. divaricata				*X*
Commelina cyanea			*X*	*X*
Danthonia longifolia			*X*	
Danthonia tenuior			*X*	
Dianella species		*X*	*X*	*X*
Dichelachne micrantha			*X*	
Dichopogon strictus				*X*
Echinopogon ovatus				*X*
Entolasia stricta				*X*
Eragrostis brownie				*X*
Juncus usitatus			*X*	
Lomandra longifolia	*X*	*X*	*X*	
Microlaena stipoides var. stipoides			*X*	*X*
Themeda australis			*X*	*X*

Austrodanthonia racemosa

Carex appressa

Commelina cyanea

Dichelachne micrantha

Poa labillardieri

Microlaena stipoides

Rosa ‘Pierre de Ronsard’

Rosmarinus officinalis

Echinopogon ovatus

Eragrostis brownie

Juncus usitatus

Trachelospermum jasminoides

Russelia equisetiformis

Strelitzia reginae

Teucrium fruticans

4.1.4 Ground Covers Planting Matrix

Reinforce the character of each zone on the ground plane

SPECIES	*LOCATION*				
	Lake Park	*Entry*	*Village Parks*	*Riparian*	*Wetland*
Ajuga reptans	X		X		
Alternanthera dentata 'Little Ruby'	X	X	X		
Banksia spinulosa 'Birthday Candles'	X		X		
Brachyscome multifida	X		X		
Convolvulus mauritanicus			X		
Dichondra repens	X		X	X	
Echinacea purpurea			X		
Euphorbia species		X	X	X	
Glycine species				X	
Grevillea 'Bronze Rambler'	X		X		
Helichrysum petiolare			X		
Iris germanica			X		
Juniperus conferta	X	X			
Juniperus horizontalis	X				
Juniperus Sabina	X				
Liriope muscari	X	X	X		
Marsdenia rostrata				X	
Myoporum parvifolium	X		X		
Nandina domestica 'Nana'	X	X	X		
Pratia purpurascens	X			X	
Rosa 'Flower Carpet'	X	X	X		
Scaevola aemula	X		X		
Sigesbeckia orientalis subsp. orientalis				X	
Stachys byzantina			X		
Tulbaghia violacea		X	X	X	
Viola hederacea	X		X		
Zephyranthes candida	X		X		

4.1.5 Wetland Planting Matrix

Species selected to stabilise constructed wetlands and reinforce the natural and ecosystems of these areas.

SPECIES	*LOCATION*				
	Lake Park	*Entry*	*Village Parks*	*Riparian*	*Wetland*
Baumea articulate	X				X
Bolboschoenus caldwelli	X				X
Cyperus exaltatus	X				X
Elaeocharis sphacelata	X				X
Entolasia marginata	X				X
Ficinia nodosa	X				X
Juncus usitatus	X				X
Potamogeton tricarinatus (aquatic)	X				X
Schoenoplectus mucronatus	X				X
Triglochin procerus (aquatic)	X				X

Adiatum affine

Ajuga reptans

Banksia 'Birthday Candles'

Baumea articulata

Ficinia nodosa

Grevillea 'Bronze Rambler'

Juniperus sabina

Liriope muscari

Convolvulus mauritanicus

Cyperus exaltatus

Dampiera diversifolia

Echinacea purpurea

Myoporum parvifolium

Rosa 'Amber Sun'

Scaevola aemula

Schoenoplectus validus

4.2 Appendix B – Landscape Materials Palette

Landscape Materials Palette

The use and design of hard and soft material treatments aims to reinforce the character of Jacaranda.
The development also needs to provide an identifiable and marketable image to prospective residents to promote Jacaranda as a desirable and attractive place to live and work. The design of soft and hard landscape will be integral to this image.
The materials palette will support the following design principles:

- Longevity - low maintenance
- Quality and consistency
- Contemporary - clean simple lines
- Heritage links - rural and indigenous
- Robust and simple components
- Rural influences
- Natural environment and materials

Detail of materials will be confirmed with the details documentation that is submitted to Council for DA and CC.

Hard Landscape
Colour

- Warm tones and natural or subdued colours. Bright colours only used as highlights in distinctive and select locations.
- Bright colour swatches to be sources from locally significant elements such as prominent vegetation or topography.

Materials principles

- Naturally and locally sourced.
- Variations in aesthetic created by using the same material with a different finish.
- Good quality craftsmanship.
- Timber sourced from sustainable suppliers. (where possible)
- Stone sourced from local suppliers. (where possible)
- Clean lines and crisp finishes.

Pavement principles

Footpath paving will provide a hard wearing, cost effective and practically maintainable surface that enhances the character and identity of the place and provides an aesthetically pleasing visual experience.
A hierarchy of pavement treatments reflects the varied pedestrian and vehicular access roles of streetscapes and open space areas, from urban to natural landscape character contexts.
Park and open space areas will have a less structured approach to application of pavement materials as parks tend to be destinations for users, and as such do not need to provide strong visual continuity between different sites.

This is except for:

- Cycle linkages connecting to systems beyond the park.
- Pedestrian linkages connecting to systems beyond the individual park; and

Paving materials incorporated in the public domain (including parks and open space) will be limited in range to make maintenance, renewal and extension works more cost effective and practical for Council.

Key Materials and Finishes

The following table outlines the materials being proposed with photographic images demonstrating design intent including:

- Footpaths and paving
- Cycleway
- Walls
- Fencing
- Picnic Shelters
- Signage
- Lighting
- Furniture
- Seating
- Custom furniture
- Bollards
- Bike racks
- Rubbish bins
- Drinking fountains

Footpaths and paving

Paving will be selected for individual area depending on the site and its priority. Materials will include:
Broom finished concrete
Exposed aggregate concrete

Cycleway

The development of the pedestrian and cycle network through the Jacaranda development is an important component of the ongoing planning for the site. Cycleways will be 2.5 metres wide unless specified in the Biobank Agreements. Major road crossing points will be treated differently to highlight their location.

Edging

Edging will be used to separate soft landscape surface finishes (e.g.. turf and mass planting and will include:

- Steel
- Concrete

Walls

Walls will be designed to relate to the environment and may include:

- Sandstone logs
- Dimensioned sandstone /stone
- 1 - 2 man sandstone boulders
- Reinforced concrete blockwork.
- Insitu concrete with a finish
- Corncrib or similar.

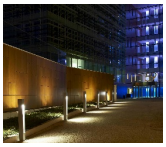
Retaining will be reduced by utilising the topography of the site where possible. Where retaining is required it should be in keeping with the character of the precinct.

Fencing

Feature landscape fencing relates to the rural heritage of the site. Hedge or mass planting is strongly encouraged adjacent fencing.

A timber (or suitable alternative product such as plastic) post and rail fence treatment is proposed. In specific areas timber (or suitable alternative product such as plastic) post and rail fence which will incorporate 2, 3 or 4 horizontal timber rails to highlight the projects rural heritage. Lap and cap fencing is permissible for side and rear fencing only.

