

Beveridge North West

Precinct Structure Plan

August 2019

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Precincts and Activity Centres

- precinct area
- national employment and innovation cluster
- Metropolitan Activity Centre - existing
- Metropolitan Activity Centre - future
- Activity Centre - existing and future
- education precinct
- health precinct
- industrial precinct - existing
- industrial precinct - future
- state-significant industrial precinct - existing
- state-significant industrial precinct - future

Transport

- transport gateway - major airport
- intermodal freight terminal (future)
- rail network
- train station
- tram network
- transport projects - potential future
- 1 Outer Metropolitan Ring/E6 reservation
- 2 Airport Rail Link

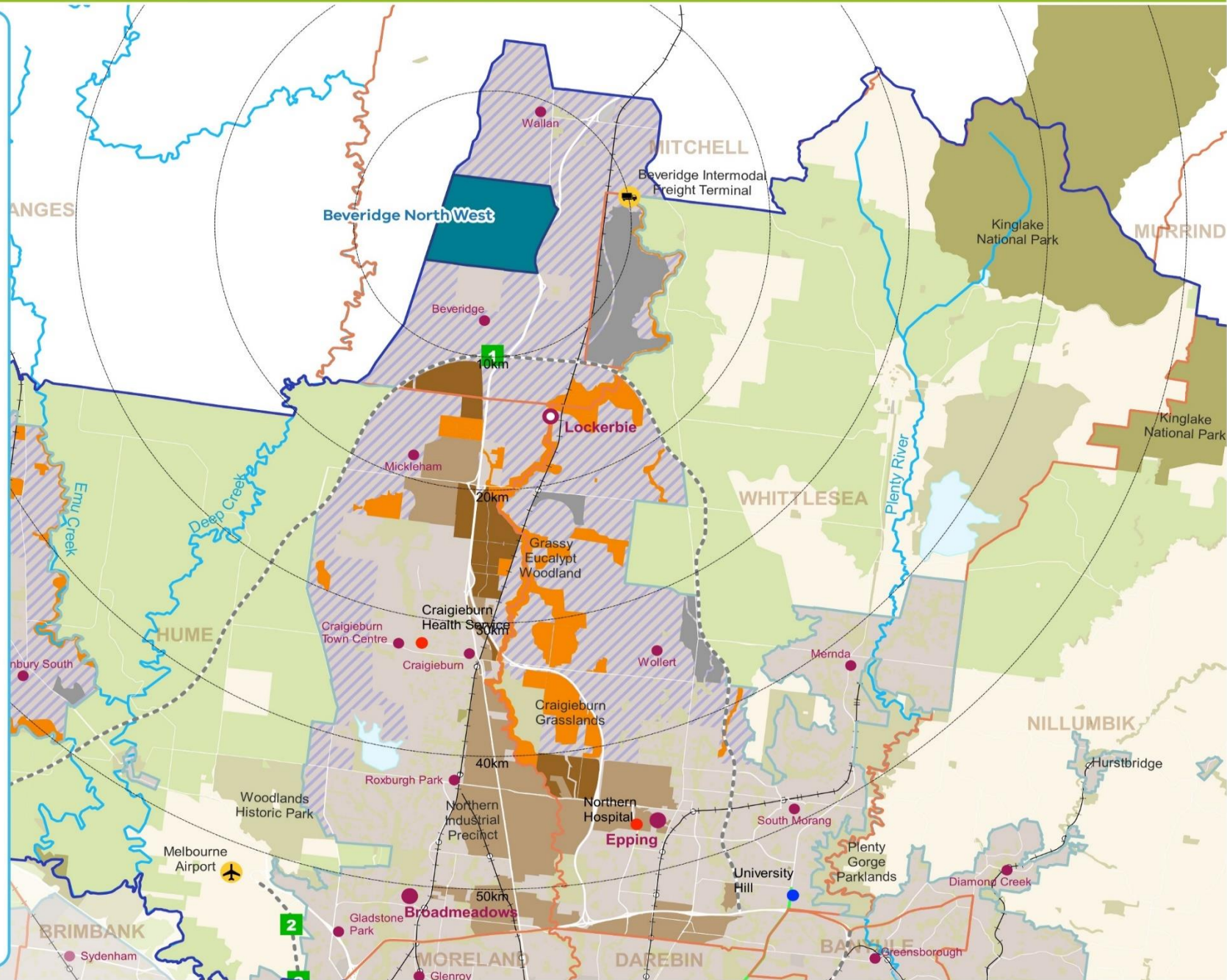
Environment

- waterway
- Conservation Area (as identified in the Biodiversity Conservation Strategy for Melbourne's growth area)
- waterbody
- national park / state park
- public open space
- green wedge

Administration

- urban growth boundary
- subregion boundary
- local government area boundary
- growth area
- urban area

Source: Northern Subregion, Department of Environment, Land, Water and Planning, 2017 (adapted)



1 INTRODUCTION

The Beveridge North West Precinct Structure Plan (the PSP) has been prepared by the Victorian Planning Authority (VPA) with the assistance of Mitchell Shire Council, Government agencies, service authorities and major stakeholders.

The PSP is a long-term plan for urban development. It describes how the land is expected to be developed, and how and where services are planned to support development.

Generally, the PSP:

- sets out plans to guide the delivery of quality urban environments in accordance with the Victorian Government guidelines
- enables the transition of non-urban land to urban land
- sets the vision for how the land should be developed, illustrates the future urban structure and describes the outcomes to be achieved by the future development
- outlines the projects required to ensure that future residents, visitors and workers within the area can be provided with timely access to services and transport necessary to support a quality and affordable lifestyle
- sets out objectives, requirements and guidelines for land use, development and subdivision
- provides government agencies, the council, developers, investors and local communities with certainty about future development
- addresses the requirements of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) in accordance with an endorsed program under Part 10.

The PSP is informed by:

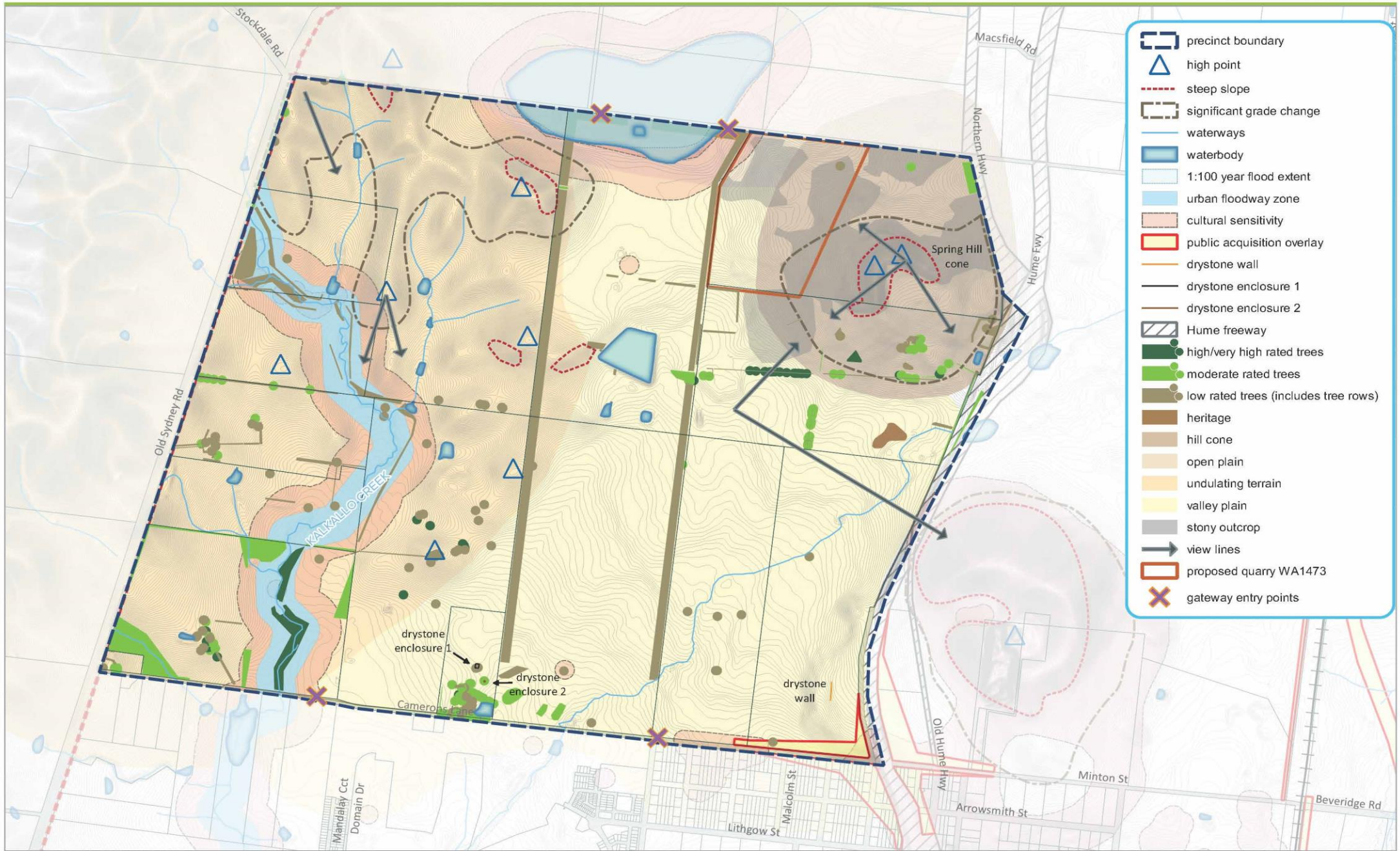
- *Plan Melbourne – Metropolitan Planning Strategy*, May 2017
- *The State Planning Policy Framework* as set out in the *Mitchell Planning Scheme*
- *The Growth Corridor Plans: Managing Melbourne’s Growth* (Growth Areas Authority, June 2012)

- The Local Planning Policy Framework as set out in the *Mitchell Shire Planning Scheme*
- *The Biodiversity Conservation Strategy and Sub Regional Species Strategies for Melbourne’s Growth Areas* (Department of Environment and Primary Industries, June 2013)
- *The Precinct Structure Planning Guidelines*.

The following planning documents have been developed in parallel with the PSP to inform and direct the future planning and development of the Precinct:

- The *Beveridge North West Infrastructure Contributions Plan* (ICP) requires development proponents to make a contribution toward infrastructure required to support the development of the Precinct
- The *Beveridge North West Background Report* (Background Report).

In preparing this PSP, the VPA has worked closely with Resilient Melbourne and Yarra Valley Water to encourage innovative approaches to community engagement and affordable housing.



- precinct boundary
- high point
- steep slope
- significant grade change
- waterways
- waterbody
- 1:100 year flood extent
- urban floodway zone
- cultural sensitivity
- public acquisition overlay
- drystone wall
- drystone enclosure 1
- drystone enclosure 2
- Hume freeway
- high/very high rated trees
- moderate rated trees
- low rated trees (includes tree rows)
- heritage
- hill cone
- open plain
- undulating terrain
- valley plain
- stony outcrop
- view lines
- proposed quarry WA1473
- gateway entry points

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1.1 How to read this document

This PSP guides land use and development where a planning permit is required under Schedule 3 to the Urban Growth Zone (Clause 37.07 of the *Mitchell Planning Scheme*), or any other provision of the Mitchell Planning Scheme that references this PSP.

A planning application and subsequent planning permit must implement the outcomes of the PSP. The outcomes are expressed as the VISION AND OBJECTIVES.

Each element of the PSP contains requirements and guidelines as relevant.

Requirements must be adhered to in developing the land. Where they are not demonstrated in a permit application, requirements will usually be included as a condition on a planning permit whether or not they take the same wording as in the structure plan. A requirement may reference a plan, table or figure in the structure plan.

Guidelines express how discretion will be exercised by the responsible authority in certain matters that require a planning permit. If the responsible authority is satisfied that an application for an alternative to a guideline, implements the outcomes, the responsible authority may consider the alternative. A guideline may include or reference a plan, table or figure in the PSP.

Meeting these **Requirements** and **Guidelines** will implement the vision of the PSP.

Conditions that must be included in a planning permit are outlined in Schedule 3 to the Urban Growth Zone (UGZ) in the Mitchell Planning Scheme.

Development must also comply with other Acts and approvals where relevant e.g. the Environment Protection and Biodiversity Conservation Act 1999 in the case of biodiversity or the Aboriginal Heritage Act 2006 in the case of cultural heritage, amongst others.

Not every aspect of the land's use, development or subdivision is addressed in this structure plan. A responsible authority may manage development and issue permits as relevant under its general discretion.

1.2 Infrastructure Contributions Plan

Development proponents within Beveridge North West Precinct will be bound by the *Beveridge North West Infrastructure Contribution Plan* (the ICP). The ICP sets out requirements for infrastructure funding across the Beveridge North West Precinct.

The ICP will be incorporated in the *Mitchell Planning Scheme*.

Development proponents wishing to commence works prior to incorporation of this ICP may enter into agreements with Mitchell Council under Section 173 of the *Planning and Environment Act 1987* to expedite contributions.

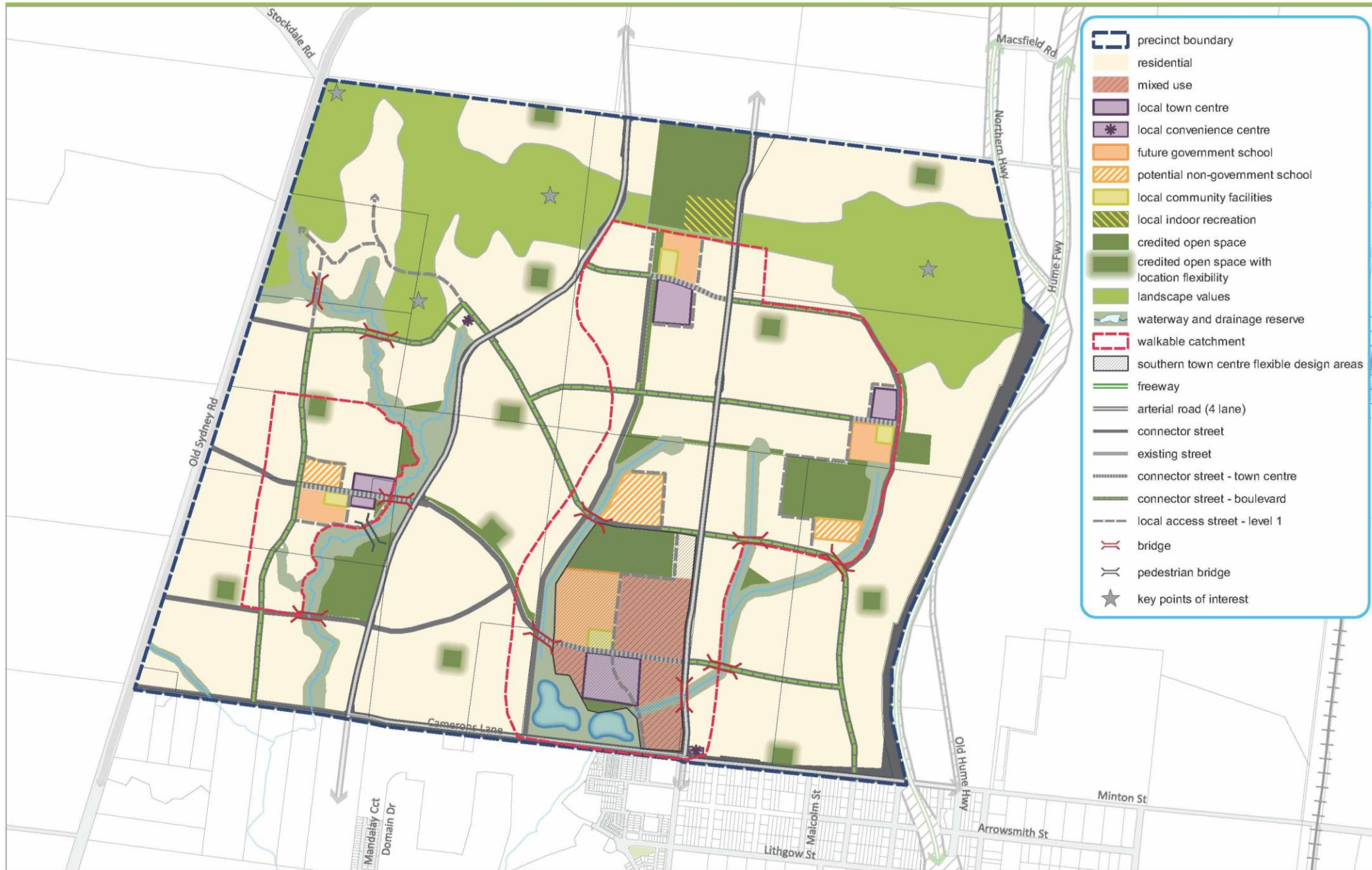
1.3 Background Information

The Beveridge North West PSP Background Report provides detailed background information relating to the precinct, including its local and metropolitan context, history, landform and topography, biodiversity, drainage, open space, transport infrastructure, employment and community facilities. The report also summarises various background technical studies that have informed the preparation of the PSP Land to which this PSP applies.

1.4 Land to which this PSP applies

Beveridge North West, PSP 1059, covers 1,279 hectares located approximately 40km north of the Melbourne CBD. The precinct is bounded by the Hume Freeway to the east, Camerons Lane to the south, Old Sydney Road to the west and Hadfield Road reservation to the north. The precinct is illustrated on Plan 2-Precinct Features.

The Beveridge North West precinct contains generous plains, gently sloping valleys and undulating hills inclusive of distinctive hilltops and remnant volcanic cones, while Kalkallo Creek flows through the western portion of the PSP. A basalt flow containing a high-quality hard rock resource has been identified to the west of Spring Hill.



2 OUTCOMES

2.1 Vision

The Beveridge North West PSP provides a strong framework for the delivery of a resilient community through the early delivery of facilities, flexibility in planning, sensitive response to the landscape and an innovative approach to the delivery of services.

The precinct will be defined by its high-quality residential neighbourhoods - located between ridgelines, prominent volcanic cones and rolling hills. A significant network of open spaces formed by waterways, hilltops and linear parks will connect the diverse residential neighbourhoods within the area.

Beveridge North West will be home to resilient communities who will have early access to a range of facilities, including health care, education, recreation and community infrastructure. These will be located adjoining local town centres with the precinct anchored by a viable mixed-use town centre at the junction of the waterways and Camerons Lane.

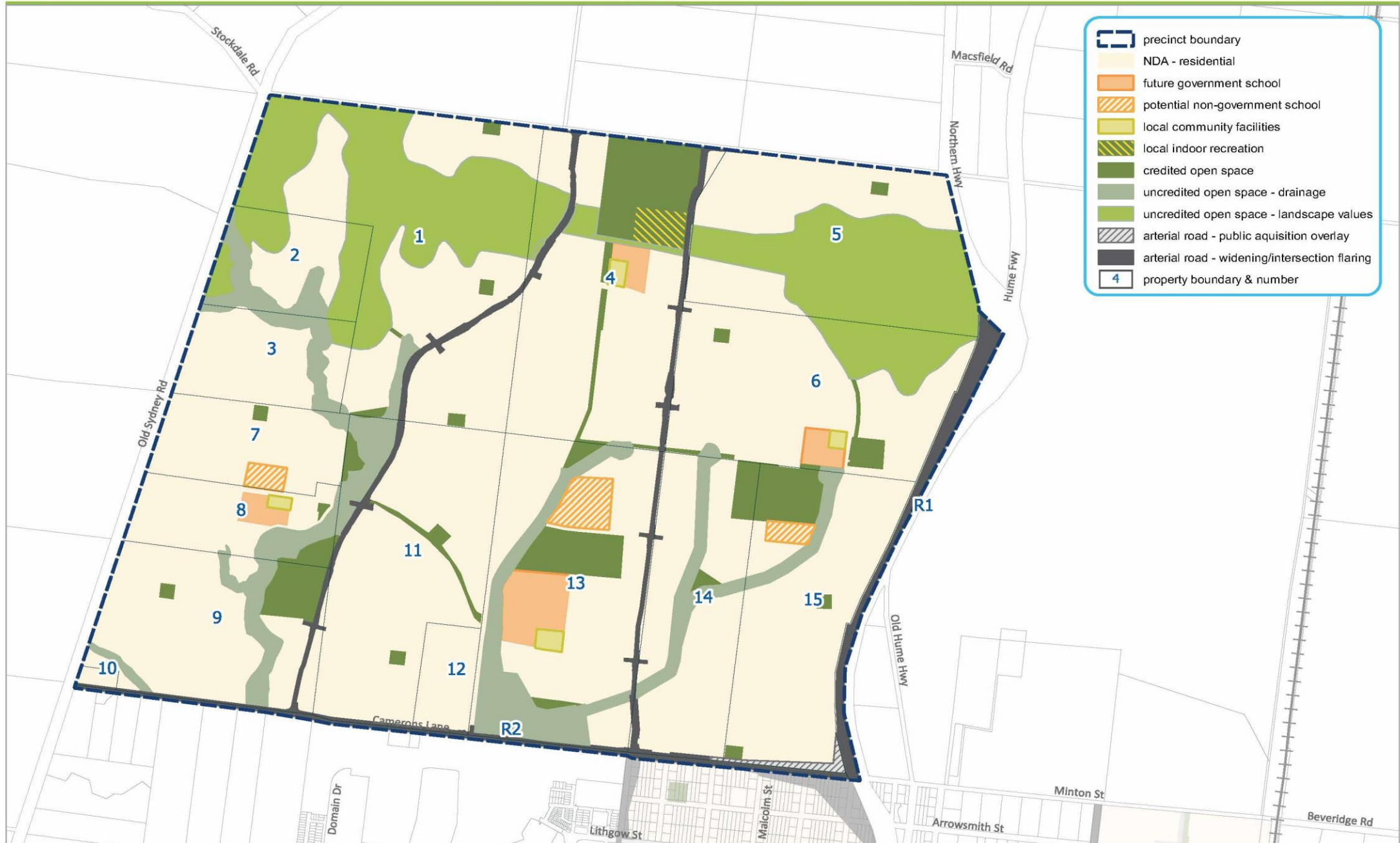
The Precinct will take full advantage of planned infrastructure, including an efficient connection to the Hume Freeway via the future construction of Camerons Lane Interchange and will be supported by a series of local arterial roads that can accommodate high frequency public transport. High amenity streets and trails will encourage people to cycle and walk to key local destinations. The orientation of the local road network will emphasise the visually important landscape features, particularly Spring Hill and the hill tops to the north. This will create a unique sense of place for future residents.