Lighting



Street Lighting
Street lighting will be provided within Jacaranda to contribute to a coordinated street environment. Selection will be subject to electricity authority approval.

An effective lighting schedule will be included in the design of residential areas and open spaces to ensure that street footpaths are adequately lit to relevant Australian Standards.

Open Space lighting

There are a range of issues that must be considered in determining the level of lighting to be provided to open space areas. The situations to which lighting may apply are:

- Lighting of major cycle routes and pedestrian access paths for nighttime usage
- Feature lighting of elements as visual displays (eg. Sculpture/ artwork elements, uplighting trees)
- Pedestrian lighting of pathways through parks will be evaluated for each specific site based on linkage value, impacts on pedestrian amenity, and safety/security considerations. In general lighting will not be provided in open space.

Furniture

Generally, furniture items will be selected to consider a functional and aesthetic contribution to the quality of the public domain as well as achieving a low maintenance outcome for council. It will form a recognisable theme particular to Jacaranda.
For both maintenance, cost, and replacement purposes it is preferable that a simple palette of furniture be incorporated into open space design.
Furniture will be accessible to cater for wheelchairs

Seating

Seating will be provided in significant open space areas and will include materials such as recycled large section timber, and galvanized steel.

Where “off the shelf” seating and furniture is to be used then it will meet all relevant Australian Standards and be constructed from durable timber and steel/aluminium and be Australian made.

Materials to be utilised include pre-cast concrete, galvanised and weathered steel, recycled hardwood.

Custom Furniture

In specific areas there may be the opportunity for ‘one off’ designed furniture that responds to a theme such as the Riparian Corridor or the places rural heritage.

Picnic Shelters

Shelters will be designed to reflect the rural heritage of the area. Generally, structures will incorporate a mix of building materials including galvanised steel and timber.

Signage

Signage will be subject to ongoing site-specific design and related development approval and biobank requirements.
Materials are used to reinforce a cohesive theme across the environment and will be contemporary in appearance and build of low maintenance materials.
Typically, signage will be made of a metal and fixed to an element such as steel, timber, or concrete.
All signage will be developed in consultation with Council prior to lodging CC documentation.

Bollards

Design:

- Robust
- Simple form
- Low maintenance
- Removable where required

Bollards will be constructed of recycled timber and/or steel and/or recycled plastic depending upon the location and function required.
Consideration will be given to them having a multi-functional purpose such as bicycle parking.

Bike Racks

Design:

- Consider as sculpture
- Ability to ‘standalone’
- Durability

Generally stainless-steel construction.

Rubbish Bins

Design:

- Consider recycling needs
- Discrete location that is practical
- Ease of council access for maintenance

Generally, of steel/timber construction with lockable door and with a cover to keep out weather.
Appropriate signage on bins for general rubbish, recycling and other waste. 240L and 120L sizing to be determined at CC stage in conjunction with Council.

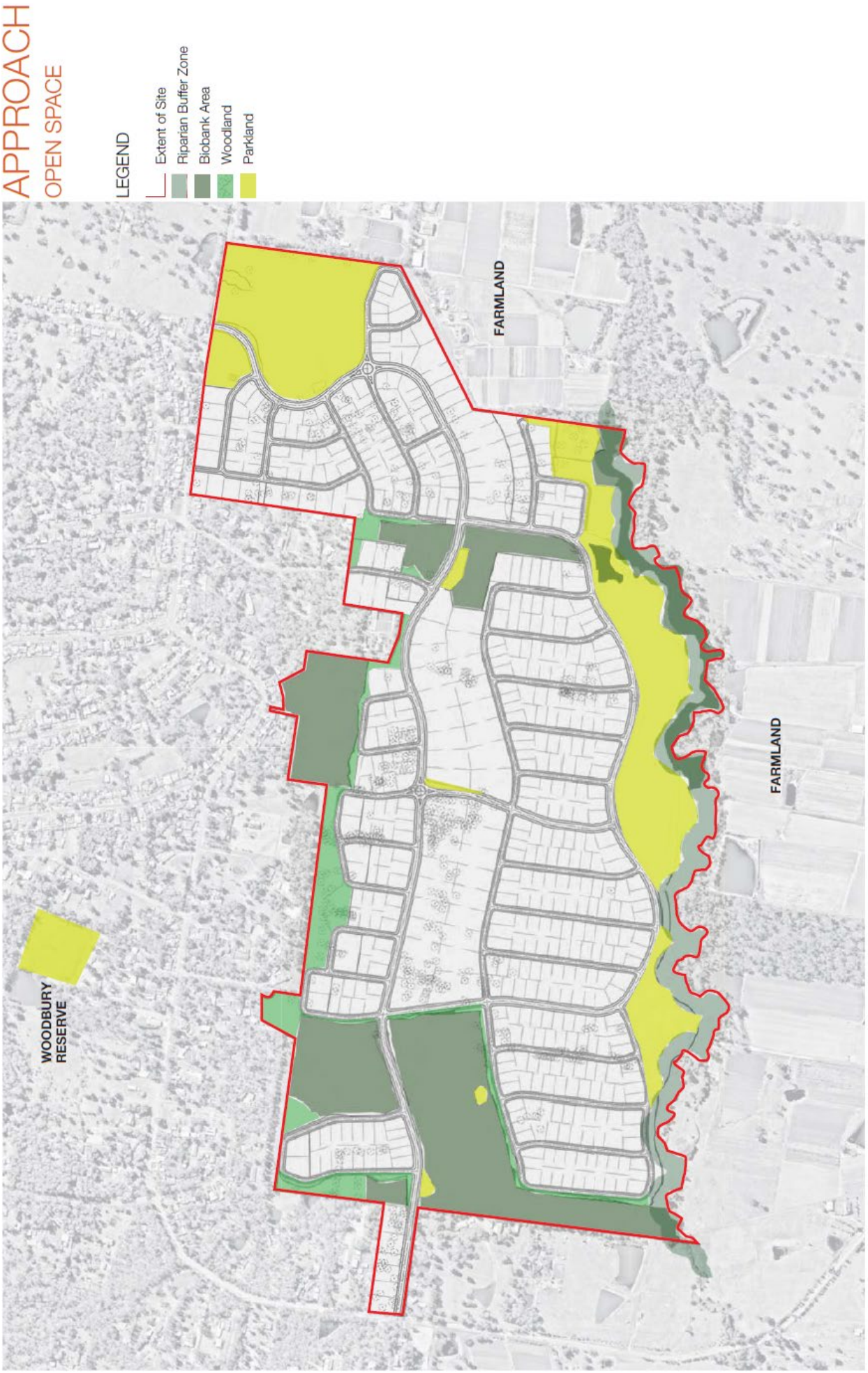
Drinking Fountains

Drinking fountains will be of stainless steel and aluminium construction and be in the higher profile open space areas where appropriate such as the Village and Lane Park. Consideration to be given to dog drinking bowls.

4.3 Appendix C – Residential Controls

Dwelling House & Ancillary Development			
Key Controls			
Zone		R2	R5
Lot size (minimum)		1,000m2	2,000m2
Lot width (minimum average)		20m	30m
Lot depth (minimum average)		40m	50m
Yield per lot (maximum)	Excluding secondary dwellings	1 dwelling	1 dwelling
Site Coverage (maximum)		40%	45%
Height		10m, 1-3 storeys	10m, 1-3 storeys
Setbacks			
Articulation Line (minimum)		6m	8m
Front building line (minimum)		8m	10m
Side Setback (minimum)	25m+ width measured at any point of the building envelope	3m	3m
	<25m width measured at any point of the building envelope	2.5m	2.5m
Rear Setback (minimum)		5m	10m
Secondary Setback (minimum)		4.5m	4.5m
Secondary Setback Articulation Line (minimum)		2m	2m
Garage setback (minimum)		1m from building line	1m from building line
Landscaped Area			
Area (minimum, including permeable surfaces)		40% of lot area	40% of lot area
Dimension (minimum)		3m	3m
Behind the building line (minimum)		50%	50%
Front landscaped area (minimum)		25%	45%
PPOS			
Area (minimum)		24m2	30m2
Dimension (minimum)		4m	5m
Basements			
Area (maximum)		45m2	45m2
Detached Ancillary Development			
Detached Development			
Height (maximum)		4.5m	4.5m
GFA (maximum)	Any outbuilding	100m2	100m2
Front setback (minimum)	Other than decks, patios, pergola, terraces, and verandahs	Behind the building line	Behind the building line
Secondary Setback (minimum)	Other than decks, patios, pergola, terraces, and verandahs	Behind the building line	Behind the building line

4.4 Appendix D – Indicative Public Domain Landscape Principles


APPROACH
OPEN SPACE
LEGEND
Extent of Site
Riparian Buffer Zone
Biobank Area
Woodland
Parkland
FARMLAND
FARMLAND
WOODBURY RESERVE

Create a key community and recreational destination for the wider Glossodia community

THE LAKE PARK - KEY DESIGN DRIVERS

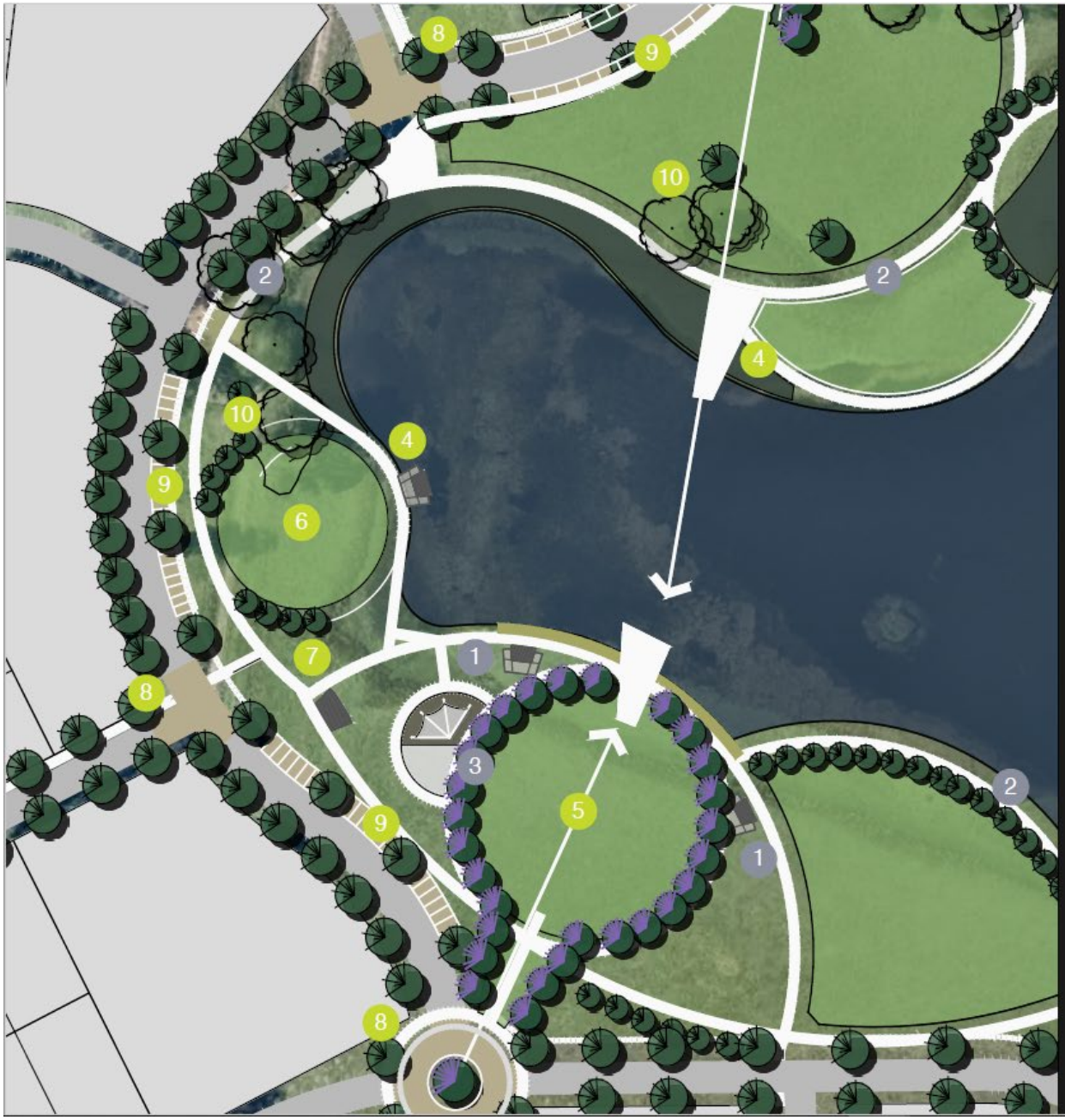
- Design of entry drive to create a sense of openness and maximise views and access around the lake
- Provide a variety of active and passive nodes that help to activate the lake edge and provide a more diverse range of recreational spaces and experiences
- The character and landscape / hardscape treatment of the main entry drive to slow vehicle speeds and improve safety, accessibility and connectivity to the lake park from adjoining residential areas
- Lake Park to become a unique and high amenity recreational destination for the wider Glossodia community

Create a unique entry to the community and lake park that maximises views and access around the lake

Street design and pathway network to maximise accessibility and connectivity to the park and improve safety

Curvilinear form of the entry drive to slow vehicle speeds and increase accessibility and activation of the lake edge