Future residents will enjoy genuine diversity of housing, which will range from conventional residential lots through to well-designed higher density housing near the town centres. The unique topography of the site offers the opportunity to provide bespoke housing, that responds to the landscape through design and orientation, on the hillsides.

The most valued parts of the landscape will be revived and enhanced through the rehabilitation and replanting of Kalkallo Creek and the hilltops, coupled with the construction of wetlands and water retention facilities on the open plains.

2.2 Objectives

| KEY PSP OBJECTIVES | |
|--------------------|---|
| O1 | Provide a framework for a high amenity and integrated urban environment that encourages a sense of place and community, as well as responds to the existing natural, cultural and built features. |
| O2 | Facilitate housing affordability and choice at densities that supports local services, access to jobs and sustainable transport options. |
| O3 | Support investment in an innovative and vibrant local and regional economy within a network of highly accessible activity and employment centres that support jobs and business activity. |
| O4 | Identify and guide timely delivery of essential adaptable and multi-purpose open space, community and other essential infrastructure to support development. |
| O5 | Facilitate 20-minute neighbourhoods by providing for an integrated transport network that supports active and public transport options, movement of goods and connections to jobs. |
| O6 | Facilitate safe, resilient and water sensitive urban environments that respond to climate change and other hazards. |
| O7 | Provide appropriate transitions and interfaces with adjoining and existing land uses. |



- precinct boundary
- NDA - residential
- future government school
- potential non-government school
- local community facilities
- local indoor recreation
- credited open space
- uncredited open space - drainage
- uncredited open space - landscape values
- arterial road - public acquisition overlay
- arterial road - widening/intersection flaring
- property boundary & number

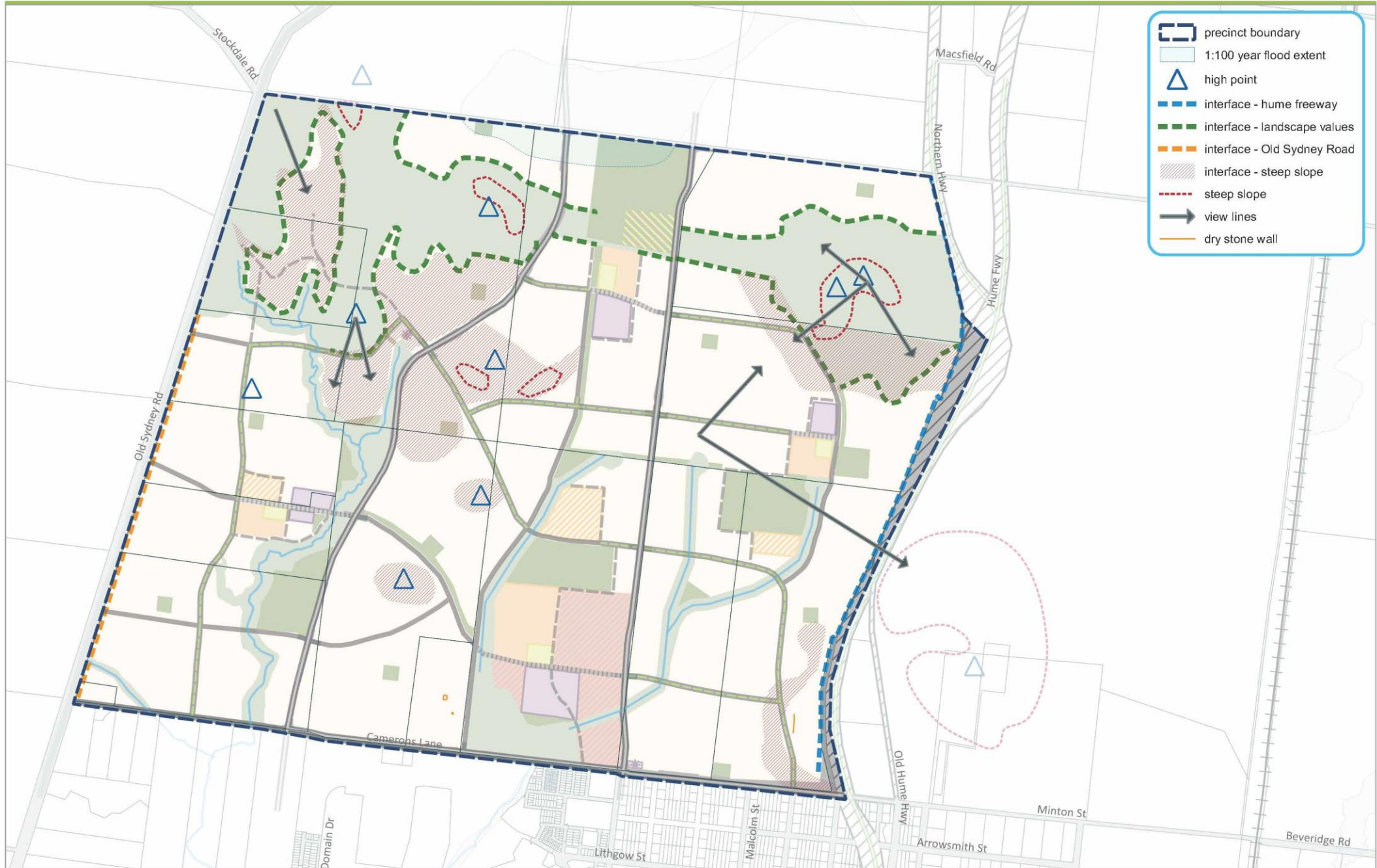
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2.3 Precinct Land Use Budget

Table 1: Precinct Land Use Budget

| Description | PSP 1059 | | |
|--|-----------------|---------------|---------------|
| | HECTARES | % OF TOTAL | % OF NDA |
| TOTAL PRECINCT AREA (ha) | 1,279.35 | | |
| Transport | | | |
| Arterial Road - Existing Road Reserve | 23.94 | 1.87% | 2.94% |
| Arterial Road - Public Acquisition Overlay | 2.60 | 0.20% | 0.32% |
| Arterial Road - New / Widening / Intersection Flaring (ICP land) | 36.97 | 2.89% | 4.54% |
| Sub-total Transport | 63.52 | 5.0% | 7.79% |
| Community & Education | | | |
| Government School | 22.39 | 1.75% | 2.75% |
| Potential Non-Government School | 12.10 | 0.95% | 1.48% |
| Local Community Facility (ICP land) | 4.30 | 0.34% | 0.53% |
| Sub-total Education | 43.79 | 3.4% | 5.4% |
| Open Space | | | |
| Service Open Space | | | |
| Waterway and Drainage Reserve | 89.92 | 7.03% | 11.03% |
| Other | 184.32 | 14.41% | 22.61% |
| Sub-total Service Open Space | 274.24 | 21.44% | 33.64% |
| Credited Open Space | | | |
| Local Sports Reserve (ICP land) | 55.31 | 4.3% | 6.79% |
| Local Network Park (ICP land) | 27.31 | 2.1% | 3.35% |
| Sub-total Credited Open Space | 82.62 | 6.5% | 10.13% |
| Regional Open Space | | | |
| Metropolitan Open Space (state funded) | 0.00 | 0.0% | 0.00% |
| Municipal Open Space (council funded) | 0.00 | 0.0% | 0.00% |
| Sub-total Regional Open Space | 0.00 | 0.0% | 0.00% |
| Total All Open Space | 356.86 | 27.9% | 43.78% |
| TOTAL NET DEVELOPABLE AREA - (NDA) Ha | 815.18 | 63.72% | - |
| NET DEVELOPABLE AREA - RESIDENTIAL (NDAR) Ha | 815.18 | 63.72% | - |
| NET DEVELOPABLE AREA - EMPLOYMENT (NDAE) Ha | 0.00 | 0.00% | - |



- precinct boundary
- 1:100 year flood extent
- high point
- interface - hume freeway
- interface - landscape values
- interface - Old Sydney Road
- interface - steep slope
- steep slope
- view lines
- dry stone wall

3 IMPLEMENTATION

3.1 Image, Character, Heritage and Housing

3.1.1 Image, character, landscape & heritage

Requirements

| | |
|-----------|--|
| R1 | <p>Subdivision layouts, lot diversity and housing typologies must respond to the natural features of the area, including (but not limited to):</p> <ul style="list-style-type: none"> • topographical features and slopes • landscape Values • Kalkallo Creek • rural landscape interface west of old Sydney Road. |
|-----------|--|

GUIDELINES

| | |
|-----------|--|
| G1 | Subdivisions that retain lots around existing dwellings should be designed to ensure that the future subdivision of retained lots will appropriately integrate with the surrounding subdivision layout. |
| G2 | Except for the southern local town centre, subdivision layouts and development should respond to and address the relevant provisions of the Urban Design Guidelines for Victoria. |
| G3 | <p>Lots should front (in order of priority where a lot fronts multiple elements):</p> <ul style="list-style-type: none"> • public open space • landscape areas • local access streets • connector roads • arterial roads. |

| | |
|------------|---|
| G4 | Where possible, salvaged rocks should be incorporated into the design of waterways, retaining structures, fences and other landscape features. |
| G5 | Significant landscape features, such as high points, vegetation, open space and waterways, should be used as focal points for view lines along streets. |
| G6 | Landmark sites on gateway entry points where shown on Plan 2 should be planned, developed and landscaped to create a sense of arrival and entry. |
| G7 | Subdivision design should incorporate natural and constructed design elements which respond to local heritage, neighbouring land uses and topography to assist in place making and the achievement of a “sense of place”. |
| G8 | Aboriginal and historic cultural heritage should be recognised through the design of public places, infrastructure and interpretive installations. Opportunity should be explored through cultural heritage interpretation trails along public path networks in areas of known historic cultural history or areas of Aboriginal cultural heritage sensitivity, in consultation with relevant stakeholders. |
| G9 | Signage or interpretive opportunities should be integrated into the public realm to contribute to the knowledge and understanding of the local area’s Aboriginal cultural and historic cultural history. |
| G10 | Subdivision design should respond sensitively to the visual setting and character of heritage places. |
| G11 | <p>Dry stone walls that are retained should:</p> <ul style="list-style-type: none"> • be situated within public open space or a street reserve to the satisfaction of the responsible authority • be incorporated into subdivision design to minimise disturbance to the walls (e.g. utilisation of existing openings for vehicle and pedestrian access) • have a suitable landscape interface to minimise maintenance requirements (for example mulch, garden bed or gravel), which does not encourage public access immediately adjacent to the retained walls |

| | |
|------------|---|
| | <ul style="list-style-type: none"> • be checked by a suitably qualified professional for works required to preserve the structural integrity of the wall in a manner suitable for the future context • retain any post and wire or post and rail elements, with any wire protruding beyond the vertical face of the wall reinstated to its original position or removed. |
| G12 | <p>Any reinstatement or repair of dry stone walls should be undertaken by a suitably qualified professional and is to be consistent with the construction style of the original wall, with edges around wall openings made secure (cemented) to the satisfaction of the responsible authority. Reinstatement is to use stone from (in order of priority):</p> <ul style="list-style-type: none"> • the original wall in that location (including fallen stone adjacent to the wall) • a nearby section of the wall approved to be removed • any adjacent land containing wall parts which can be recovered • any walls approved for removal in the nearby area (including any stone which has been stockpiled by the responsible authority). <p>A list of suitably qualified professionals can be obtained from the responsible authority and the Dry Stone Walls Association of Australia.</p> |
| G13 | <p>Tree rows where shown on Plan 8 should be retained and incorporated into the subdivision design and located within the public realm where practicable.</p> |
| G14 | <p>A consistent suite of lighting and furniture should be used across neighbourhoods, appropriate to the type and role of street or public space.</p> |

3.1.2 Housing

| REQUIREMENTS | |
|--------------|---|
| R2 | <p>Subdivision must provide for dwelling and lot size diversity, as indicated by Table 3.</p> |

| | |
|-----------|--|
| R3 | <p>Subdivision of residential land within the walkable catchment and mixed use areas shown on Plan 3 must achieve an overall average minimum density of 30 dwellings per net developable hectare.</p> <p>Applications for subdivision that can demonstrate how target densities can be achieved over time shall be considered.</p> |
| R4 | <p>Development along the Sensitive Interface Areas identified in Plan 5 must respond to and achieve the outcomes identified in Table 2.</p> |

| GUIDELINES | |
|------------|---|
| G15 | <p>Subdivision of land outside the walkable catchment shown on Plan 3 should achieve the overall average minimum densities as show in Table 4.</p> <p>Applications for subdivision that can demonstrate how target densities can be achieved over time shall be considered.</p> |
| G16 | <p>Subdivision of land should provide up to 10% of the NDA for the provision of affordable housing as defined by the <i>Planning & Environment Act 1987</i> (as amended).</p> |
| G17 | <p>Land for affordable housing should:</p> <ul style="list-style-type: none"> • be provided within walkable catchments • provide for a range of housing typologies to meet demonstrated local need. |
| G18 | <p>Subdivision applications for super-lots identified for future medium density, high density, or integrated housing should demonstrate:</p> <ul style="list-style-type: none"> • expected dwelling yield • connections and active interfaces with adjacent streets, open space and waterways • safe and effective internal vehicle and pedestrian circulation • indicative treatments for sensitive interfaces, as identified in Plan 5. |

| | |
|------------|---|
| G19 | Residential subdivision should include a broad range of lot configurations including a variety of lot sizes, lot widths and lot depths. |
| G20 | <p>Specialised housing forms, such as retirement living or aged care should:</p> <ul style="list-style-type: none"> • be integrated with adjoining development • be accessible by public transport • not present a barrier to movement through the surrounding road network • be located within walkable catchments as shown on Plan 3. |

3.1.3 Topography

REQUIREMENTS

| | |
|-----------|---|
| R5 | <p>Subdivision and development applications for land on slope greater than 10% must respond to and address the dwelling construction methods as indicated by Figures 1, 2 & 3 and Table 5.</p> <p>Alternative responses utilising suspended floors instead of split levels will also be considered.</p> |
|-----------|---|

GUIDELINES

| | |
|------------|--|
| G21 | <p>Any retaining structures within public and private spaces (except for those which are part of a building) should be:</p> <ul style="list-style-type: none"> • no more than 1.0 metres in height between a dwelling and a street or public space, or where visible from a street or public space • set back at least 1.0 metres from any building envelope • staggered, with a minimum 0.75 metre distance between each stagger to allow for the inclusion of landscaping where cutting and filling is deeper than 1.0 metres • positioned so that associated drainage infrastructure and structural foundation are fully located within the same lot. |
|------------|--|

Table 2: Sensitive Interface Area Outcomes

| DESCRIPTION | SENSITIVE INTERFACE AREAS | | | |
|---------------------------------|--|--|---|--|
| | A OLD SYDNEY ROAD/URBAN GROWTH BOUNDARY | B LANDSCAPE VALUES | C STEEP SLOPES | D HUME FREEWAY |
| Depth of Interface | First rows of buildings. | First row of buildings. | N.A. | First row of buildings. |
| General | Must be a single building on the lot. | | Must respond sensitively to steep slopes. | Must meet VicRoads noise requirements. |
| Building Setbacks and Interface | Minimum 10m setback from Old Sydney Road reserve. Minimum 3m side boundary setbacks. Building height should not exceed 1 storey above ground. | The height of buildings should not impact the view lines into the RCZ, which should be maintained at the equivalent of 2 storeys (above ground). | | Must provide an internal road adjacent to the acoustic noise wall as demonstrated in the freeway interface cross section – see Appendix 4.5. |
| Bushfire Management | Minimum separation of 19m from vegetation in Old Sydney Road Reserve. Setback may include edge road and is subject to further refinement through a site management plan. | Minimum separation of 19m from the edge of the Hilltop Reserve/Landscape Value areas. Setback may include edge road and is subject to further refinement through a site management plan. | | None |

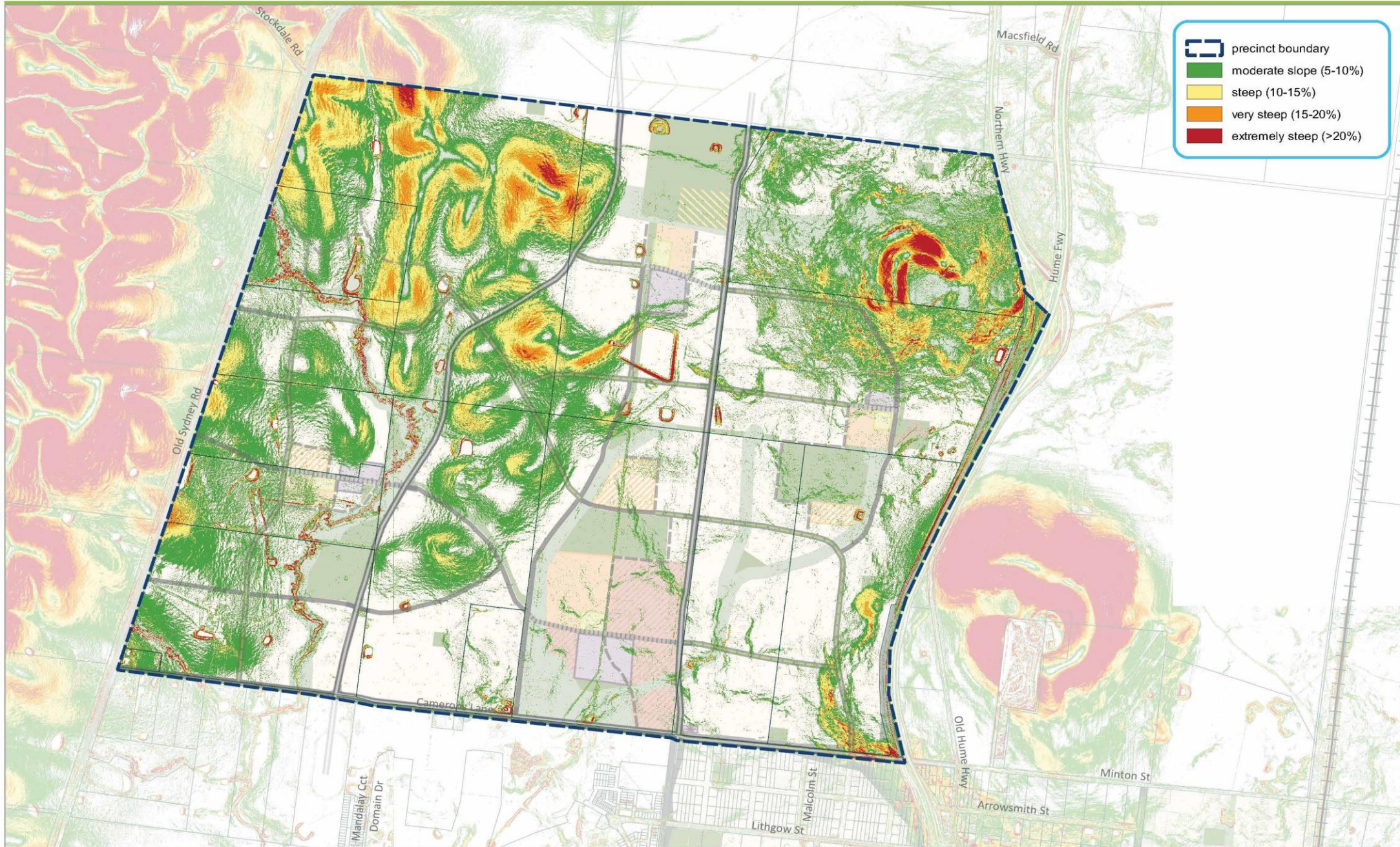
Table 3: Housing type by lot size

Table 3 is intended to provide guidance on the achievement of housing diversity objectives by providing an example of how variation in lot sizes supports the delivery of a broad range of housing types.

| HOUSING TYPES THAT MAY BE SUPPORTED | LOT SIZE CATEGORY (M ²) | | |
|--|-------------------------------------|-----------|------|
| | <300 | 300 - 600 | >600 |
| Small Lot Housing including townhouses and attached, semi-detached and detached houses | ✓ | | |
| Dual occupancies, duplexes | ✓ | ✓ | ✓ |
| Detached houses | | ✓ | ✓ |
| Multi-unit housing sites including terraces, row houses and villas | | ✓ | ✓ |
| Walk up flats and Apartments | | | ✓ |

Table 4: Housing Density Guide

| RESIDENTIAL TYPE | NDAR (HA) | DWELL / NDHA | DWELLINGS |
|---|---------------|--------------|---------------|
| Residential within walkable catchment (applied RGZ) | 238.43 | 30.00 | 7,153 |
| Standard residential outside walkable catchment (applied GRZ) | 380.08 | 17.00 | 6,461 |
| Residential outside walkable catchment - Sensitive Interface Area A (applied GRZ) | 13.00 | 9.50 | 124 |
| Residential outside walkable catchment - Sensitive Interface Area B (applied GRZ) | 8.87 | 15.50 | 137 |
| Residential outside walkable catchment - Sensitive Interface Area C (applied GRZ) | 130.67 | 9.00 | 1,176 |
| Mixed use | 27.98 | 30.00 | 840 |
| Town Centre (applied CZ1) | 15.81 | 25.00 | 395 |
| Totals Residential Yield Against NDA | 814.85 | 20 | 16,286 |
| Anticipated population @ 2.8 persons per dwelling | | | 45,601 |
| Anticipated population @ 3.1 persons per dwelling | | | 50,487 |



- precinct boundary
- moderate slope (5-10%)
- steep (10-15%)
- very steep (15-20%)
- extremely steep (>20%)

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Figure 1: Dwelling constructed on 10-15% Slope

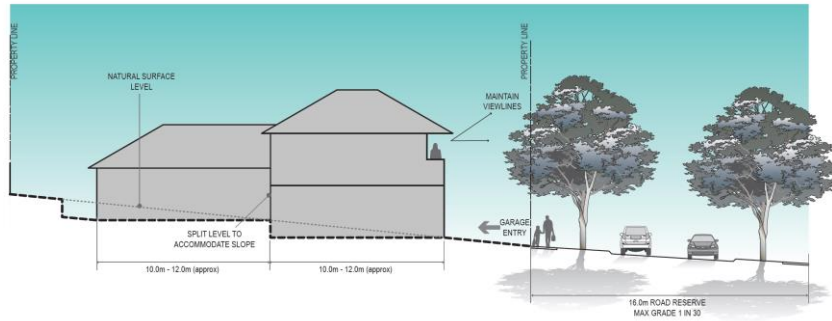
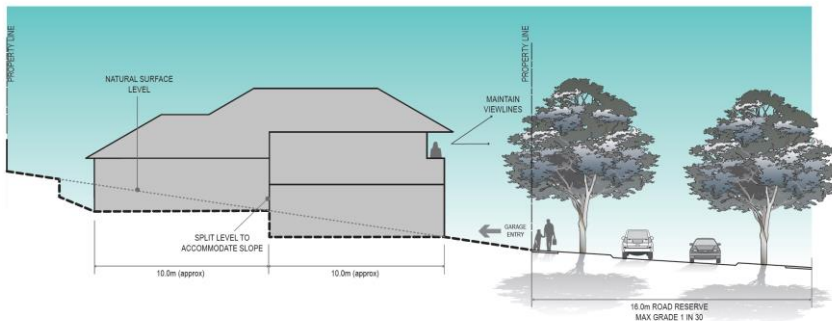


Figure 2: Dwelling constructed on 15-20% Slope



FLAT - Land with a slope gradient less than 5%

MODERATE SLOPE - Land with a slope gradient of between 5% and 10%

STEEP - Land with a slope gradient of between 10% and 15%

VERY STEEP - Land with a slope gradient of between 15% and 20%

EXTREMELY STEEP - Land with a slope gradient of more than 20%

Figure 3: Dwelling constructed on greater 20% Slope

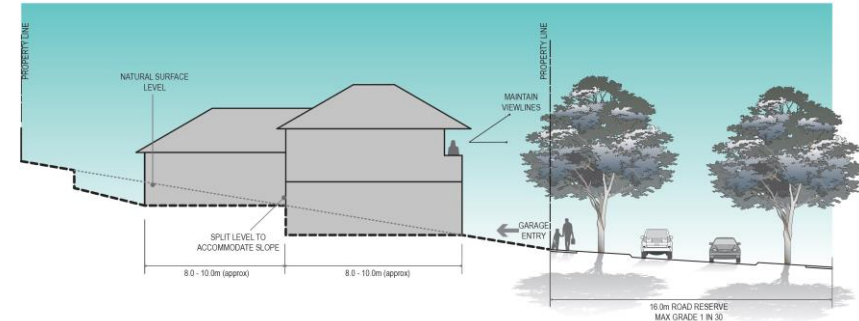


Table 5: Sloping Land

The following table provides assistance in interpreting the definition and categories of slope. It should be referred to in conjunction with Plan 6 and the requirements and guidelines above.

| SLOPE GRADIENT (RISE:RUN) | SLOPE GRADIENT (%) | SLOPE ANGLE (DEGREES) |
|---------------------------|--------------------|-----------------------|
| 1:3 | 33% | 18.43 |
| 1:4 | 25% | 14.04 |
| 1:5 | 20% | 11.31 |
| 1:6.7 | 15% | 8.49 |
| 1:10 | 10% | 5.71 |
| 1:20 | 5% | 2.86 |

3.2 Town Centres & Employment

3.2.1 Town Centres

Table 6: Town Centre Hierarchy – External to Precinct

| EXTERNAL TOWN CENTRE | RETAIL FLOOR SPACE | LOCATION AND ANCILLARY USES |
|--|----------------------|---|
| Mandalay Estate Town Centre | 5,000 m ² | Located on the corner of Camerons Lane and Patterson Road south of the precinct to service the community in Beveridge Central and Mandalay Estate. The town centre is located with a State Primary School and Community Centre. |
| Beveridge Central Local Convenience Centre | 3,000 m ² | Located on the corner of Camerons Lane and Patterson Street, adjacent to the planned town centre in the Mandalay Estate. The centre may include a small line supermarket/specialty retail and small office uses. |
| Lockerbie North Northern Town Centre | 9,000 m ² | Located to service the community to the east of the Hume Freeway. |

Table 7: Beveridge North West Town Centre Hierarchy

| INTERNAL TOWN CENTRE | RETAIL FLOOR SPACE | COMMERCIAL FLOOR SPACE | LOCATION AND USES |
|----------------------------|----------------------|------------------------|---|
| Southern LTC1 | 6,300m ² | 2,700m ² | On the Eastern Arterial (Patterson Road/E14 Extension) that runs north-south and adjoins a planned mixed-use area, schools and open spaces. The Southern LTC1 is identified to be larger than the other three LTCS. |
| Eastern LTC2 | 3,300m ² | 1,400m ² | East of the PSP area between the Eastern Arterial (Patterson Road/E14 Extension) and the Hume Freeway. |
| Northern LTC3 | 6,300 m ² | 2,700m ² | North of the PSP area between the Western Arterial and Eastern Arterial (Patterson Road /E14 Extension). |
| Western LTC4 | 6,300m ² | 2,700m ² | West of the PSP area between the Western Arterial and Old Sydney Road to the west. |
| Local Convenience Centre 1 | 1000m ² | | West of the PSP area on the Western Arterial and north-east of LTC4. |
| Local Convenience Centre 2 | 1000m ² | | On the north eastern corner of the intersection between Camerons Lane and the Eastern Arterial. |

Table 8: Anticipated Employment Creation within Precinct

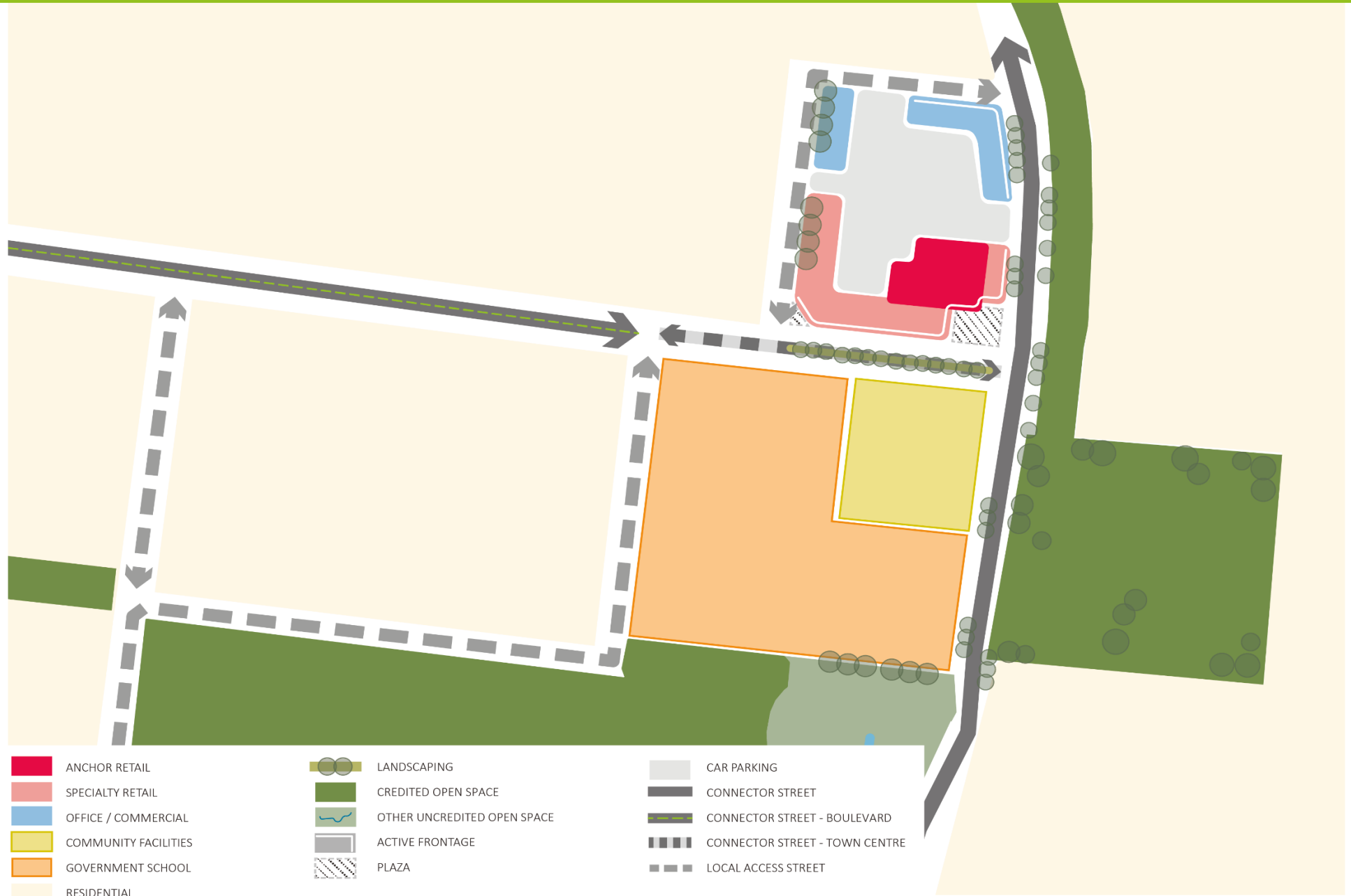
| LAND USE | MEASURE | TOTAL QUANTITY IN PSP | ESTIMATED JOBS |
|---------------------------------|------------------------|-----------------------|----------------|
| Community Facility CI-01 | 10 jobs/hectare | 1.20 | 12 |
| Community Facility CI-02 | 10 jobs/hectare | 0.80 | 8 |
| Community Facility CI-03 | 10 jobs/hectare | 1.50 | 15 |
| Community Facility CI-04 | 10 jobs/hectare | 0.80 | 8 |
| All Community Facilities | 10 jobs/hectare | 9.29 | 93 |
| Local Town Centre LTC1 | 40 jobs/hectare | 7.00 | 280 |
| Local Town Centre LTC2 | 40 jobs/hectare | 2.00 | 80 |
| Local Town Centre LTC3 | 40 jobs/hectare | 4.00 | 160 |
| Local Town Centre LTC4 | 40 jobs/hectare | 1.86 | 74 |
| All Town Centres | 40 jobs/hectare | 15.56 | 622 |
| Mixed Use | 40 jobs/hectare | 27.98 | 1119 |
| All Mixed Use | 40 jobs/hectare | 27.98 | 1,119 |
| Government Primary School | 40 jobs/campus | 3 | 120 |
| Government Secondary School | 90 jobs/campus | 1 | 90 |
| Non- Government Primary School | 30 jobs/campus | 2 | 60 |
| Non-Government Secondary School | 100 jobs/campus | 1 | 100 |
| Home based business | 0.05 jobs/dwelling | 16,297 | 815 |
| TOTAL ESTIMATED | | | 3,019 |

| REQUIREMENTS | |
|--------------|--|
| R6 | Development of the Southern Town Centre (LTC 1) shown hatched on Plan 3 must accord with the Performance Requirements and Objectives of Table 9. |

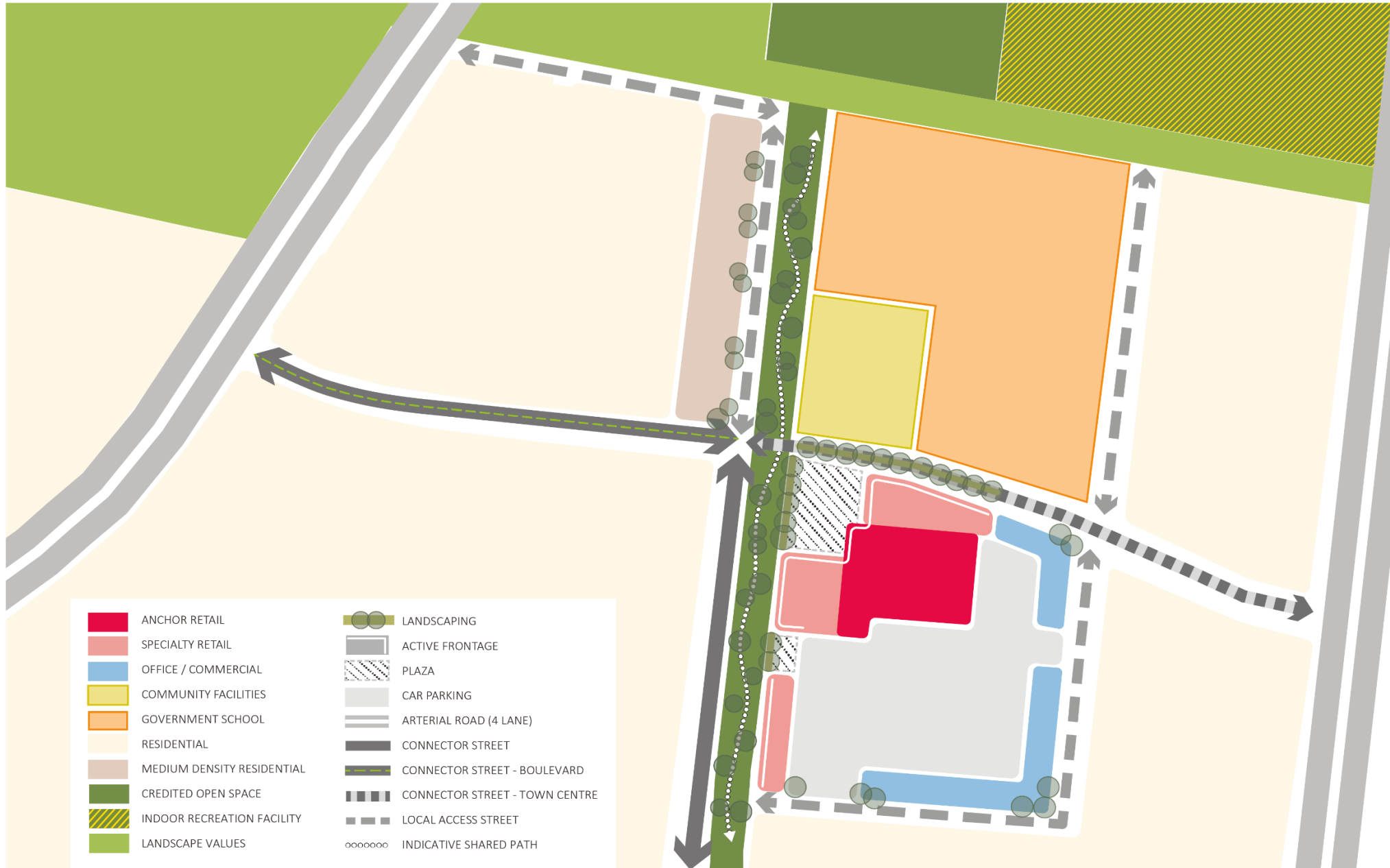
| GUIDELINES | |
|------------|---|
| G22 | Subdivision layouts should provide for a range of lot configurations to cater for various uses, including small local enterprises. |
| G23 | Local town centres LTC2, LTC3 & LTC4 should be developed generally in accordance with the location shown on Plan 3 and should be consistent with the role and function of the centre outlined in Table 7. |
| G24 | The design of all Town Centres should respond to the Design Guidelines in Appendix 4.3. |
| G25 | Local Town Centres LTC2, LTC3 & LTC4 should respond to the relevant concept plans shown in Figures 4-6. Alternative concepts may be considered where it can be demonstrated that the key design elements principles and guidelines have been achieved. |
| G26 | If proposed, local convenience centres should be located where indicated on Plan 3. Additional local convenience centres may be provided subject to demonstrating that they do not compromise the function and role of nearby Local Town Centres. |