1 Main entry along Spinks Road positioned to maximise safety at the intersection whilst also creating a sense of openness and increasing views and activation of the lake
2 Curvilinear form of the entry drive helps to slow vehicle speeds whilst also increasing activation and accessibility to the central and eastern portions of the Lake Park
3 Potential to include on road parking at various locations around the lake edge
4 Potential to include additional passive nodes / bbq shelters / picnic areas at various locations around the lake edge to increase diversity and choice of recreation spaces
5 Detailed design of entry drive, intersection treatments and landscaping to slow vehicle speeds and improve accessibility and connectivity to park
6 All streets focus viewlines and pedestrian linkages down to lake to maximise connectivity



KEY OPEN SPACE / COMMUNITY FACILITES REQUIRED UNDER VPA

1. 2 x shelters inclusive of picnic facilities - located to provide lake view and integration with playground
2. Pathway loop around lake - continuous loop with multiple circuit / route options
3. Small Playground and junior skate surround to play space to connect with main pathway and other amenities - include nature based play elements

Additional / detailed items to be located as required subject to detailed design
- Bins
- Bicycle Rack
- Fringing Vegetation establishment

POTENTIAL ADDITIONAL FACILITES

- not required under VPA but suggested to improve community / recreation outcomes
- subject to ongoing design and approval process

4. Potential additional bbq shelters / viewing platforms to improve recreation choice and activation of lake park
5. 60m x 60m active recreation / kick + throw area
6. Smaller 30m x 30m active recreation space
7. Potential toilet block - subject to future demand
8. Potential intersection / landscape treatments to slow vehicle speeds and improve accessibility, connectivity and safety at key intersections / crossings - subject to engineering design
9. Potential on-street parking along entry drive espalanade interface to park
10. Potential retention of existing vegetation - subject to detailed design and qualitative assessment

Integrate the Village Green with the Currency Creek environs to provide a nature based setting that improves amenity and recreational opportunities and creates a destination for the wider Glossodia community

THE VILLAGE GREEN - KEY DESIGN DRIVERS

- Integrate the Village Green with Currency Creek to provide a higher amenity nature based setting and improve accessibility and recreational opportunities
- Design the Village Green based upon multiple use principles that provide a greater range of recreational opportunities and improve maintenance outcomes
- Improve the integration between the Village Green, creekline and wider open space network to encourage walking, cycling and improve accessibility, connectivity and safety
- Design the Village Green as a series of connected nodes that provide a greater spread, diversity and choice of usage and help to activate the Currency Creek frontage

Multiple use spaces that provide a wider range of recreational opportunities and improve maintenance outcomes

Improve integration with the wider open space network to encourage walking and cycling

Create a series of connected nodes that provide a greater spread, diversity and choice of recreational spaces

1 The Main Central Green

Centrally located node accommodating the main recreational features including district playground, BBQ shelters and active recreation areas

2 Secondary Nodes

Smaller nodes linked to the main central green incorporating shelters, picnic areas and active and passive spaces - provide more recreational diversity and choice and help to activate the creekline environs

3 Creekline Setting

Providing nature based cycling and walking trails and passive recreation areas integrated with the creekline setting that increase the amenity and recreational diversity of the Village Green

1 **Main Recreation Facilities**
- Key recreation facilities required under VPA to be incorporated into central node including district playground, bbq shelters, toilets, multi-purpose court and skate pad and active + passive spaces

2 **Main Active Recreation Space**
- Large multi-purpose active recreation space of approx. 120m x 120m suited to accommodating a range of informal sporting and community activities

3 **Secondary Active Recreation Spaces**
- Flexible multi-purpose active recreation spaces of approx. 60m x 60m suited to accommodating a range of informal sporting and community activities

4 **Creekside Trails**
- Extensive creekside trails linking the Village Green nodes and residential areas and encouraging walking and cycling

5 **Secondary Passive Recreation Nodes**
- Potential to provide additional bbq shelters / seating areas to improve recreation choice and activation of creekline
- not required under VPA but suggested to improve community / recreation outcomes (subject to ongoing design and approval process)

6 **Informal Creekside Passive Areas**
- Informal areas along creekline linking the recreation nodes and providing spaces suited for picnics and nature based passive uses

7 **WSUD / Bio-Basins**
- Designed to minimise batters / basin walls and landscaped to become integrated feature of open space and trail network

KEY OPEN SPACE / COMMUNITY FACILITES REQUIRED UNDER VPA

1. Playground (District Playground) and junior skate surround to play space to connect with main pathway and other amenities
2. Shelter x 4 - inclusive of picnic facilities
3. Multi-purpose court including the provision for skate pad facilities, agility activities and the ball court area to allow for multiple application (basketball, futsal, netball)
4. Passive area (fencing, bag holders, water)
5. Toilet block - inclusive of separate male / female and PWD

Additional / detailed items to be located as required subject to detailed design:

- BBQ x 2 (incorporated with shelters)
- Irrigation to Village Green
- Potable water refill station
- Bins x 6
- Bicycle Rack x 1
- Fringing Vegetation establishment
- General seating throughout area x 6
- Pathways
- Lighting

Conserving and enhancing the natural site features and integrating with trails and small, informal passive recreation spaces

CONSERVATION + PASSIVE OPEN SPACE - KEY DESIGN DRIVERS

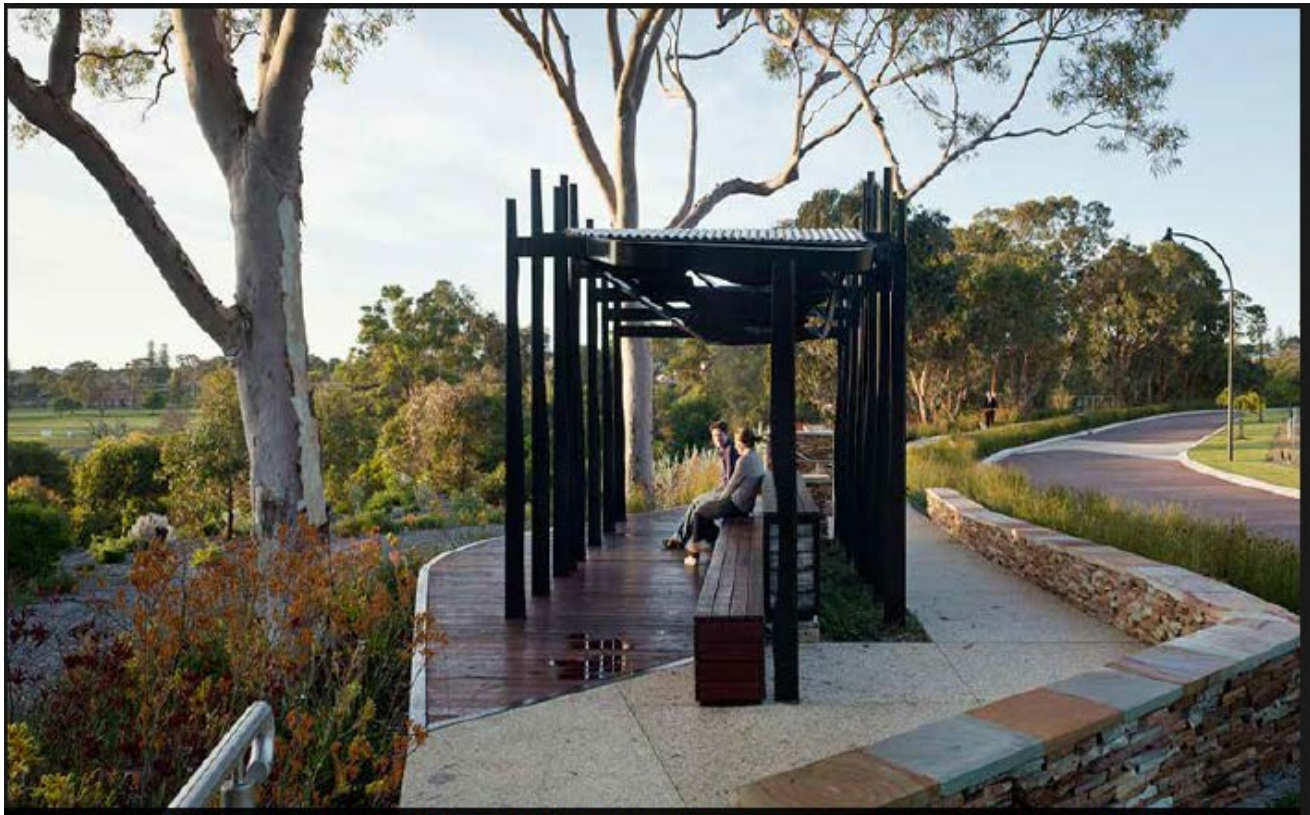
- Conserve and enhance existing vegetation and natural site features - potential to revegetate cleared spaces to strengthen the environmental qualities whilst creating a lower maintance and more natural setting
- Creating small picnic and passive recreation spaces that are easily accessible, visible and low maintenance but allow people to sit within and connect with nature
- Provide trails that offer a strong nature based experience but link with the wider open space and pedestrian network
- Nature based focus - minimising infrastructure, creating informal / natural character and focus on passive uses only (walking, picnics, interpretive / nature based activities)

Nature based trails that tie in with the wider open space network

Potential to incorpoate low scale signage and interpretive elements

Small picnic and seating spaces that are low maintenance and enhance the nature based recreational experience


1
Passive Nodes
• Passive picnic / seating / viewing outlook spaces created that sit within natural setting but that are easily accessible / visible from adjoining residential areas
2
Overland Flow
• Potential to fill dams to remove ongoing maintenance requirements and risk and regrade areas to manage overland flow from main gullies whilst still protecting existing vegetation
3
Trails
• Trails focus on providing nature based experience of key site features and integrated with wider open space and pedestrian network. Fencing to be integrated with the trail design to protect conservation areas.
4
Revegetation Zones
• Opportunity to revegetate cleared / open areas to enhance the environmental qualities and natural setting whilst also helping to reduce ongoing maintenance requirements



Potential to include feature outlooks as key nodes along the open space, street and trail network - utilising low maintenance / robust materials and finishes

THE OUTLOOKS - KEY DESIGN DRIVERS

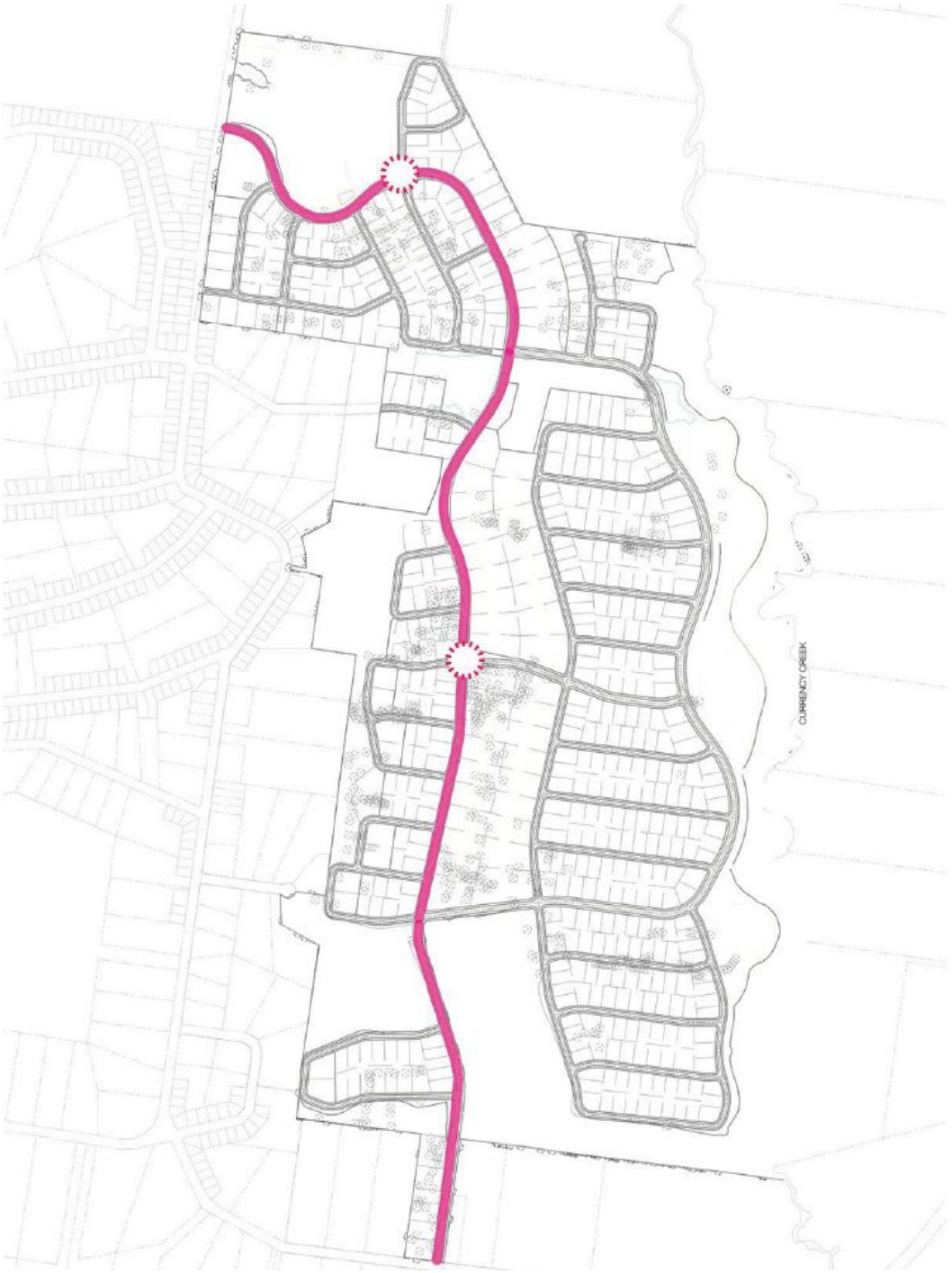
- Create feature viewing areas along the central ridge that offer elevated views towards the creekline and out over the community and distant landscape
- Position the outlooks in locations that maximise views but that also provide a landscape / community / wayfinding feature at key locations along the open space and trail network
- Outlooks can be located within parkland / biobank areas or as feature streetscape widenings that create view corridors
- Outlooks could include seating areas, platforms, feature landscaping / hardscaping, artwork / sculpture / signage - subject to detailed design and council input