Table 9: Southern Town Centre – Performance Requirements & Guidelines

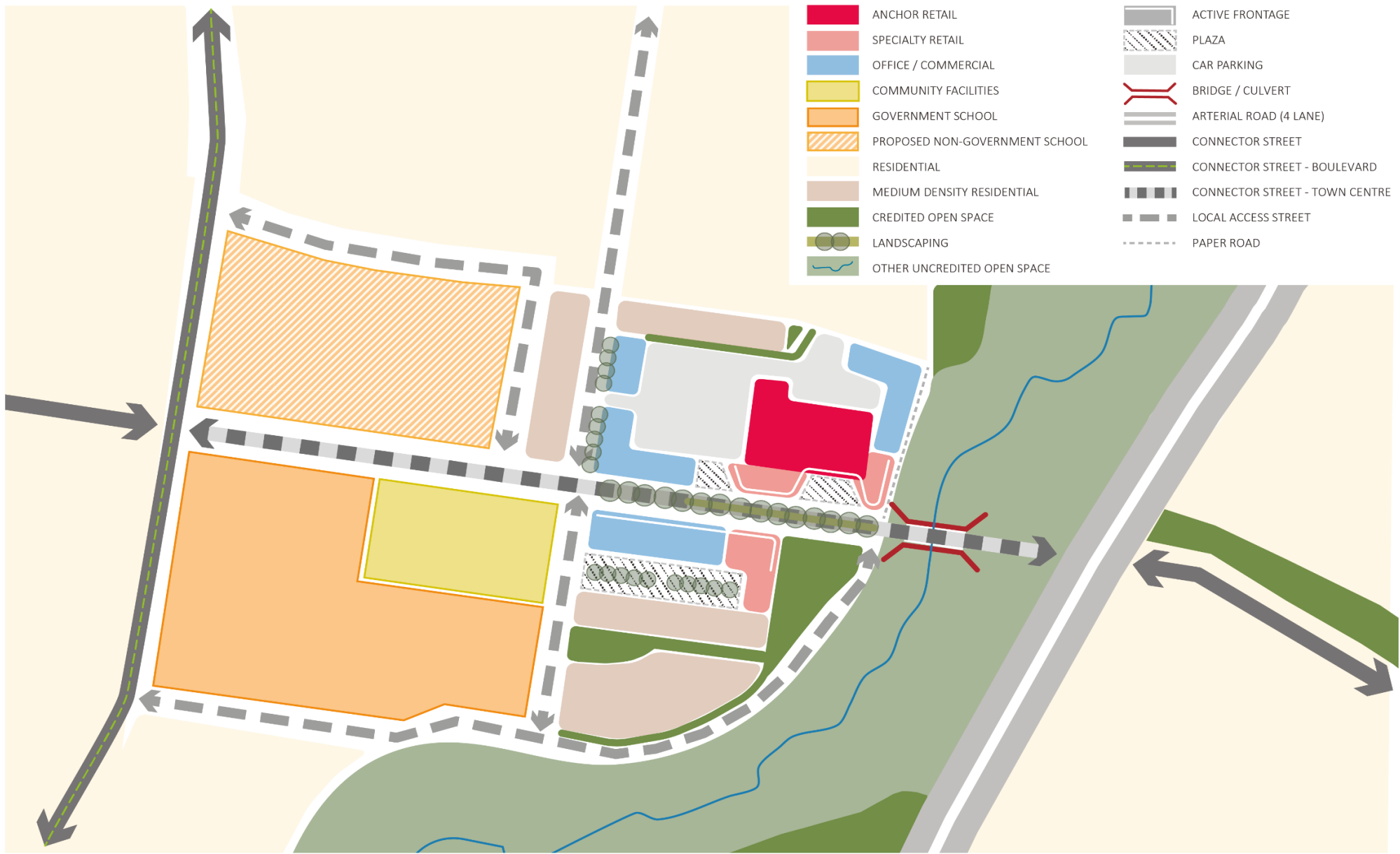
| TOWN CENTRE ELEMENT | PERFORMANCE REQUIREMENTS | PERFORMANCE GUIDELINES |
|---------------------------------|--|---|
| General | <ul style="list-style-type: none"> Must address the all relevant elements of the Urban Design Guidelines of Victoria. | <ul style="list-style-type: none"> Should respond to the surrounding site features, including the wetlands, waterways, open space areas, surrounding hilltops, and other points of interest to create views and connections and the stories of the place. Should provide a neighbourhood with a pedestrian and active transport priority, with a focus on creating a resilient and accessible '20-minute neighbourhood' |
| Retail Core (Local Town Centre) | <ul style="list-style-type: none"> Must provide an area of 7 net developable hectares for the provision of the Local Town Centre. | <ul style="list-style-type: none"> Should be located adjacent to and integrate with the community facility, local parks and waterways and wetlands. Should provide active frontages that address the main street, town square and surrounding road network to promote activation of the street and public areas. Should integrate with and utilise the active transport network, particularly those provided by the waterways. Should be located adjacent to and integrate with the waterways and wetlands. Should provide a core retail floor space of 6,300m² Should provide a commercial floor space of 2,700m². |
| Mixed Use | <ul style="list-style-type: none"> Must provide a minimum mixed-use area of 27.98 net developable hectares. | <ul style="list-style-type: none"> Provide a transition between the retail and commercial core and the residential areas. |
| Future Government School | <ul style="list-style-type: none"> Must provide an area of 11.9ha for the provision of a government school. Must be orientated east-west, with a dimension ratio of 1:1.5. Must have three road frontages, one of which should be a connector road. <p>Alternatives may be considered based on-site specifics, subject to advice from DET and to the satisfaction of the relevant authority</p> | <ul style="list-style-type: none"> Should be adjacent to and integrate with and utilise the active transport connection provided by the waterway. Should be adjacent to and integrate with the active open space. |
| Active Open Space | <ul style="list-style-type: none"> Must provide an area of 11.8ha for the provision of active open space. | <ul style="list-style-type: none"> Should be adjacent to and integrate with and utilise the active transport connection provided by the waterway. Should be adjacent to and integrate with the future government school. |
| Community Facilities | <ul style="list-style-type: none"> Must provide an area of 1.5ha for the provision of a community facility. | <ul style="list-style-type: none"> Should be adjacent to an integrate with the future government school and the retail core. |
| Local Park (LP10) | <ul style="list-style-type: none"> Must provide an area of 1.15ha for local park. | <ul style="list-style-type: none"> Should act as a gateway and provide a transition between the 'retail core' and the wetlands. |



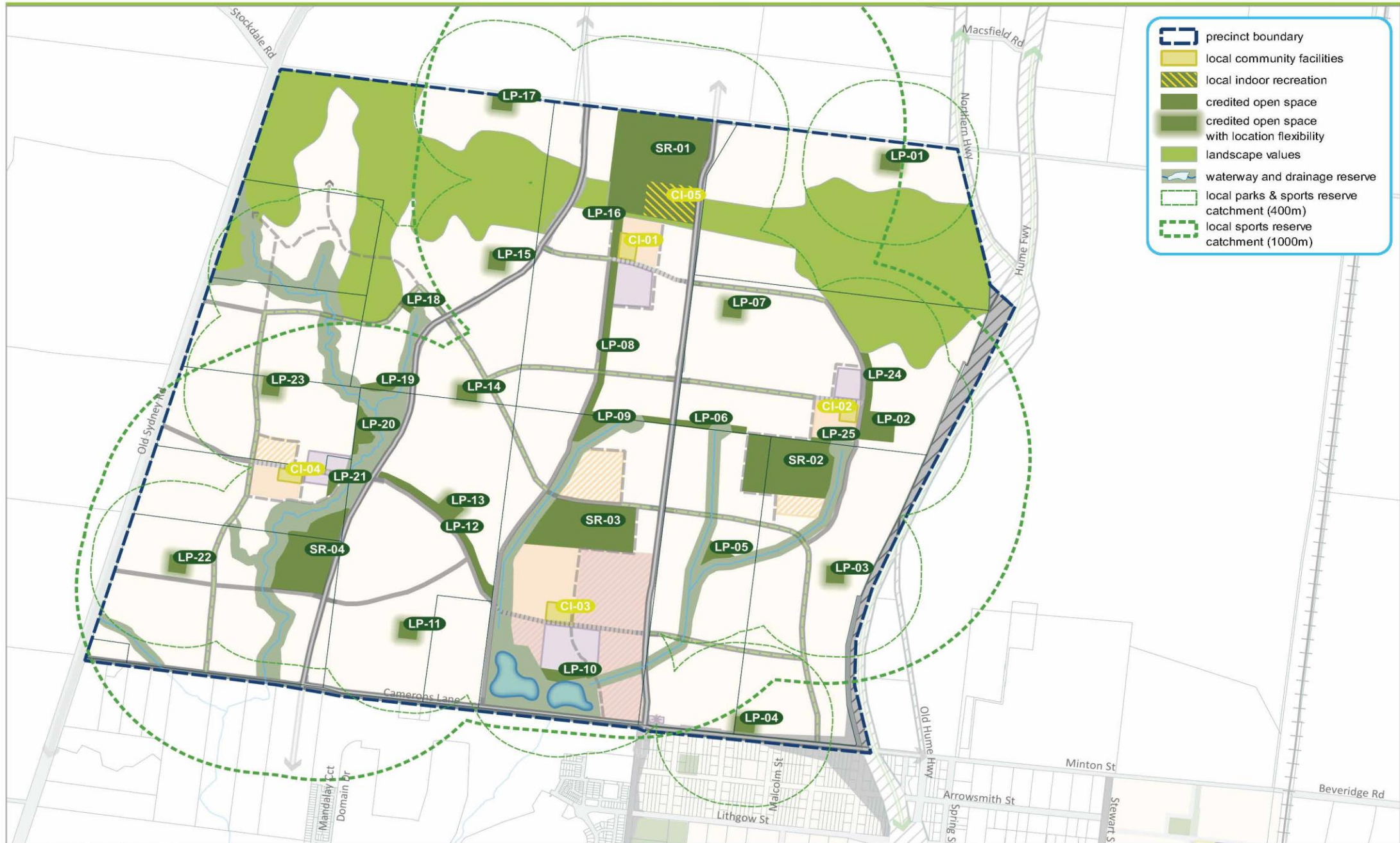
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3.3 Open Space, Community Facilities & Education

3.3.1 Open space and natural system

Table 10: Credited Open Space Delivery Guide

| PARK ID | AREA | TYPE | LOCATIONAL ATTRIBUTES | RESPONSIBILITY |
|---------|------|------------|---|------------------------|
| LP-01 | 0.75 | Local Park | Passive open space located to the north of landscape values area (Spring Hill Cone). | Mitchell Shire Council |
| LP-02 | 2.55 | Local Park | Passive open space to protect aboriginal heritage site, adjacent boulevard connector street and Local Town Centre. | Mitchell Shire Council |
| LP-03 | 0.75 | Local Park | Passive open space, central to the surrounding residential community. | Mitchell Shire Council |
| LP-04 | 0.75 | Local Park | Passive open space, adjacent to RD-01, central to the surrounding residential community. | Mitchell Shire Council |
| LP-05 | 1.01 | Local Park | Passive open space, located between two drainage corridors. | Mitchell Shire Council |
| LP-06 | 1.25 | Local Park | Linear passive open space running east-west. Connects LP-09, two drainage corridors and SR- 02. | Mitchell Shire Council |
| LP-07 | 0.75 | Local Park | Passive open space, central to the surrounding residential community. | Mitchell Shire Council |
| LP-08 | 4.04 | Local Park | Linear passive open space running north-south, adjacent to the central connector street, connects drainage and Northern Local Town Centre LTC-3 | Mitchell Shire Council |
| LP-09 | 1.40 | Local Park | Passive open space located between central connector street and drainage corridor. | Mitchell Shire Council |
| LP-10 | 1.15 | Local Park | Passive open space, located at the southern edge of the Southern Local Town Centre LTC-1, abutting drainage reserve. | Mitchell Shire Council |
| LP-11 | 0.75 | Local Park | Passive open space, central to surrounding residential community. | Mitchell Shire Council |
| LP-12 | 3.05 | Local Park | Linear passive open space abutting connector, diagonally linking Southern Local Town Centre LTC-1 and Western Local Town Centre LTC-4. | Mitchell Shire Council |
| LP-13 | 0.75 | Local Park | Passive open space abutting LP-12. | Mitchell Shire Council |
| LP-14 | 0.75 | Local Park | Passive open space, adjacent to connector street boulevard and central to surrounding residential community. | Mitchell Shire Council |
| LP-15 | 0.75 | Local Park | Passive open space located at close proximity to landscape values area (Hilltops Reserve), central to surrounding community. | Mitchell Shire Council |

| PARK ID | AREA | TYPE | LOCATIONAL ATTRIBUTES | RESPONSIBILITY |
|---------|-------|----------------|---|------------------------|
| LP-16 | 0.46 | Local Park | Passive open space adjoining SR-01 and LP-08. | Mitchell Shire Council |
| LP-17 | 0.75 | Local Park | Passive open space, adjacent to Hadfield Road Reserve, central to surrounding residential community. | Mitchell Shire Council |
| LP-18 | 0.25 | Local Park | Linear passive open space, connection landscape values area (Hilltops Reserve) and drainage corridor. | Mitchell Shire Council |
| LP-19 | 0.89 | Local Park | Passive open space located between drainage corridor and Kalkallo Creek corridor. | Mitchell Shire Council |
| LP-20 | 1.36 | Local Park | Passive open space, abutting the Kalkallo Creek corridor. | Mitchell Shire Council |
| LP-21 | 0.43 | Local Park | Passive open space, abutting the Western Local Town Centre LTC-4 and Kalkallo Creek corridor. | Mitchell Shire Council |
| LP-22 | 0.75 | Local Park | Passive open space, adjacent to connector street and central to surrounding residential community. | Mitchell Shire Council |
| LP-23 | 0.75 | Local Park | Passive open space, adjacent to connector street boulevard and central to surrounding residential community. | Mitchell Shire Council |
| LP-24 | 0.98 | Local Park | Linear passive open space, adjacent to boulevard connector street, connects LP-02 and landscape value areas (Spring Hill Cone). | Mitchell Shire Council |
| LP-25 | 0.22 | Local Park | Passive open space, located at the southern edge of the Eastern Local Town Centre LTC-2, adjoining SR-02. | Mitchell Shire Council |
| SR-01 | 20.01 | Sports Reserve | Northern active open space bordered by RD-04 (east) and Southern Local Town Centre LTC-3 (south). | Mitchell Shire Council |
| SR-02 | 13.32 | Sports Reserve | Eastern active open space, adjacent to drainage corridor, abutting two schools (north and south). | Mitchell Shire Council |
| SR-03 | 12.02 | Sports Reserve | Southern active open space, adjacent to drainage corridor, abutting two schools (north and south). | Mitchell Shire Council |
| SR-04 | 9.96 | Sports Reserve | Western active open space, located between the Kalkallo Creek corridor (west) and RD-03 (east). | Mitchell Shire Council |

REQUIREMENTS

| | |
|-----------|--|
| R7 | <p>Trees in streets, civic places and the open space network must be provided in accordance with Mitchell Shire Council's Street and Park Tree Policy and:</p> <ul style="list-style-type: none"> • complement the existing native indigenous and exotic species • be larger species to facilitate continuous canopy cover • be planted in modified and improved soil to support tree establishment • be appropriately sized to nature strips, nearby utilities and buildings • suited to local conditions. |
|-----------|--|

GUIDELINES

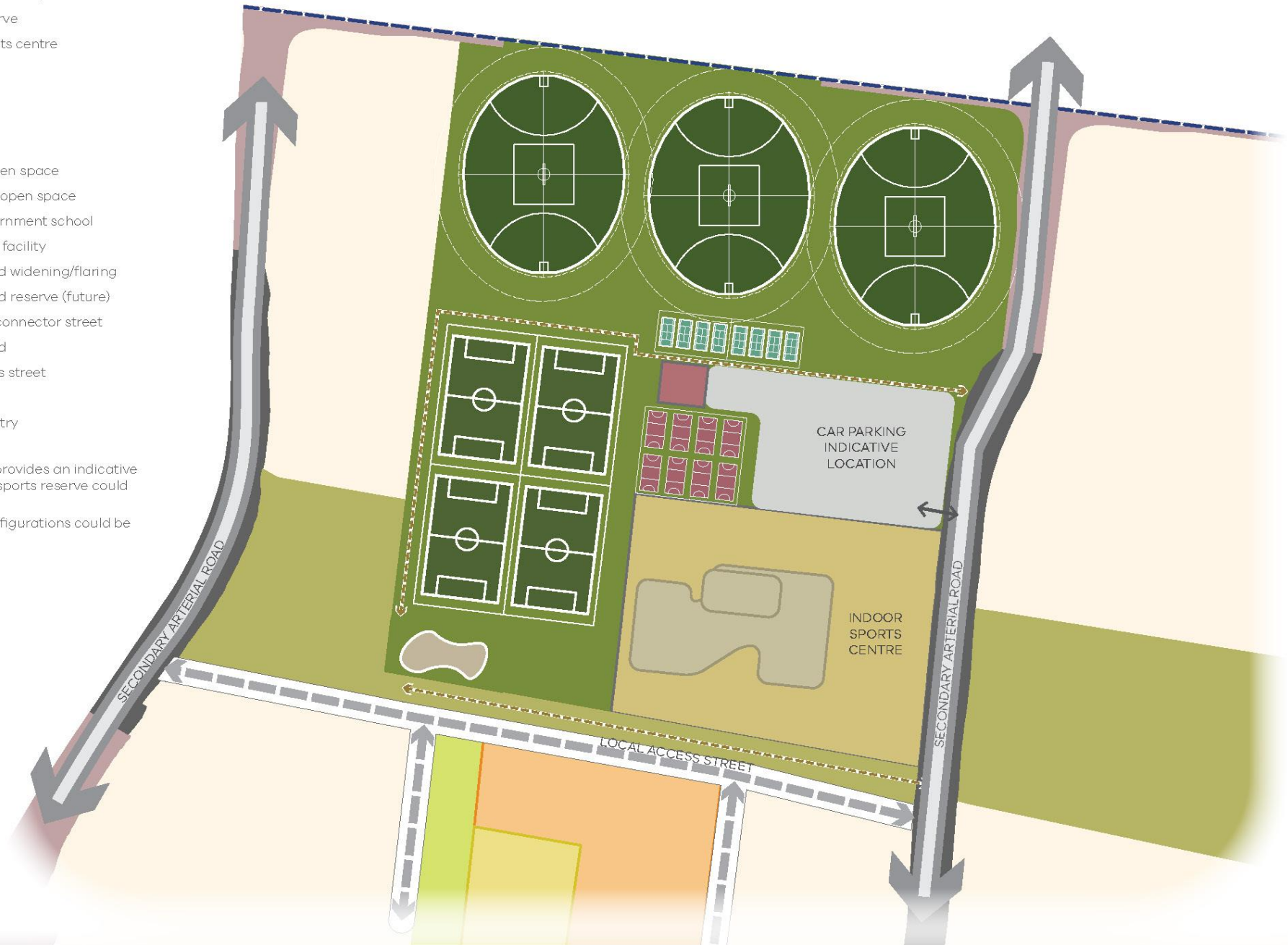
| | |
|------------|--|
| G27 | <p>Open space should be provided where shown on Plan 7 and as outlined in Table 10.</p> |
| G28 | <p>Alternative locations and configurations for credited open space with location flexibility, as illustrated on Plan 7, may be considered subject to:</p> <ul style="list-style-type: none"> • walkable access as demonstrated on Plan 7 not being adversely impacted • not diminishing the quality or usability of the space • not adversely impacting on the overall diversity of the precinct open space network • being equal to or more than the passive open space provision shown in table 10 • still being supported by the preferred path network outlined in Plan 9. |

| | |
|------------|---|
| G29 | <p>All open space and public landscaped areas should contain extensive canopy tree planting.</p> |
| G30 | <p>Existing high-quality vegetation should be retained within public space, including road reserves and open spaces, where safe and practicable.</p> |
| G31 | <p>The open space network should:</p> <ul style="list-style-type: none"> • Maximise the amenity and value of service open space through the provision of shared paths, trails and other recreational elements. • Respond to the values of adjoining open space, waterways, and Aboriginal and post-contact heritage. • Provide flexible recreational opportunities that allow for the anticipated range of sporting reserves, and local parks and recreational uses required by the community. |
| G32 | <p>Where a local park illustrated on Plan 7 spans multiple parcels, the first development proponent to lodge a permit application for land containing the park should prepare a master plan for the entire park. Consultation with all relevant landowners should be undertaken as part of the master plan preparation.</p> |
| G33 | <p>Any fencing of open space should be low scale and visually permeable to facilitate public safety and surveillance.</p> |
| G34 | <p>Public recreation and open space areas should be located adjacent to significant landscape value areas and waterways to create and or enhance any buffer area.</p> |

- precinct boundary
- sports reserve
- indoor sports centre
- residential
- car parking
- playground
- club house
- credited open space
- uncredited open space
- future government school
- community facility
- arterial road widening/flaring
- arterial road reserve (future)
- boulevard connector street
- arterial road
- local access street
- path
- car park entry

Note:

- This concept plan provides an indicative example of how the sports reserve could be developed.
- Other modified configurations could be suitable

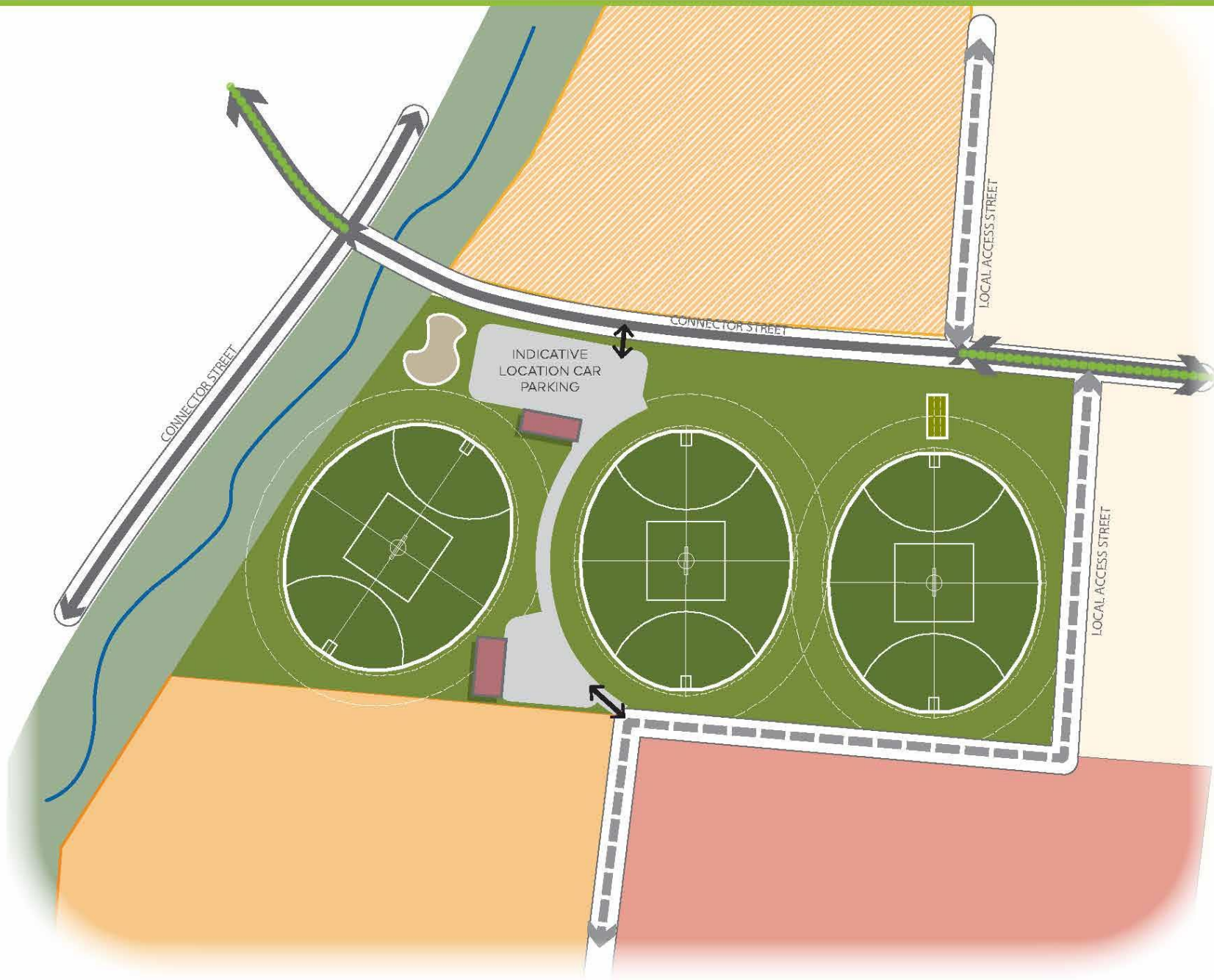


- sports reserve
- residential
- car parking
- playground
- club house
- credited open space
- uncredited open space
- heritage site
- future government school
- potential non government school
- community facility
- town centre
- connector street
- boulevard connector street
- town centre main street
- local access street
- car park entry

Note:

- This concept plan provides an indicative example of how the sports reserve could be developed.
- Other modified configurations could be suitable.