Potential to add viewing areas / platforms within widenings of streets to create view corridors

Outlooks could have simple detailing whilst still being a key feature of the open space and recreational network

Potential to create iconic viewing platforms that frame views and become a feature of the community and recreational trails

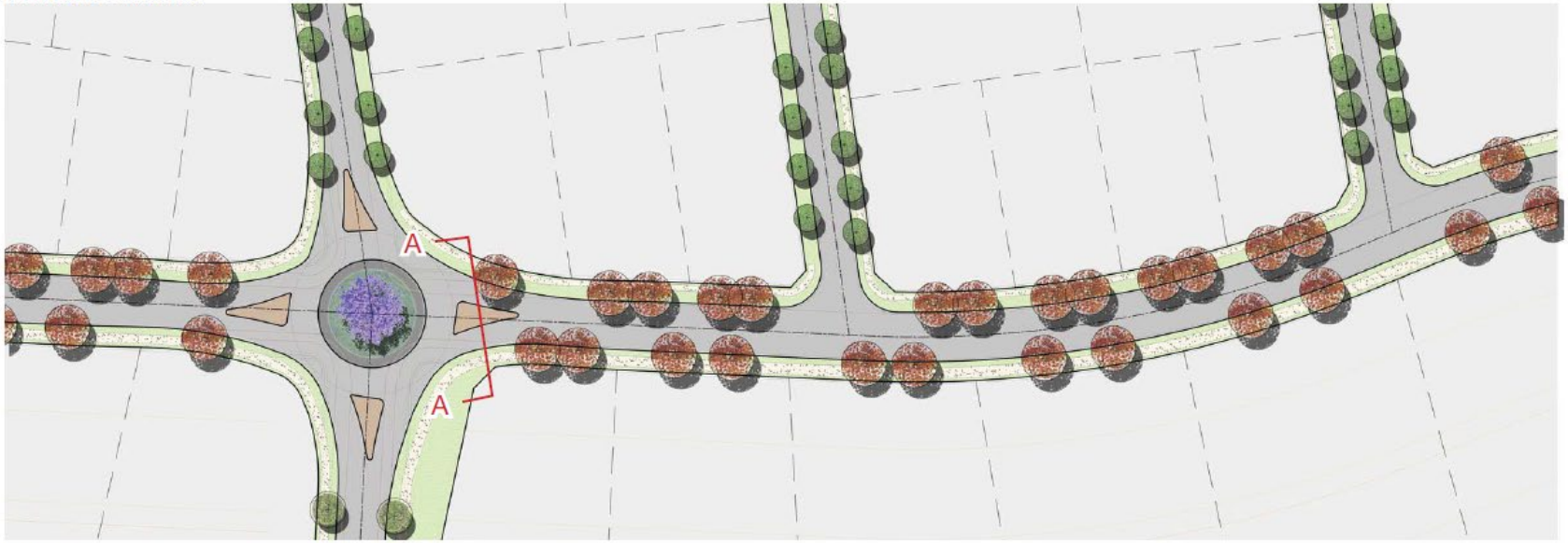
STREETSCAPE
ENTRANCE + COLLECTOR ROAD



STREETSCAPE

MAJOR COLLECTOR ROAD

SECTION/ELEVATION AA 1:200



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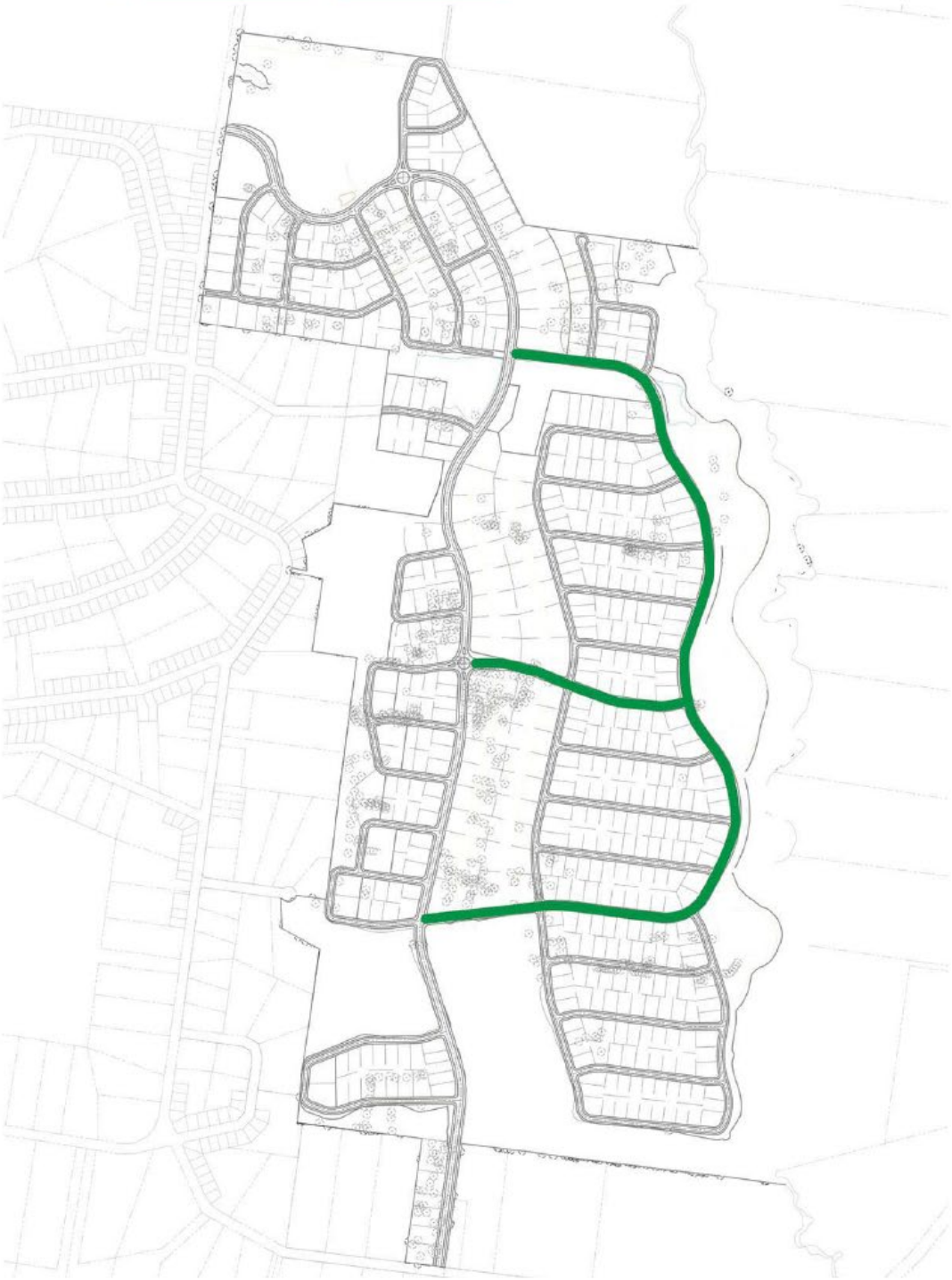
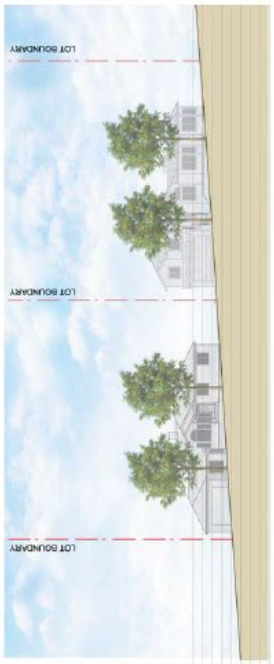
STREETSCAPE
KEY GREEN STREET

KEY GREEN STREETS

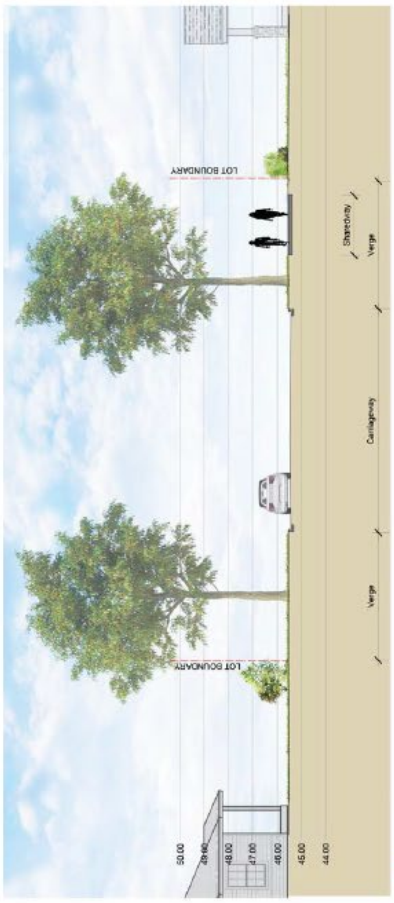


STREETSCAPE

KEY GREEN STREET



ELEVATION AA 1:500



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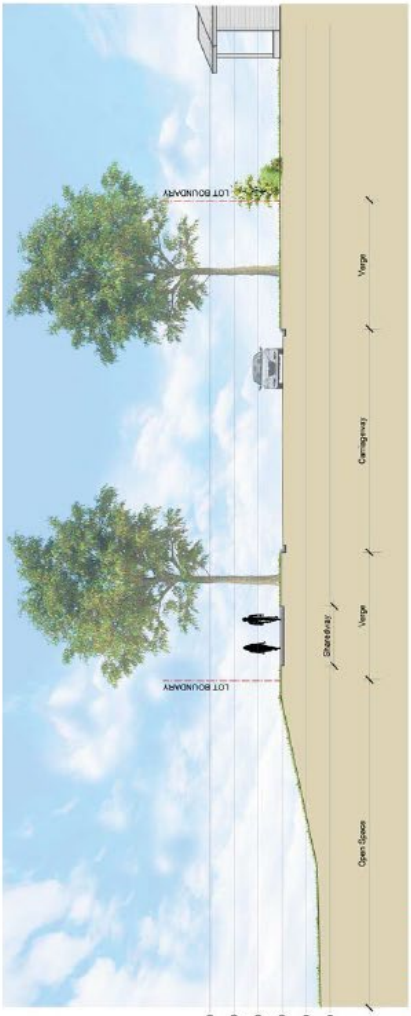