- sports reserve
- residential
- car parking
- playground
- club house
- cricket net
- uncredited open space
- future government school
- potential non-government school
- boulevard connector street
- connector street
- local access street
- car park entry

Note:

- This concept plan provides an indicative example of how the sports reserve could be developed.
- Other modified configurations could be suitable

- sports reserve
- residential
- car parking
- playground
- club house
- credited open space
- uncredited open space
- future government school
- arterial road
- connector street
- local access street
- path
- pedestrian bridge
- car park entry

Note:

- This concept plan provides an indicative example of how the sports reserve could be developed.
- Other modified configurations could be suitable



- local park
- linear park
- lots
- lot frontage
- arterial road
- connector road boulevard
- connector road
- access street
- access laneway
- shared driveway open space interface
- paper road

Note:
This concept plan provides an indicative example of how this land could be developed.



3.3.2 Community Facilities & Education

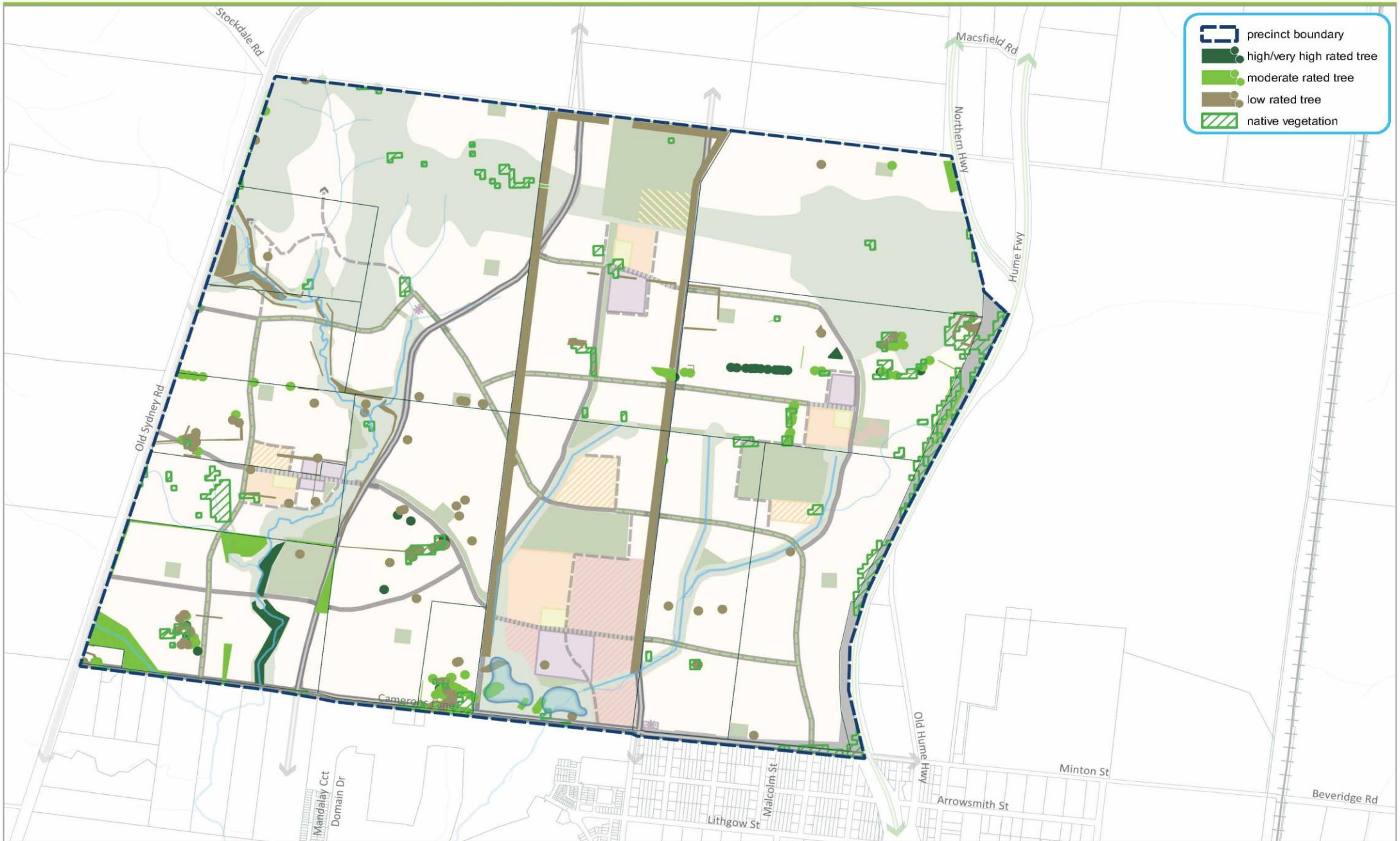
REQUIREMENTS

| | |
|-----------|--|
| R8 | Education facilities must have three road frontages, one of which should be a connector road. |
| R9 | Any connector road or access street abutting a community or education facility must be designed to achieve slow vehicle speeds and provide designated pedestrian crossing points in the vicinity of the school site. |

GUIDELINES

| | |
|------------|---|
| G35 | Education, community facilities and sports reserves should be co-located and accessible by active and public transport routes and provide active street frontages. |
| G36 | Subdivision and development should facilitate integration of schools, sports reserves and community facilities where they are co-located and promote: <ul style="list-style-type: none"> • integration with neighbouring facilities to maximise efficiencies through the sharing of car parking and other complementary infrastructure • out-of-hours use, street activation and permeability • safe and convenient pedestrian and cyclist shared path access. |
| G37 | Educational, community or civic infrastructure not shown on Plan 3 should be located within or proximate to a town centre, local convenience centre, community hub or council community building, as appropriate. |
| G38 | Emergency services should have access to the arterial road network to maximise coverage and reduce response times. |
| G39 | Public health and justice services should be located within or adjacent to a community hub or town centre and with access to public transport. |
| G40 | Where the responsible authority is satisfied that land shown as a school site is unlikely to be used for a school at ultimate development of the PSP, |

| | |
|------------|--|
| | that land must be used for an alternative purpose that is compatible with the surrounding land uses and the provisions of the applied zone. Justification should be provided in accordance with the VPA's guidance note titled <i>Development of Non-Government School Sites for an Alternative Purpose</i> . |
| G41 | The indicative layout of community facilities and open space as illustrated in Plan 7 may be altered to the satisfaction of the relevant responsible authorities. |



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3.4 Biodiversity and Bushfire Management

3.4.1 Biodiversity

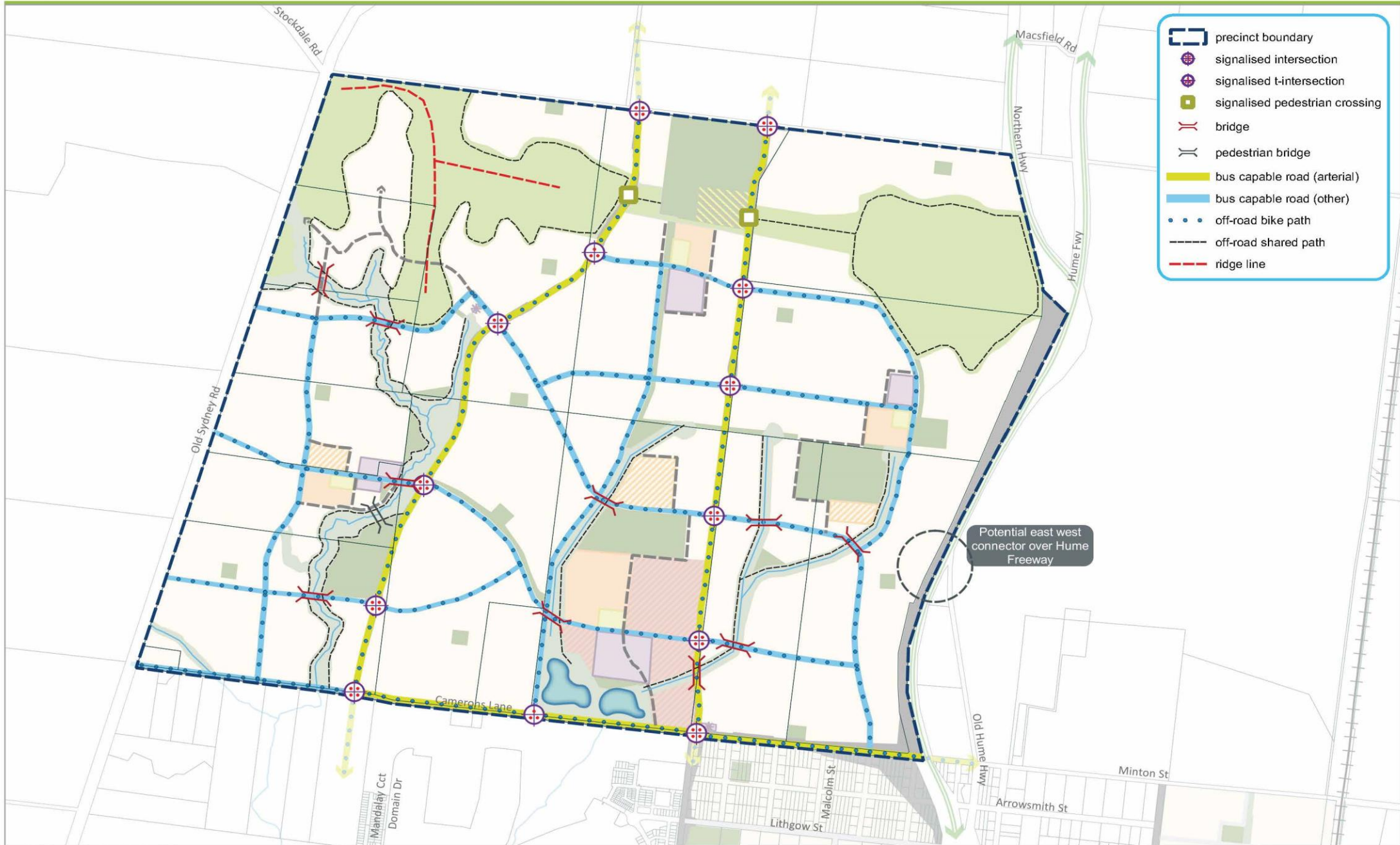
| GUIDELINES | |
|------------|---|
| G42 | Where practicable, existing vegetation should be retained, protected and enhanced to provide habitat and movement corridors for local fauna. |
| G43 | Appropriately managed and sensitively designed community access to conservation and landscape values areas should be provided where practicable, and where protection of the primary conservation and landscape values can be maintained |
| G44 | The layout and design of waterways, wetlands and retarding basins (including the design of paths, bridges and boardwalks, and the stormwater drainage system) should integrate with biodiversity and natural systems to the satisfaction of Melbourne Water and other relevant responsible authorities. |

3.4.2 Bushfire Management

| REQUIREMENTS | |
|--------------|--|
| R10 | <p>For the purpose of Clause 56.06-7, the requirements of the relevant fire authority must be adhered to, unless otherwise approved by the Country Fire Authority. Requirements are as follows:</p> <ul style="list-style-type: none"> • roads must be constructed with a minimum trafficable width of 7.3 metres where cars park on both sides, or: <ul style="list-style-type: none"> ○ a minimum of 5.4 metres in trafficable width where cars park on one side only ○ a minimum of 3.5 metres width with no parking and 0.5 metres clearance to structures on either side, and if this width applies, there must be passing bays of at least 20 metres long, 6 metres wide and located not more than 200 metres apart. <p>Roads must be constructed so that they are capable of accommodating a vehicle of 15 tonnes for the trafficable road width including the following:</p> |

| | |
|--|---|
| | <ul style="list-style-type: none"> • the average grade of a road must be no more than 1 in 7 (14.4 percent or 8.1 degrees) • the steepest grade on a road must be no more than 1 in 5 (20 percent or 11.3 degrees) with this grade continuing for no more than 50 metres at any one point • dips on the road must have no more than 1 in 8 grade (12.5 percent or 7.1 degrees) entry and exit angle • constructed dead end roads more than 60 metres in length from the nearest intersection must have a turning circle with a minimum radius of 8 metres (including roll over curbs if they are provided). |
|--|---|

| GUIDELINES | |
|------------|---|
| G45 | Any buffer established to minimise fire threat should be functional and able to be managed appropriately, to the satisfaction of the responsible authority and the CFA. |



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3.5 Transport & Movement

3.5.1 Public Transport

REQUIREMENTS

| | |
|------------|--|
| R11 | Any Road nominated in Plan 9 as a potential public transport route must be constructed (including partial construction where relevant) in accordance with the corresponding cross section in the PSP and the <i>Public Transport Guidelines for Land Use Development</i> to the satisfaction of the responsible authority. |
|------------|--|

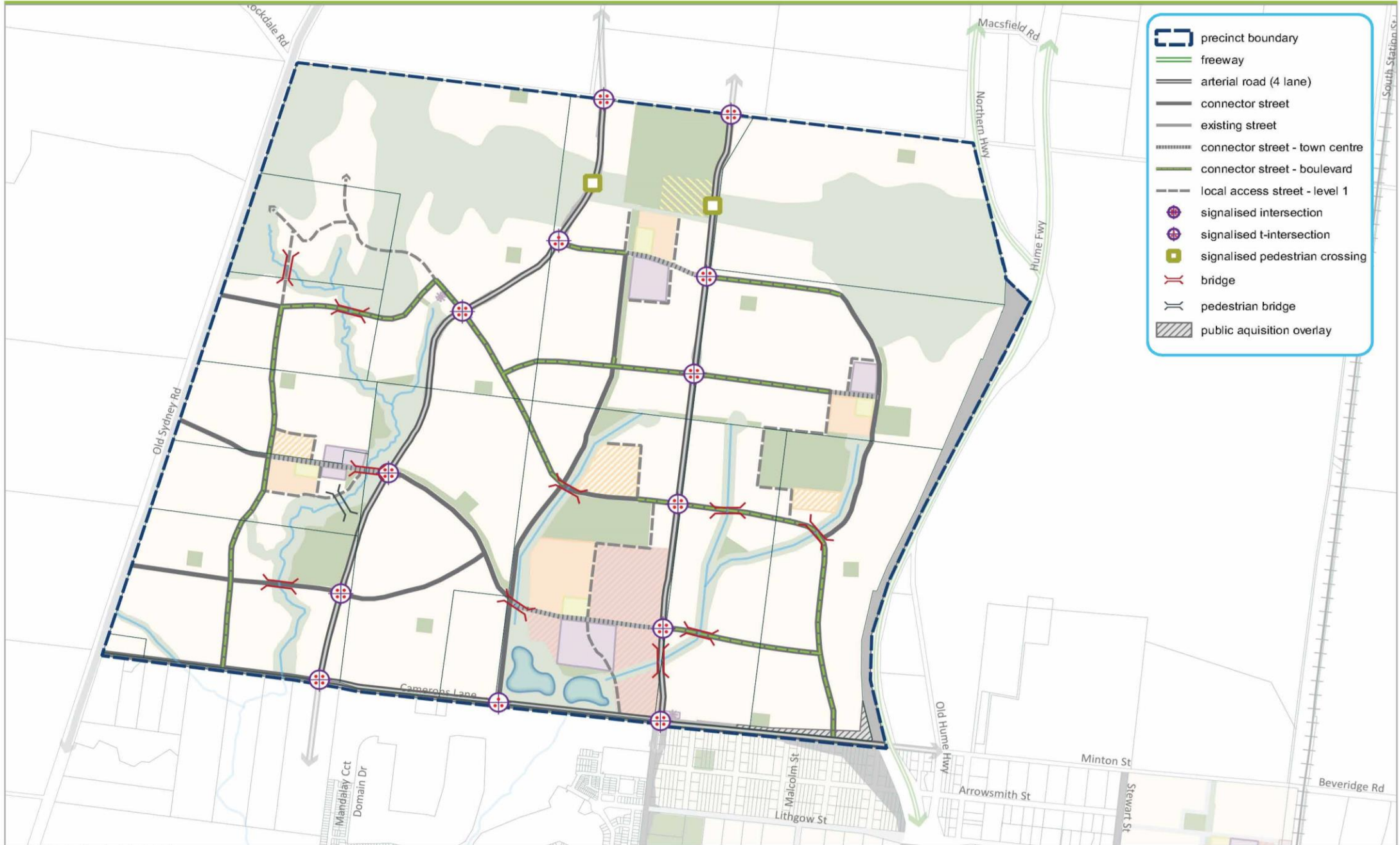
GUIDELINES

| | |
|------------|---|
| G46 | Bus stop facilities should be designed as integral parts of town centres and activity generating land uses such as schools, sports fields and employment areas. |
| G47 | The street network should be designed to ensure all households have direct and convenient walking access to public transport services. |

3.5.2 Walking & Cycling

GUIDELINES

| | |
|------------|---|
| G48 | Location of walkways or pedestrian and cycle paths in addition to those described through the standard cross sections should consider the need for appropriate lighting and passive surveillance. |
| G49 | The alignment of off-road bicycle paths must be designed for cyclists travelling up to 30km/hr. |
| G50 | In addition to waterway pedestrian crossings shown on Plan 9, development proponents should provide waterway crossings at intervals no greater than 400m or corresponding with all perpendicular through roads or pedestrian and cycle paths. |



- precinct boundary
- freeway
- arterial road (4 lane)
- connector street
- existing street
- connector street - town centre
- connector street - boulevard
- local access street - level 1
- signalised intersection
- signalised t-intersection
- signalised pedestrian crossing
- bridge
- pedestrian bridge
- public aquisition overlay

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3.5.3 Street Network

REQUIREMENTS

| | |
|------------|---|
| R12 | <p>Design of all subdivisions, streets and arterial roads must provide:</p> <ul style="list-style-type: none"> • a permeable, direct and safe street network prioritising walking and cycling • safe and convenient crossing points of connector roads and local streets at all intersections and on key desire lines as well as crossing waterways • safe pedestrian crossings of arterial roads at all intersections, at key desire lines, and on regular intervals appropriate to the function of the road and public transport provision • safe and convenient transition between on- and off-road bicycle networks • convenient access to regional and local points of interest and destinations for effective integration with neighbouring properties, parkland and sports reserves • direct and convenient walking access to public transport services. |
|------------|---|

GUIDELINES

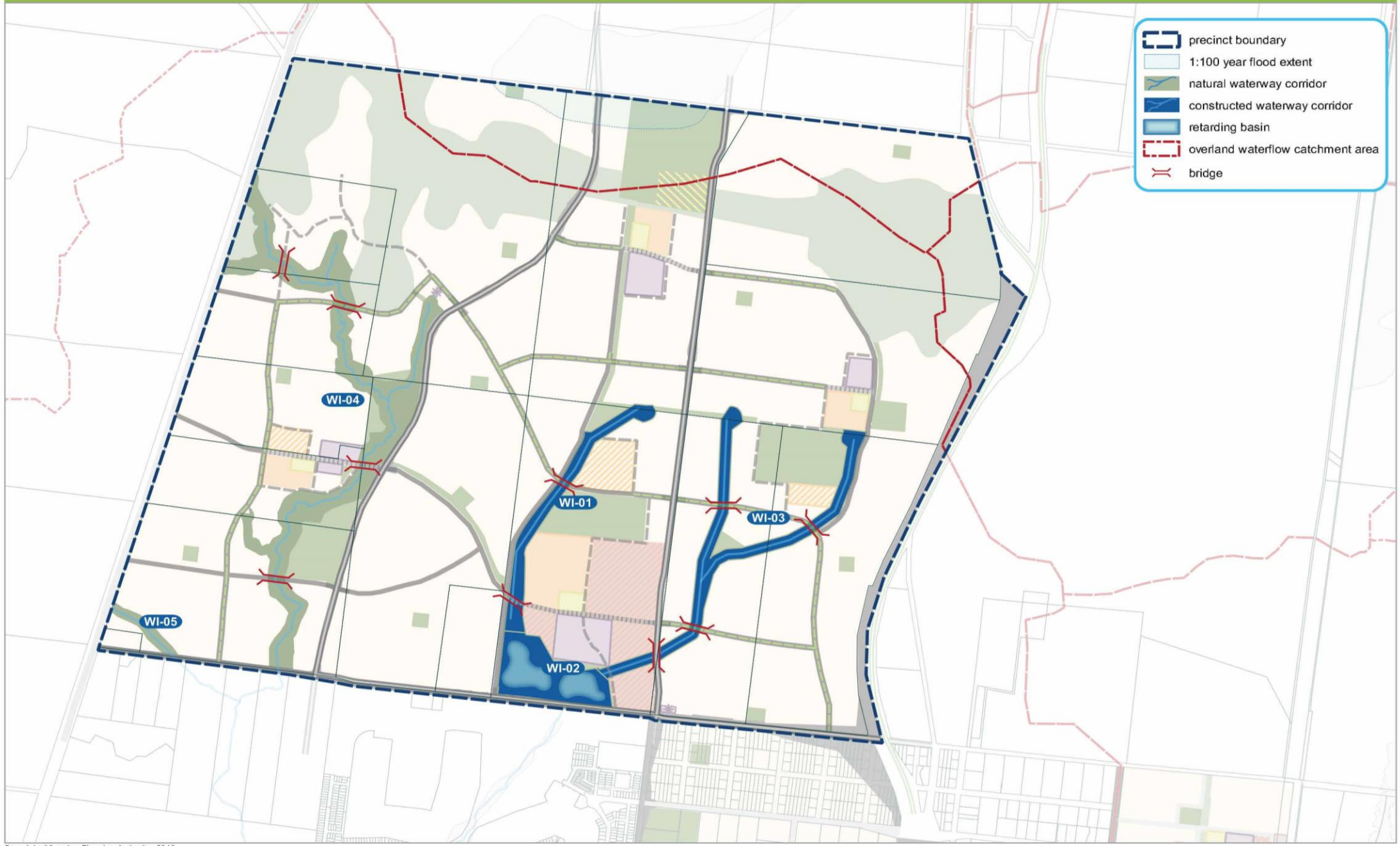
| | |
|------------|--|
| G51 | Slip lanes should be avoided in areas of high pedestrian activity and only provided at intersections between connector streets and arterial roads where they are necessitated by high traffic volumes but with pedestrian priority crossings. |
| G52 | Cul-de-sacs should not detract from convenient pedestrian and vehicular connections. |
| G53 | <p>The frequency and impact of vehicular crossovers on verges of connector roads should be minimised through the use of a combination of:</p> <ul style="list-style-type: none"> • rear loaded lots with laneway access • vehicular access from the side streets |

| | <ul style="list-style-type: none"> • combined or grouped crossovers • increased lot widths. | | | | | | | | |
|------------------|---|------------------|-----------|---------------|---|---------------|-------------------------------------|----------------|--|
| G54 | All signalised intersections should be designed having regard to the VicRoads working document <i>Guidance for Planning Road Networks in Growth Areas</i> November 2015 (as updated), to the satisfaction of VicRoads and the responsible authority. | | | | | | | | |
| G55 | <p>Street trees should be provided on both sides of all roads and streets (excluding laneways) at regular intervals appropriate to tree size at maturity, unless otherwise agreed by the responsible authority.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Average Interval</th> <th style="text-align: left;">Tree Size</th> </tr> </thead> <tbody> <tr> <td>8 – 10 metres</td> <td>Small trees (less than 10 metre canopy)</td> </tr> <tr> <td>10- 12 metres</td> <td>Medium trees (10 - 15 metre canopy)</td> </tr> <tr> <td>12 – 15 metres</td> <td>Large trees (canopy larger than 15 metres)</td> </tr> </tbody> </table> | Average Interval | Tree Size | 8 – 10 metres | Small trees (less than 10 metre canopy) | 10- 12 metres | Medium trees (10 - 15 metre canopy) | 12 – 15 metres | Large trees (canopy larger than 15 metres) |
| Average Interval | Tree Size | | | | | | | | |
| 8 – 10 metres | Small trees (less than 10 metre canopy) | | | | | | | | |
| 10- 12 metres | Medium trees (10 - 15 metre canopy) | | | | | | | | |
| 12 – 15 metres | Large trees (canopy larger than 15 metres) | | | | | | | | |
| G56 | <p>A variety of cross sections should be utilised in a subdivision layouts to create differentiation and neighbourhood character.</p> <p>Alternative cross sections should ensure that:</p> <ul style="list-style-type: none"> • Minimum required carriageway dimensions are maintained to ensure safe and efficient operation of emergency vehicles on all streets as well as buses on connector streets. • The performance characteristics of standard cross sections as they relate to pedestrian and cycle use are maintained. • Relevant minimum road reserve widths for the type of street are maintained, unless otherwise approved by the responsible authority. | | | | | | | | |

Table 11: Streets and Slopes

The following table is intended to provide statutory planners with guidance on the appropriate grade for different types of streets.

| STREET / ROAD TYPE | DESIRABLE MAXIMUM SLOPE | ABSOLUTE MAXIMUM SLOPE |
|-------------------------|-------------------------|------------------------|
| Access | 10 | 20 |
| Connector | 8 | 12 |
| Connector (bus capable) | 6 | 10 |
| Arterial | 5 | 7 |



- precinct boundary
- 1:100 year flood extent
- natural waterway corridor
- constructed waterway corridor
- retarding basin
- overland waterflow catchment area
- bridge

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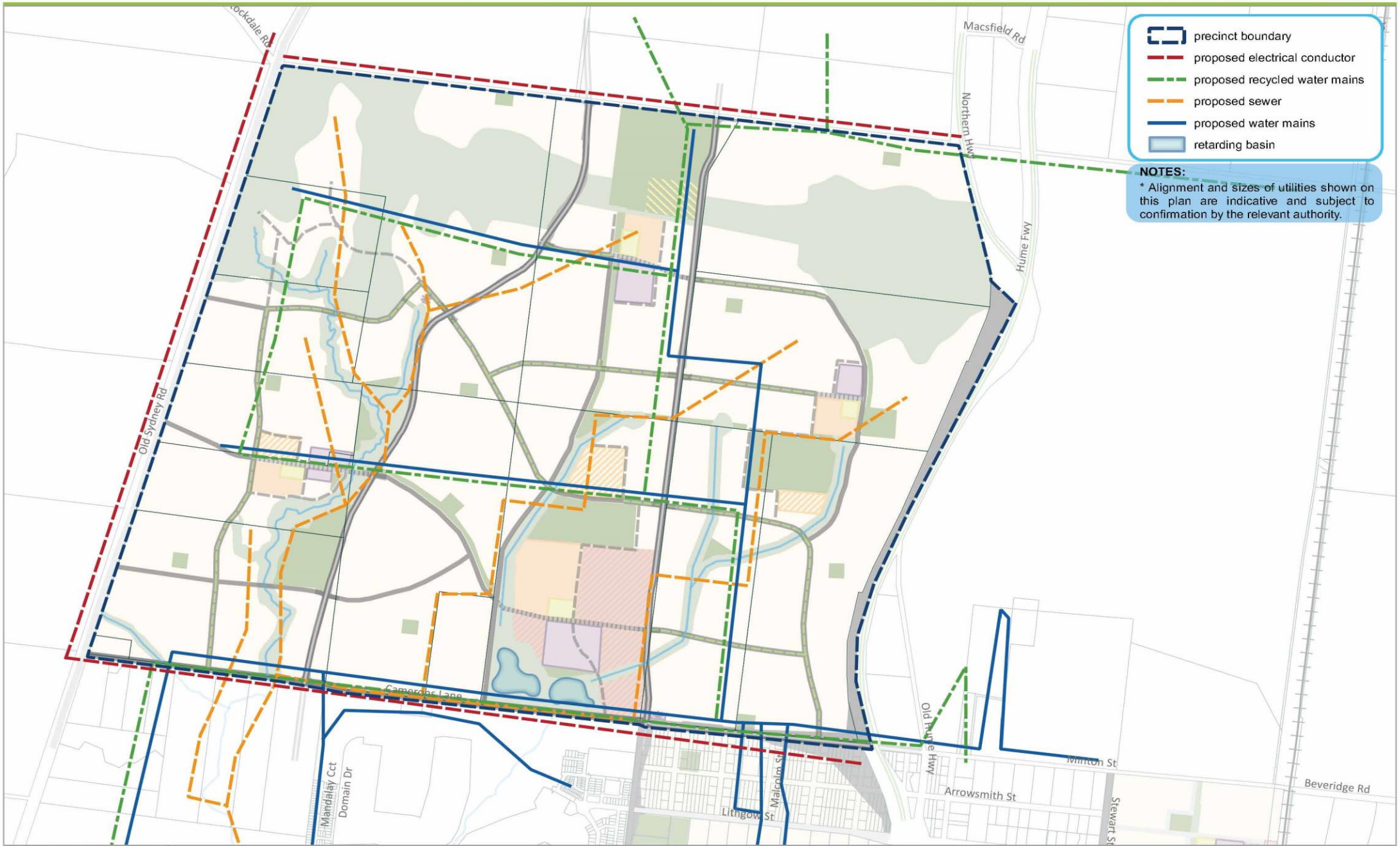
3.6 Integrated Water Management & Utilities







3.6.1 Integrated Water Management

| REQUIREMENTS | |
|--------------|---|
| R13 | Stormwater conveyance and treatment must be designed in accordance with the relevant Development Services Scheme and Plan 11 unless otherwise agreed by Melbourne Water and the responsible authority. |
| R14 | Final designs and boundaries of constructed wetlands, retarding basins, stormwater quality treatment infrastructure, and associated paths, boardwalks, bridges, and planting, must be to the satisfaction of both the responsible authority and Melbourne Water. |
| R15 | Development staging must provide for the delivery of ultimate waterway and drainage infrastructure, including stormwater quality treatment. Where this is not possible, development proposals must demonstrate how any interim solution adequately manages and treats stormwater generated from the development and how this will enable delivery of an ultimate drainage solution, to the satisfaction of Melbourne Water and the responsible authority. |
| R16 | Stormwater runoff from the development must meet the performance objectives of the <i>CSIRO Best Practice Environmental Management Guidelines</i> for Urban Stormwater prior to discharge to receiving waterways and as outlined on Plan 11, unless otherwise approved by Melbourne Water and the responsible authority. Proposals that exceed the performance objectives will be considered to the satisfaction of the relevant authority. |
| R17 | Applications must demonstrate how: <ul style="list-style-type: none"> • Waterways and integrated water management design enables land to be used for multiple recreation and environmental purposes. • Overland flow paths and piping within road reserves will be connected and integrated across property/parcel boundaries. • Melbourne Water and the responsible authority freeboard requirements for overland flow paths will be adequately contained within the road reserves. |

| | |
|--|--|
| | <ul style="list-style-type: none"> • Relevant Integrated Water Management (IWM) requirements of this PSP will be achieved to the satisfaction of the retail water authority, including the supply of recycled water where required by the relevant water authority. |
|--|--|

| GUIDELINES | |
|------------|--|
| G57 | Development should have regard to relevant policies and strategies being implemented by the responsible authority, Melbourne Water and Yarra Valley Water, including any approved integrated water management plan. |
| G58 | The design and layout of roads, road reserves, and public open space should optimise water use efficiency and long-term viability of vegetation and public uses through the use of overland flow paths, Water Sensitive Urban Design initiatives such as street swales, rain gardens and/or locally treated storm water for irrigation to contribute to a sustainable and green urban environment. |
| G59 | Where practical, and where primary waterway or conservation functions are not adversely affected, land required for integrated water management initiatives should be integrated with the precinct open space and recreation system and as depicted on Plan 7. |



-  precinct boundary
-  proposed electrical conductor
-  proposed recycled water mains
-  proposed sewer
-  proposed water mains
-  retarding basin

NOTES:
 * Alignment and sizes of utilities shown on this plan are indicative and subject to confirmation by the relevant authority.

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3.6.2 Utilities

| REQUIREMENTS | |
|--------------|---|
| R18 | All existing above ground electricity cables (excluding substations and cables with voltage 66kv or greater) must be placed underground as part of the upgrade of existing roads or subdivision works. |
| R19 | All new electricity supply infrastructure (excluding substations and cables with voltage 66kv or greater) must be provided underground. |
| R20 | Above ground utilities must be identified at the subdivision design stage to ensure effective integration with the surrounding neighbourhood, to minimise amenity impacts and be designed to the satisfaction of the relevant authority. Where that infrastructure is intended to be located in public open space, the land required to accommodate that infrastructure will not be counted as contributing to public open space requirements specified and will be additional to the areas designated in Table 10. |

| GUIDELINES | |
|------------|---|
| G60 | The delivery of underground services should be coordinated, located and bundled (utilising common trenching) to facilitate tree and other planting within road verges. |
| G61 | Utilities should be placed outside of landscape values areas, natural waterway corridors or on the outer edges of these corridors in the first instance. Where services cannot avoid crossing or being located within a landscape values area or natural waterway corridor, they must be located to avoid disturbance to existing waterway values, native vegetation, significant landform features and heritage sites, to the satisfaction of Melbourne Water and the responsible authority. |
| G62 | All new above-ground utilities, including temporary utilities, should be located outside of key view lines and screened with vegetation, as appropriate. |

| | |
|------------|---|
| G63 | Trunk services should be placed along the general alignments shown on Plan 12, subject to any refinements as advised by the relevant servicing authorities. |
| G64 | Design and location of underground services should be guided by Appendix 4.6. |
| G65 | Utility easement to the rear of lots should only be provided where there is no practical alternative. |

Table 12: Water Infrastructure

| Asset ID | Asset Type | Location | Area (ha) | Responsibility |
|----------|-----------------------------------|---|-----------|----------------|
| WI-01 | Constructed waterway | Centrally located within the precinct, running adjacent to the connector street | 10.34 | MWC |
| WI-02 | Retarding Basin/Wetlands | Centrally located within the precinct, adjacent to Camerons Lane | 14.08 | MWC |
| WI-03 | Constructed waterway | Located to the east of the precinct running north south | 18.56 | MWC |
| WI-04 | Natural Waterway (Kalkallo Creek) | Located to the west of the precinct running north south | 44.79 | MWC |
| WI-05 | Natural Waterway | Located on the south western corner of the precinct | 2.14 | MWC |

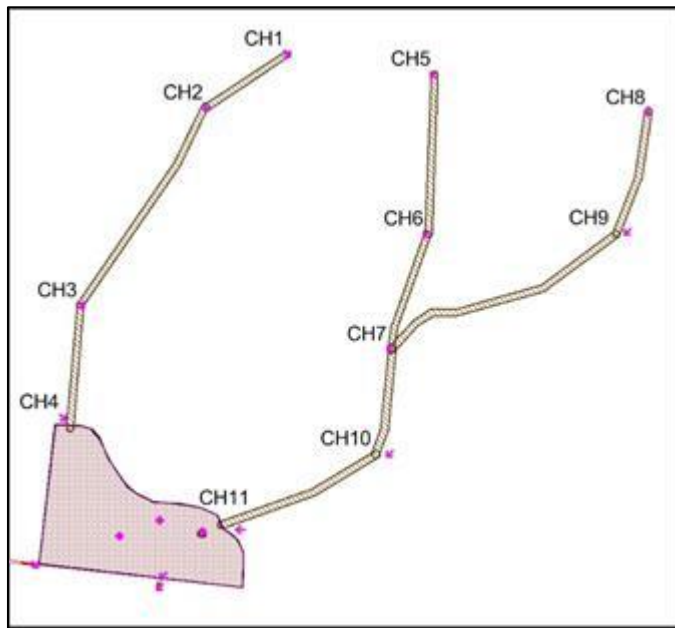
(Note: The areas identified in this table are subject to change/confirmation during the functional and detailed design stage to the satisfaction of Melbourne Water and the responsible authority.)