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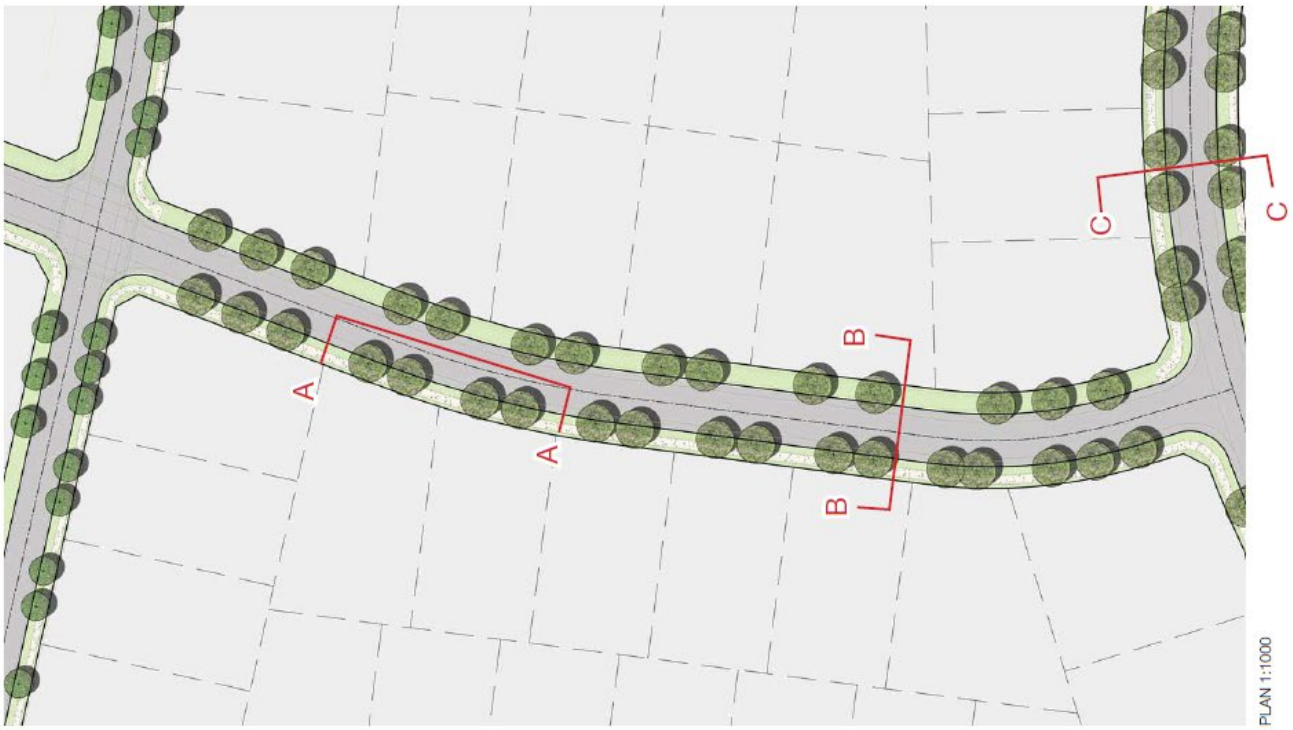
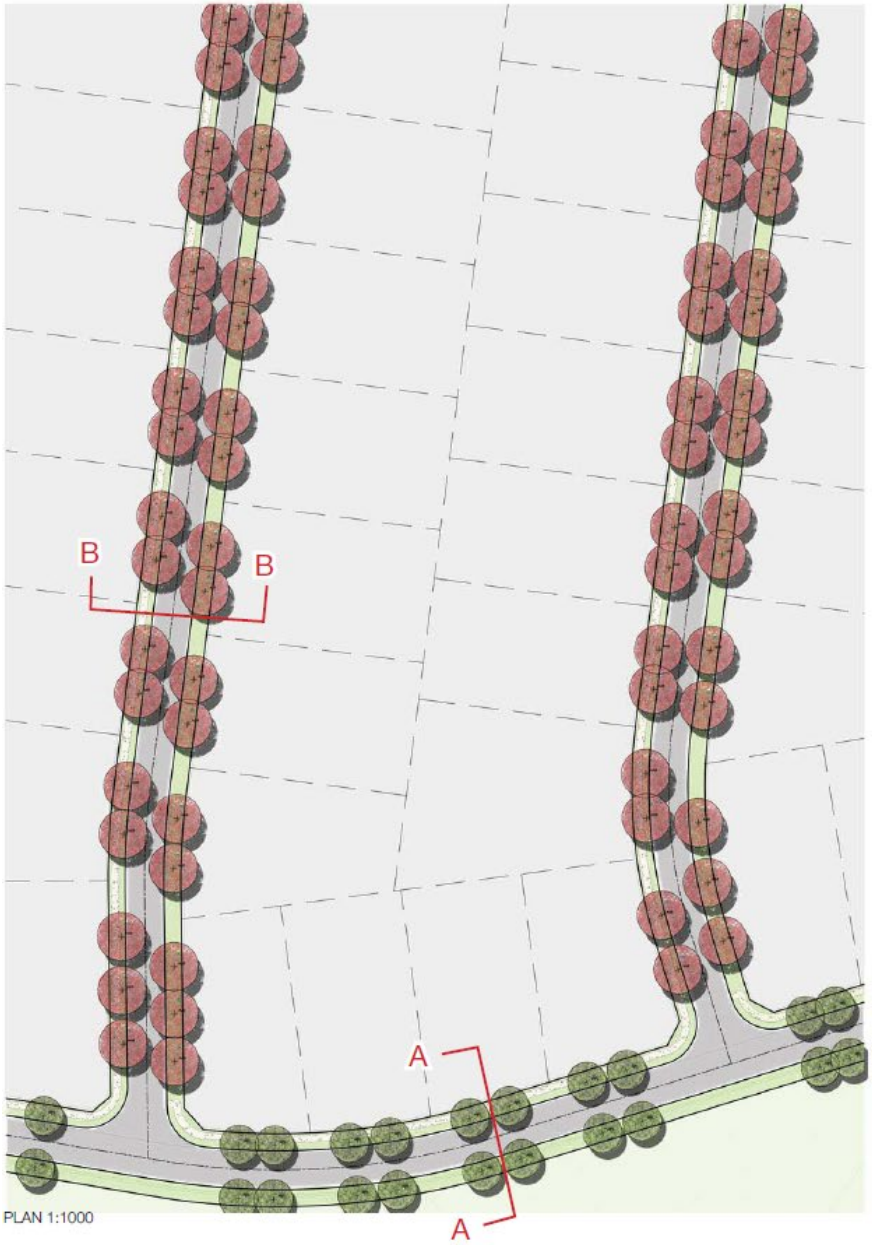


PLAN 1:1000

STREETSCAPE
LOCAL STREET

STREETSCAPE

LOCAL STREET



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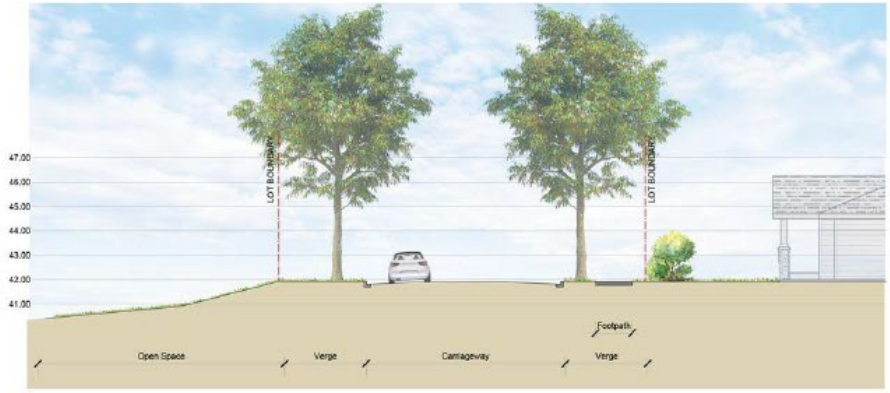

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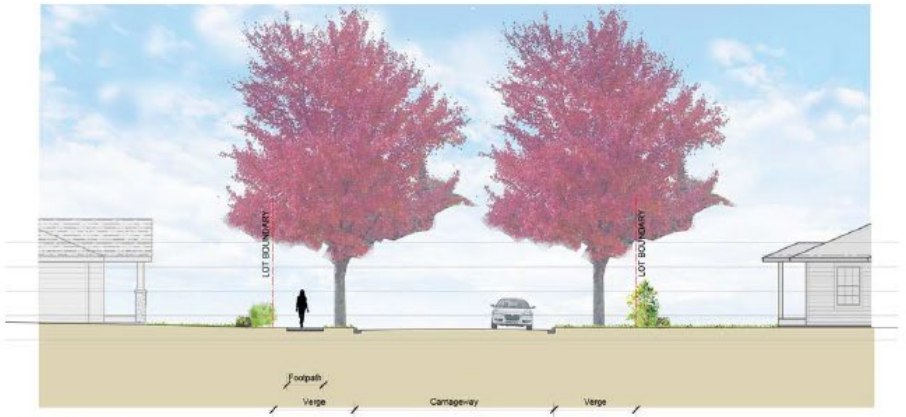

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