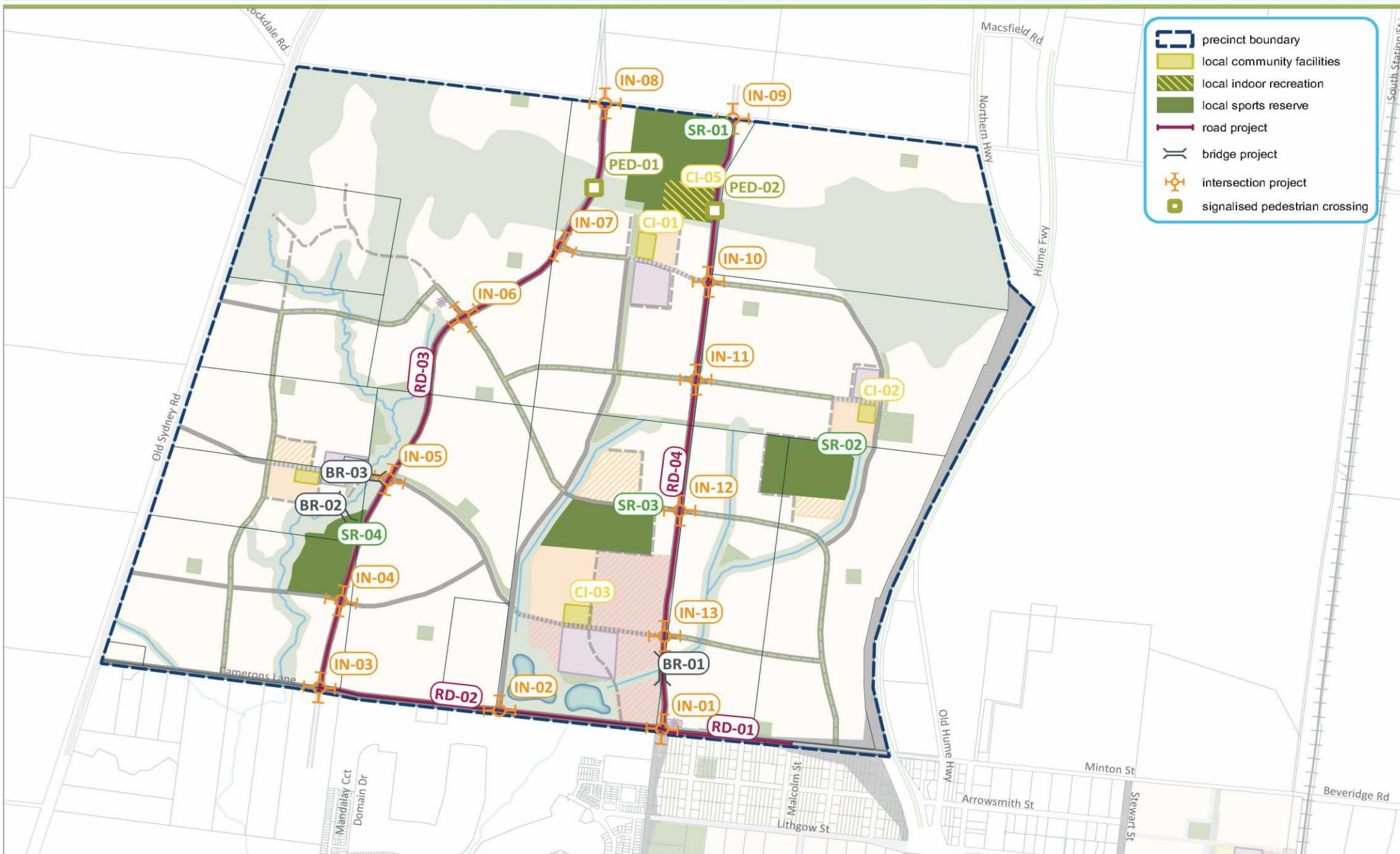
MWC= Melbourne Water Corporation

Table 13: Constructed Water Way Widths

| Node Reference (see diagram below) | Width |
|---------------------------------------|-------|
| CH1 – CH4 | 50m |
| CH7 – CH11 | 55m |
| CH8 – CH7 | 50m |
| CH5 – CH7 | 50m |

Figure 12: Constructed Water Way Nodes





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3.7 Precinct Infrastructure Plan & Staging

3.7.1 Development Staging

REQUIREMENTS

| | |
|------------|--|
| R21 | <p>Development staging must provide for the timely provision and delivery of:</p> <ul style="list-style-type: none"> • arterial road reservations • connector streets and connector street bridges • street links between properties, constructed to the property boundary • on- and off-road pedestrian and bicycle network paths • essential infrastructure • land for community infrastructure, sports fields and local open space • connection of the north-south Arterial network between Camerons Lane and Hadfield Road where practicable. |
|------------|--|

GUIDELINES

| | |
|------------|--|
| G66 | The staging of development should provide for the early delivery of community facilities to the satisfaction of the responsible authority. |
| G67 | <p>Staging of development should be determined largely by the development proposals on land within the precinct and the availability of infrastructure services. Development applications should demonstrate how the development will:</p> <ul style="list-style-type: none"> • integrate with adjoining developments, including the timely provision of roads and path connections, to a practical extent • provide open space and amenity to new residents in the early stages of the development, where relevant • provide sealed road access to each new allotment • deliver any necessary trunk service extensions, including confirmation of the agreed approach and timing by the relevant service provider |

| | |
|------------|--|
| | <ul style="list-style-type: none"> • avoid and minimise impacts to BCS conservation areas with regard to the location of essential and other services. |
| G68 | <p>Sports fields, community facilities, local parks and playgrounds should be delivered as early as possible within each neighbourhood and may be delivered in stages.</p> |
| G69 | <p>Infrastructure projects identified in the Precinct Infrastructure Plan at Appendix 4.1 should be delivered as per the timing priority identified in the timing column of Appendix 4.1.</p> <p>Where infrastructure is proposed to be delivered outside ahead of the sequence identified in Appendix 4.1, the onus is on the developer to fund the infrastructure works as 'Works In Kind'.</p> <p>Note: <i>Project delivery timing outlined in Appendix 4.1 is indicative and subject to periodic review by the relevant responsible authority.</i></p> |
| G70 | <p>Development staging should have regard to:</p> <ul style="list-style-type: none"> • proximity to existing or proposed development fronts or serviced land • proximity to significant existing public transport infrastructure or public transport service • proximity to existing or committed community infrastructure, such as schools • proximity to new or existing arterial or connector road infrastructure • its role in facilitating delivery of the above infrastructure. <p>Staging that meets alternative criteria to the above may be considered by the responsible authority where an applicant satisfactorily demonstrates that development will not be isolated from basic and essential infrastructure and services.</p> |

3.7.2 Subdivision Works

REQUIREMENTS

| | |
|------------|--|
| R22 | <p>Subdivision of land within the PSP must provide and meet the cost for all local infrastructure, other than that provided for within the Beveridge North West ICP. This includes (but is not limited to):</p> <ul style="list-style-type: none"> • connector roads and local streets, including Old Sydney Road • local bus stop infrastructure (where locations have been agreed in writing by Public Transport Victoria) • landscaping, including canopy tree planting, of all existing and future roads and local streets • intersection works and traffic management measures along arterial roads, connector streets, and local streets • council approved fencing and landscaping (where required) along arterial roads and reserves • shared pedestrian and bicycle paths along local arterial roads, connector roads, utilities easements, local streets, waterways and within local parks including bridges, intersections, and barrier crossing points • bicycle parking • appropriately scaled lighting along all roads, major shared and pedestrian paths, and traversing public open space • basic improvements to local parks and open space (refer to open space delivery below) • local drainage system • local street or pedestrian path crossings of waterways unless outlined as the responsibility of another agency in the Precinct Infrastructure Plan • infrastructure as required by utility service providers including water, sewerage, drainage (except where the item is funded through a Development Services Scheme), electricity, gas, and telecommunications. • construction of shared paths along waterways and open space |
|------------|--|

| | |
|------------|--|
| | <ul style="list-style-type: none"> • remediation and / or reconstruction of dry-stone walls where required. |
| R23 | <p>All public open space (where not otherwise provided via the Beveridge North West ICP) must be finished to a standard that satisfies the requirements of the responsible authority prior to the transfer of the public open space, including but not limited to:</p> <ul style="list-style-type: none"> • removal of all existing and disused structures, foundations, pipelines, and stockpiles • basic levelling including the supply and spread of minimum 75mm topsoil and subsoil if required on the proposed areas of open space to provide a stable free draining surface • clearing of rubbish, weeds and rocks, levelled, topsoiled and grassed with warm climate grass (unless conservation reserve requirements dictate otherwise) • provision of water tapping, potable and recycled water connection points • sewer, gas and electricity connection points must also be provided to land identified as sports reserve • planting of trees and shrubs (with drought tolerant species) • adequate protection of existing trees that are to be retained including exclusion zones as appropriate • vehicular exclusion devices (fence, bollards, or other suitable method) • maintenance access points • construction of minimum 1.5 metre wide pedestrian paths around the perimeter of the reserve, connecting and linking into any other surrounding paths or points of interest, except where shown as a shared paths on Plan 9 • installation of park furniture including barbeques, shelters, tables, local scale play grounds and other local scale play elements such as half basketball courts and hit-up walls, rubbish bins and appropriate paving to support these facilities, consistent with the type of public open space listed in the open space delivery guide at Table 10. |
| R24 | <p>Sports reserves must be vested in the relevant authority in the following condition:</p> |

| | |
|--|--|
| | <ul style="list-style-type: none"> • free from surface and protruding rocks and structures • reasonably graded and/or top soiled to create a safe and regular surface, with a maximum 1:6 gradient • bare, patchy and newly graded areas seeded, top-dressed with drought resistant grass. <p>Consistent with the Beveridge North West ICP, where these works are not considered to be temporary, works are eligible for a works-in-kind credit against an ICP obligation. Works associated with adjacent road construction, such as earthworks for a road embankment, are not eligible for works-in-kind credit.</p> |
|--|--|

GUIDELINES

| | |
|------------|--|
| G71 | <p>Where an inter-parcel connection is intended or indicated in the PSP, streets should be constructed to property boundaries at the relevant stage of development required or approved by the responsible authority. Provision should be made for temporary vehicle turning until the inter-parcel connection is delivered.</p> |
|------------|--|

4 APPENDICES

4.1 Precinct Infrastructure Plan

| Category | ICP Reference No. | Title | Description | Lead Agency | Component Included in ICP | | | Timing | Apportionment |
|------------------------------|-------------------|--|--|------------------------|---------------------------|----------------------|-----------------------|--------|---------------|
| | | | | | Ultimate Land | Interim Construction | Ultimate Construction | | |
| ROAD PROJECTS | | | | | | | | | |
| Road | RD-01 | Camerons Lane between Eastern Arterial (Patterson Road/E14 extension) and existing Malcolm Street. | Future secondary arterial Road. Construction of upgraded carriageway and purchase of additional road reserve needed to ensure 34m wide road reserve. | Mitchell Shire Council | Yes | Yes | No | S - M | 50% |
| Road | RD-02 | Camerons Lane between Eastern Arterial (Patterson Road/E14 extension) and Western Arterial. | Future secondary arterial road. Purchase of land for 34m wide reserve and construction of the first carriageway. | Mitchell Shire Council | Yes | Yes | No | S - M | 100% |
| Road | RD-03 | Western Arterial between Camerons Lane and Hadfield Road reservation. | Future secondary arterial road. Purchase of land for 34m wide reserve and construction of the first carriageway. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |
| Road | RD-04 | Eastern Arterial (Patterson Road/E14 extension) between Camerons Lane and Hadfield Road reservation. | Future secondary arterial road. Purchase of land for 34m wide reserve and construction of the first carriageway. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |
| INTERSECTION PROJECTS | | | | | | | | | |
| Intersection | IN-01 | Eastern Arterial (Patterson Road/E14 extension) / Camerons Lane. | Construction of a 4-way signalised intersection. | Mitchell Shire Council | Yes | Yes | No | S - M | 75% |
| Intersection | IN-02 | Camerons Lane / central connector street. | Construction of signalised T intersection. | Mitchell Shire Council | Yes | Yes | No | S - M | 100% |

| | | | | | | | | | |
|--------------|-------|--|--|------------------------|-----|-----|-----|-------|------|
| Intersection | IN-03 | Western Arterial / Camerons Lane. | Construction of signalised 4-way intersection. | Mitchell Shire Council | Yes | Yes | No | S - M | 50% |
| Intersection | IN-04 | Western Arterial and southern connector street. | Construction of a signalised 4-way intersection. | Mitchell Shire Council | Yes | Yes | No | S - M | 100% |
| Intersection | IN-05 | Western Arterial and central connector street. | Construction of a signalised 4-way intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |
| Intersection | IN-06 | Western Arterial and Boulevard connector (central). | Construction of a signalised 4-way intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |
| Intersection | IN-07 | Western Arterial and Boulevard connector (north). | Construction of a signalised T Intersection. | Mitchell Shire Council | Yes | Yes | Yes | M-L | 100% |
| Intersection | IN-08 | Western Arterial and Hadfield Road Reservation (Wallan South). | Construction of a 4-way signalised Intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 50% |
| Intersection | IN-09 | Eastern Arterial (Patterson Road/E14 extension) and Hadfield Road Reservation (Wallan South) | Construction of a 4-way signalised Intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 50% |
| Intersection | IN-10 | Eastern Arterial (Patterson Road/E14 extension) and Boulevard Connector Street (north). | Construction of a 4-way signalised Intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |
| Intersection | IN-11 | Eastern Arterial (Patterson Road/E14 extension) and Boulevard Connector Street (central). | Construction of a 4-way signalised Intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |
| Intersection | IN-12 | Eastern Arterial (Patterson Road/E14 extension) and Boulevard Connector Street (central). | Construction of a 4-way signalised Intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |
| Intersection | IN-13 | Eastern Arterial (Patterson Road/E14 extension) and | Construction of a 4-way signalised Intersection. | Mitchell Shire Council | Yes | Yes | No | M-L | 100% |

| | | | | | | | | | |
|--|-------|---|--|---------------------------------|-----|-----|-----|-------|------|
| | | Connector Street (south). | | | | | | | |
| Intersection | N/A | Camerons Lane Interchange | Construction of freeway interchange. | VicRoads | No | No | No | S - M | n/a |
| BRIDGE PROJECTS | | | | | | | | | |
| Bridge | BR-01 | Secondary arterial road Bridge across constructed waterway. | Construction of a single carriageway crossing of the constructed waterway on Patterson Road/E14 extension. | VicRoads | Yes | Yes | No | S - M | 100% |
| Bridge | BR-02 | Pedestrian Bridge over Kalkallo Creek. | Construction of a pedestrian bridge over the Kalkallo Creek. | Mitchell Shire Council | Yes | Yes | No | M | 100% |
| Bridge | BR-03 | Connector Road Bridge across Kalkallo Creek | Construction of a single carriageway crossing of Kalkallo Creek. | Mitchell Shire Council | Yes | Yes | No | S - M | 100% |
| COMMUNITY BUILDING & EDUCATION PROJECTS | | | | | | | | | |
| Community Infrastructure | CI-01 | Northern Level 2 Community Facility | Purchase of land and construction of a Community Centre collocated with LTC-3 | Mitchell Shire Council | Yes | N/A | Yes | M | n/a |
| Community Infrastructure | CI-02 | Eastern Level 1 Community Facility | Purchase of land and construction of a Community Centre collocated with LTC-2 | Mitchell Shire Council | Yes | N/A | Yes | M | n/a |
| Community Infrastructure | CI-03 | Southern Level 3 Community Facility | Purchase of land and construction of a Community Centre collocated with LTC-1 | Mitchell Shire Council | Yes | N/A | Yes | S - M | n/a |
| Community Infrastructure | CI-04 | Western Level 1 Community Facility | Purchase of land and construction of a Community Centre collocated with LTC-4 | Mitchell Shire Council | Yes | N/A | Yes | S - M | n/a |
| Community Infrastructure | CI-05 | Local indoor recreation facility | Land acquisition for indoor recreation facility adjoining northern sports reserve. | Mitchell Shire Council | Yes | No | No | M-L | n/a |
| School | N/A | Government year P-6 | Purchase of land and construction of Government year P-6 school located in proximity to LTC-3 | Dept. of Education and Training | No | No | No | M - L | n/a |

| | | | | | | | | | |
|--|-------|---------------------------------|---|---------------------------------|-----|-----|-----|-------|------|
| School | N/A | Government year P-6 | Purchase of land and construction of Government year P-6 school collocated with LTC-2 | Dept. of Education and Training | No | No | No | M - L | n/a |
| School | N/A | Non-Government year P-6 school | Purchase of land and construction of Non-Government year P-6 school collocated with LTC-2 | Private Education | No | No | No | N/A | n/a |
| School | N/A | Government year P-6 school | Purchase of land and construction of Government year P-6 school collocated with LTC-4 | Dept. of Education and Training | No | No | No | S - M | n/a |
| School | N/A | Non-Government year P-6 school | Purchase of land and construction of Non-Government year P-6 school collocated with LTC-4 | Private Education | No | No | No | N/A | n/a |
| School | N/A | Government year P-12 school | Purchase of land and construction of Government year P-12 school collocated with LTC-1 | Dept. of Education and Training | No | No | No | S - M | n/a |
| School | N/A | Non-Government year P-12 school | Purchase of land and construction of Non-Government year P-12 school collocated with LTC-1 | Private Education | No | No | No | N/A | n/a |
| OPEN SPACE & CONSERVATION AREAS | | | | | | | | | |
| Sporting Reserve | SR-01 | Sports fields | Purchase of land and construction of sports fields, hard courts and multipurpose pavilion collocated with LTC-3 | Mitchell Shire Council | Yes | N/A | Yes | M - L | 100% |
| Sporting Reserve | SR-02 | Sports fields | Purchase of land and construction of sports fields, hard courts and multipurpose pavilion collocated with LTC-2 | Mitchell Shire Council | Yes | N/A | Yes | S - M | 100% |

| | | | | | | | | | |
|------------------|-------|---------------------------|---|------------------------|-----|-----|-----|-------|------|
| Sporting Reserve | SR-03 | Sports fields | Purchase of land and construction of sports fields, hard courts and multipurpose pavilion collocated with LTC-1 | Mitchell Shire Council | Yes | N/A | Yes | M - L | 100% |
| Sporting Reserve | SR-04 | Sports fields | Purchase of land and construction of sports fields, hard courts and multipurpose pavilion collocated with LTC-4 | Mitchell Shire Council | Yes | N/A | Yes | S - M | 100% |
| Local Park | LP-01 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-02 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-03 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | S - M | 100% |
| Local Park | LP-04 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | S - M | 100% |
| Local Park | LP-05 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | S - M | 100% |
| Local Park | LP-06 | Passive Linear Open Space | Provision of land for a linear local park | Mitchell Shire Council | Yes | No | No | S - M | 100% |
| Local Park | LP-07 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-08 | Passive Linear Open Space | Provision of land for a linear local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-09 | Passive Linear Open Space | Provision of land for a linear local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-10 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-11 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |

| | | | | | | | | | |
|------------|-------|---------------------------|---|------------------------|-----|----|----|-------|------|
| Local Park | LP-12 | Passive Linear Open Space | Provision of land for a linear local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-13 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-14 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-15 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-16 | Passive Linear Open Space | Provision of land for a linear local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-17 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-18 | Passive Linear Open Space | Provision of land for a linear local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-19 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-20 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-21 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-22 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-23 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-24 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |
| Local Park | LP-25 | Passive Open Space | Provision of land for a local park | Mitchell Shire Council | Yes | No | No | M - L | 100% |

4.2 Parcel Specific Land Budget

| PSP PROPERTY ID | TOTAL AREA (HECTARES) | Transport | | | Community & Education | | | | Open Space | | | | Total Net Developable Area (Hectares) | Net Developable Area % of Property |
|-----------------|-----------------------|---------------------------------------|--|--|-----------------------|---------------------------------|--------------------------|------------------------------------|-------------------------------|-------|---------------------------------|-------------------------------|---------------------------------------|------------------------------------|
| | | Arterial Road | | | Government School | Potential Non-Government School | ICP Community Facilities | Local Indoor Recreation (ICP land) | Service Open Space | | Credited Open Space | | | |
| | | Arterial Road - Existing Road Reserve | Arterial Road - Public Acquisition Overlay | Arterial Road - New / Widening / Intersection Flaring (ICP land) | | | | | Waterway and Drainage Reserve | Other | Local Sports Reserve (ICP land) | Local Network Park (ICP land) | | |
| 1 | 178.38 | - | - | 5.09 | - | - | - | - | 3.06 | 78.07 | - | 3.25 | 88.92 | 49.85% |
| 2 | 40.97 | - | - | - | - | - | - | - | 9.63 | 15.42 | - | - | 15.92 | 38.87% |
| 3 | 41.46 | - | - | - | - | - | - | - | 7.31 | 1.70 | - | - | 32.45 | 78.26% |
| 4 | 138.50 | - | - | 10.73 | 3.50 | - | 1.20 | 4.99 | 0.29 | 8.29 | 20.01 | 4.73 | 84.75 | 61.19% |
| 5 | 116.98 | - | - | 0.11 | - | - | - | - | - | 62.99 | - | 0.75 | 53.13 | 45.41% |
| 6 | 115.49 | - | - | 0.61 | 3.50 | - | 0.80 | - | 0.84 | 17.85 | - | 5.32 | 86.57 | 74.96% |
| 7 | 42.74 | - | - | - | - | 2.60 | - | - | 1.01 | - | - | 0.75 | 38.37 | 89.79% |
| 8 | 40.14 | - | - | 0.13 | 3.50 | - | 0.80 | - | 5.80 | - | 2.20 | 0.43 | 27.27 | 67.95% |
| 9 | 90.23 | - | - | 4.54 | - | - | - | - | 11.56 | - | 7.69 | 0.75 | 65.68 | 72.80% |
| 10 | 2.09 | - | - | 0.34 | - | - | - | - | - | - | - | - | 1.75 | 83.63% |

| | | | | | | | | | | | | | | |
|--|----------------|--------------|-------------|--------------|--------------|--------------|-------------|-------------|--------------|---------------|--------------|--------------|---------------|---------------|
| 11 | 115.92 | - | - | 4.68 | - | - | - | - | 8.55 | - | 0.06 | 6.06 | 96.57 | 83.31% |
| 12 | 16.42 | - | - | 0.66 | - | - | - | - | - | - | - | - | 15.77 | 96.01% |
| 13 | 134.97 | - | - | 6.40 | 11.90 | 7.00 | 1.50 | - | 25.82 | - | 12.02 | 2.73 | 67.61 | 50.09% |
| 14 | 80.19 | - | 0.13 | 2.12 | - | - | - | - | 10.77 | - | 3.42 | 1.04 | 62.72 | 78.21% |
| 15 | 99.38 | - | 2.48 | - | - | 2.50 | - | - | 5.28 | - | 9.90 | 1.50 | 77.71 | 78.20% |
| SUB-TOTAL | 1253.85 | 0.00 | 2.60 | 35.42 | 22.39 | 12.10 | 4.30 | 4.99 | 89.92 | 184.32 | 55.31 | 27.31 | 815.18 | 65.01% |
| Road Reserve | | | | | | | | | | | | | | |
| R1 | 16.36 | 16.36 | - | - | - | - | - | - | - | - | - | - | 0.00 | 0.00% |
| R2 | 9.14 | 7.59 | - | 1.55 | - | - | - | - | - | - | - | - | 0.00 | 0.00% |
| SUB-TOTAL | 25.50 | 23.94 | 0.00 | 1.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| TOTALS PSP Beveridge North West | 1279.35 | 23.94 | 2.60 | 36.97 | 22.39 | 12.10 | 4.30 | 4.99 | 89.92 | 184.32 | 55.31 | 27.31 | 815.18 | 63.72% |

4.3 Beveridge North West Local Town Centre – Design Principles

| LOCAL TOWN CENTRES | |
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| <p>Principle 1 Provide every neighbourhood with a viable Local Town Centre as a focus of the community with a fine grain, closely spaced distribution pattern.</p> | <ul style="list-style-type: none"> • Deliver a fine grain distribution pattern of highly accessible Local Town Centres generally on a scale of one Local Town Centre for every neighbourhood of 8,000 to 10,000 people. • Locate Local Town Centres with a distribution pattern of around one Local Town Centre for every square mile (approx. 2.6km²) of residential development. • Deliver a network of economically viable Local Town Centres including a supermarket and supporting competitive local shopping business, medical, leisure, recreation and community needs while allowing opportunities for local specialisation. |
| <p>Principle 2 Locate Local Town Centres on a connector street intersection with access to an arterial road and transit stop.</p> | <ul style="list-style-type: none"> • Locate the Local Town Centre on an arterial/connector intersection and ensure that the Local Town Centre is central to the residential catchment that it services while optimising opportunities for passing trade. • Locate the Local Town Centre with future railway stations or other forms of transit stops to benefit the Local Town Centre, to offer convenience for public transport passengers, and to minimise walking distance between transit stops and the town centre core. • Other Local Town Centre locations may be considered where the location results in the Local Town Centre being central to the residential catchment that it serves and/or the location incorporates natural or cultural landscape features such as rivers and creeks, tree rows, topographic features or other heritage structures which assist in creating a sense of place. |
| <p>Principle 3 Locate Local Town Centres in an attractive setting so that most people live within a walkable catchment of a Local Town Centre and relate to the centre as the focus of the neighbourhood.</p> | <ul style="list-style-type: none"> • Ensure that 80-90% of households are within a 1km walkable catchment of a local or higher order Town Centre. • Locate Local Town Centres in attractive settings and incorporate natural or cultural landscape features such as creeks and waterways, linear open space, pedestrian and cycle links and areas of high aesthetic value. • The design of the Local Town Centre should respect existing views and vistas to and from the Local Town Centre location. |
| <p>Principle 4 Provide a full range of local community and other facilities including a supermarket, shops, medical and recreation uses.</p> | <ul style="list-style-type: none"> • Land uses should be located generally in accordance with the locations and general land use terms identified on the Local Town Centre Concept Plan. • Promote designs which offer a high degree of community interaction and provision of a vibrant and viable mix of retail, recreation and community uses. • Encourage clustering of uses in precincts such as a 'medical precinct' where similar or synergistic uses should be sited together to promote stronger trading patterns. |

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| | <ul style="list-style-type: none"> • Encourage smaller grain individual tenancies and land ownership patterns to attract participation of local business investment and encourage opportunities for greater diversity. • Incorporate flexible floor spaces (including floor to ceiling heights) into building design to enable localised commercial uses to locate amongst the activity of the local town centre. • The local town centre should generally be anchored by one full line supermarket and supported by specialty stores unless otherwise noted on the Local Town Centre Concept Plan. • Supermarkets and other commercial or community anchors or secondary anchors within the local town centre should generally be located diagonally opposite one another across the main street and/or town square to promote pedestrian desire lines that maximise movement within the public realm. • A small access mall that address a supermarket/other 'large box uses' may be considered as part of the overall design. Such access malls may have a limited number of internalised shops. The primary access to the mall should be from the main street and/or the town square. • Active building frontages should address the main- street and town square to maximise exposure to passing trade and promote pedestrian interaction. • Provide retail and/or office at ground level, and office, commercial and residential above ground level in Mixed Use precincts • Locate childcare, medical centres and specialised accommodation (for example, aged care, nursing home, student accommodation, and serviced apartments) within or at the edge of the local town centre to contribute to the centre's activity and the resident's access to services. • Locate car parking areas centrally to development sites and to the rear and or side of street-based retail frontages. • Design car parking areas to accommodate flexible uses and allow for long term development opportunities. • Provide public toilets in safe and accessible locations within the managed area of the property. |
| <p>Principle 5 Focus on a public space as the centre of community life.</p> | <ul style="list-style-type: none"> • Provide a public space which acts as the central meeting place within the local town centre. This space may take the form of a town square, town park, public plaza space, public market place or a similar locally responsive option designed to function as the identifiable 'centre' or 'heart' with a distinctive local character for both the local town centre and the broader residential catchment. • Key uses of the LTC are to be positioned where they front public spaces to ensure it is a dynamic and activated space. • Design flexible and adaptable public spaces so that a range of uses can occur within them at any one time. Such uses may include people accessing daily shopping and business needs as well as social interaction, relaxation, celebrations and temporary uses (such as stalls, exhibitions and markets). |

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| | <ul style="list-style-type: none"> • Design the public space so that it is well integrated with pedestrian and cycle links around and through the local town centre so that it acts as a 'gateway' to the activity of the centre. • The main public space or town square should have a minimum area of 500 square metres. Smaller public spaces which are integrated within the built form design, surrounded by active frontages and facilitate high levels of pedestrian movement are also encouraged. • Footpath widths within and around the public space as well as along the main street should be sufficient to provide for universal access as well as outdoor dining and smaller gathering spaces. |
| <p>Principle 6</p> <p>Integrate local employment and service opportunities in a business-friendly environment.</p> | <ul style="list-style-type: none"> • Provide a variety of employment and business opportunities through the provision of a broad mix of land uses and commercial activities. • Provide a range of options and locations for office-based businesses. • Consider appropriate locations for small office/home office housing which maximise the access and exposure to the activity of the local town centre. • Provide services and facilities to support home based and smaller businesses within the local town centre. • Consider using these uses to sleeve loading areas and car parks where feasible. |
| <p>Principle 7</p> <p>Include a range of medium and high-density housing and other forms of residential uses within and surrounding the local town centre.</p> | <ul style="list-style-type: none"> • Provide medium and high-density housing in and around the local town centre for passive surveillance and contributions to the centre's life and amenity. • Provide medium and high-density housing in locations of high amenity in and around the local town centre, connected to the activity of the local town centre through strong pedestrian and cycle links. • Provide a range of housing types for a cross section of the community (such as retirement living) in and around the local town centre. • Design the local town centre to avoid potential land use conflicts between residential and commercial uses by focusing on retail operations on the main street and around the town square and locating residential uses predominantly at the edge and/or on upper levels. • Refer to the Small Lot Housing Code for further information about housing requirements for small lots around local town centres. |
| <p>Principle 8</p> <p>Design the Local Town Centre to be pedestrian friendly and accessible by all modes including public transport,</p> | <ul style="list-style-type: none"> • Design the local town centre to provide easy, direct and safe access for pedestrians, cyclists, public transport modes, private vehicles, service and delivery vehicles with priority given to pedestrian movement, amenity, convenience and safety. • Provide a permeable street network, walkways and public spaces that provide linkages throughout the centre and designated pedestrian crossing points. • Design the main and other streets to comply with the relevant cross sections found within the PSP. |

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| <p>while enabling private vehicle access.</p> | <ul style="list-style-type: none"> • A speed environment of 40 kilometres per hour or less should be designed for the length of the main street. • Provide public transport infrastructure facilities in convenient locations for commuters. • Provide bus stops in accordance with the Public Transport Guidelines for Land Use and Development, to the satisfaction of the Department of Transport. • Provide bicycle parking within the street network and public spaces in highly visible locations and close to key destinations. • Design supermarket and other ‘large format’ buildings so they do not impede on the movement of people around the local town centre. • Encourage pedestrian movement along the length of the street and through public spaces by locating key buildings at strategic points/sites. • Design buildings so they have a positive relationship with the interface to the public street network and does not impede on the pedestrian movement. • Design car parking areas with adequate positioning and lighting to ensure passive surveillance and public. • Provide dedicated pedestrian routes and areas of landscaping within off street car park areas. • Provide on-street car parking to encourage short stay/convenience uses. • Group and limit the number of car park access crossovers. • Design heavy vehicle access points to limit the pedestrian and vehicle conflict. Loading and deliveries should be located to the rear and or side of street-based retail frontages. • All streets, public spaces and car parks to be lit to Australian standards and with pedestrian (generally white) light. Lighting should be designed to avoid unnecessary spill to the side or above. • Secondary access to the supermarket from car parking areas should only be considered where it facilitates convenient trolley access and does not diminish the role of the primary access from the main street and or town square. |
| <p>Principle 9 Create a sense of place with high quality engaging urban design.</p> | <ul style="list-style-type: none"> • Design developments to complement and enhance the character of the surrounding area by responding to key visual cues associated with the topography and other natural features of the local town centre location and its surrounds. • Minimise amenity and noise impacts resulting from the mix of uses by maintaining appropriate separation and transitional areas between retail and housing activities using open space, road networks and community facilities. • Use materials and design elements that contribute to a cohesive and legible character for the local town centre as a whole. • Designate sites in prominent locations (such as at key intersections, surrounding public spaces and terminating key view lines and vistas) for significant buildings or landmark structures. |

- Ensure that the design of corner sites, where the main street meets an intersecting and/or arterial road by:
 - providing built form that anchors the main street to the intersecting road. This can be achieved through increased building height, scale and articulated frontages
 - incorporating either 2 storey buildings or 2 storey elements (such as awnings and roof lines)
 - providing an active ground floor frontage and active floor space components to the main street frontage
 - providing a consistent covered walkway or veranda for weather protection in the design of building frontages on main pedestrian routes.
- Align built form with the property boundary to define the street edge.
- Provide visually rich, interesting and well-articulated street interfaces and all visible side or rear facades finished in suitable materials and colours that contribute to the character of the local town centre.
- The design and siting of supermarkets and other 'large format retail uses should provide an appropriate response to the entire public domain. This includes but is not limited to car parking areas, predominant routes and street level interfaces.
- Design supermarket and secondary anchors with frontages that directly address the main street and/or town square so that the use integrates with and promotes activity within the main street and public spaces/ thoroughfares.
- Design supermarkets or large format retail uses with a direct frontage to the main street using clear glazing to allow view lines into the store from the street. (Planning permits for buildings and works should condition against the use of "white washed" or frosted glass windows, excessive window advertising and obtrusive internal shelving or 'false walls' offset from the glazing).
- Retail uses along street frontages should generally include access points at regular intervals to encourage activity along the length of the street.
- Public spaces should be oriented to capture north sun and protect from prevailing winds and weather
- Landscaping of all interface areas should be of a high standard as an important element to complement the built form design.
- Urban art should be incorporated into the design of the public realm.
- Street furniture should be located in areas that are highly visible and close to or adjoining pedestrian desire lines/gathering spaces and designed to add visual interest to the Local Town Centre.
- Wrapping or sleeving of car parking edges with built form, to improve street interface, should be maximised.
- Car parking areas should provide for appropriate landscaping with planting of canopy trees and dedicated pedestrian thoroughfares.
- Screening of centralised waste collection points should minimise amenity impacts on adjoining areas and users of the centre.
- Where service areas are accessible from car parks, they should present a well-designed and secure facade to public areas.

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| <p>Principle 10 Promote localisation, sustainability and adaptability.</p> | <ul style="list-style-type: none"> • Mechanical plant and service structure roofs should be included within roof lines or otherwise hidden from view. • The Local Town Centre should promote the localisation of services which will contribute to a reduction of travel distance to access local services and less dependence on private vehicles. • The Local Town Centre should be designed to be sympathetic to its natural surrounds by: <ul style="list-style-type: none"> ○ investigating the use of energy efficient design and construction methods for all buildings ○ including Water Sensitive Urban Design principles such as integrated stormwater retention and reuse (e.g. toilet flushing and landscape irrigation) ○ promoting safe and direct accessibility and mobility within and to and from the Local Town Centre ○ including options for shade and shelter through a combination of landscape and built form treatments ○ ensuring buildings are naturally ventilated to reduce the reliance on plant equipment for heating and cooling ○ promoting passive solar orientation in the configuration and distribution of built form and public spaces ○ grouping waste collection points to maximise opportunities for recycling and reuse ○ promoting solar energy for water and space heating, electricity generation and internal and external lighting ○ investigating other opportunities for the built form to reduce greenhouse gas emissions associated with the occupation and the ongoing use of buildings. • Ensure the local town centre and building design has an inbuilt capacity for growth. |
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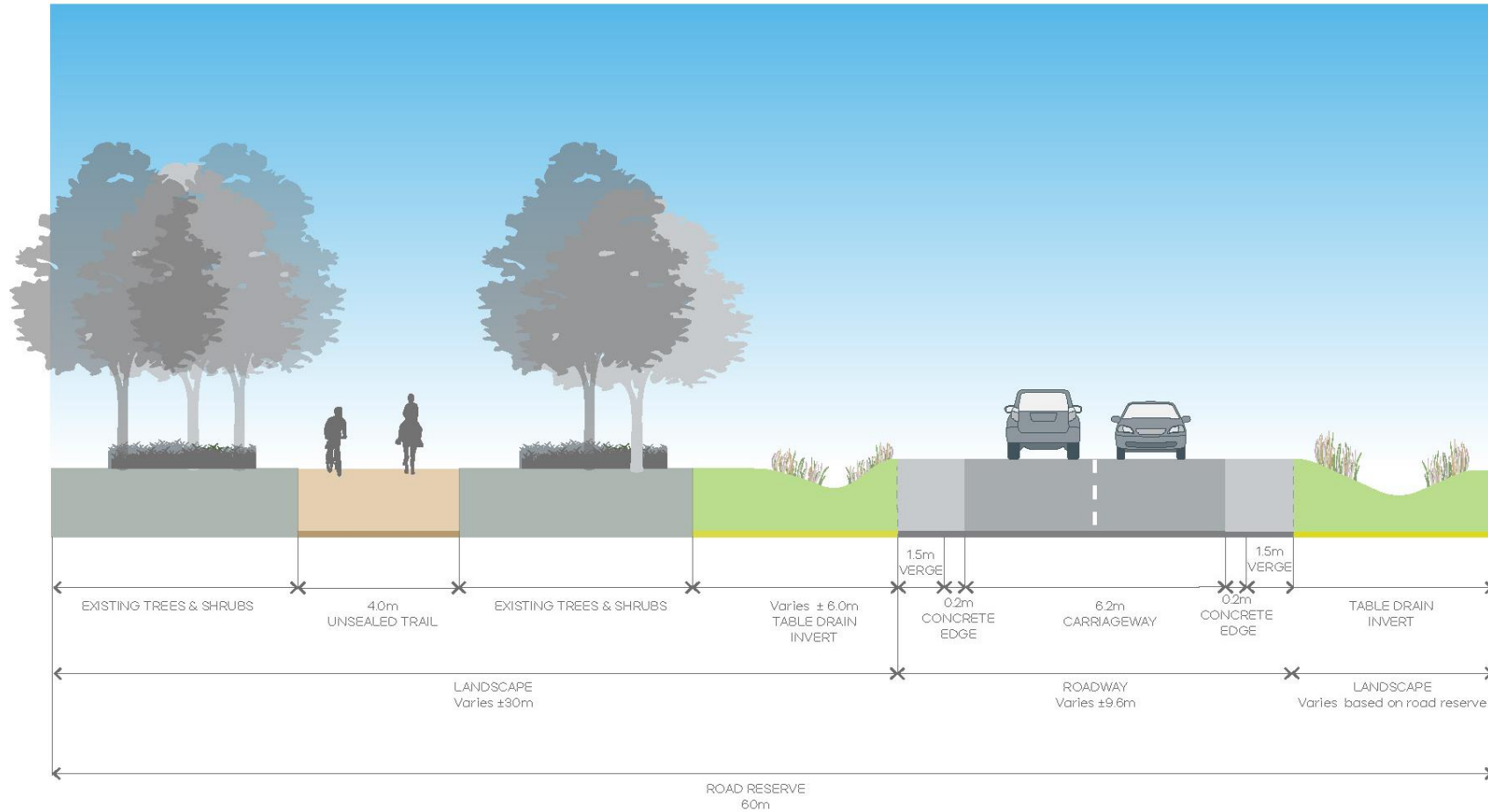
4.4 Local Convenience Centre Performance Criteria

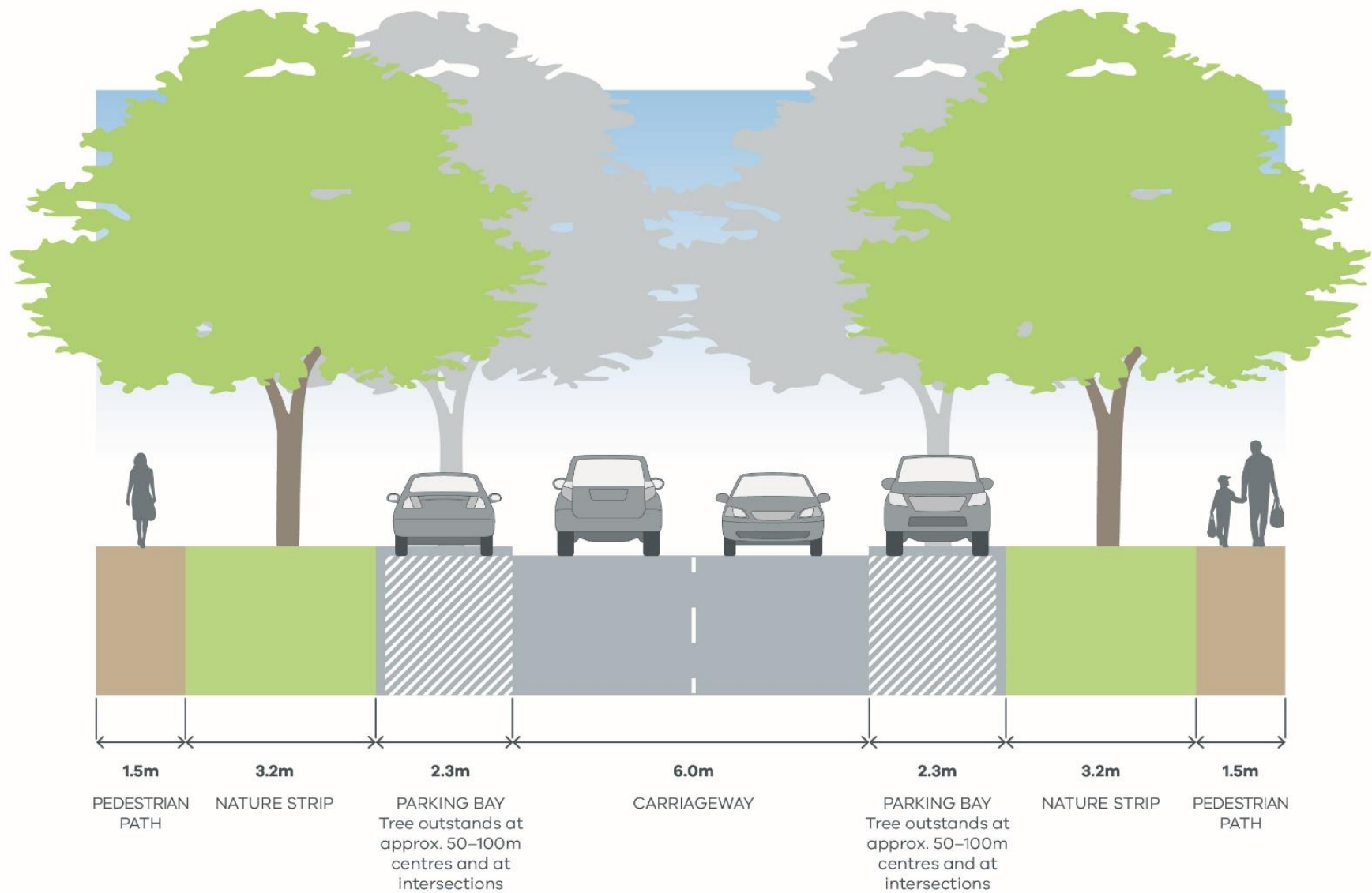
| LOCAL CONVENIENCE CENTRES | |
|---|--|
| <p>Principle 1 Provide a range of local services and facilities which are appropriate to the Local Convenience Centre location and the catchment that it serves.</p> | <ul style="list-style-type: none"> • The design of the Local Convenience Centre should facilitate development with a high degree of community interaction and provide an appropriate mix of retail, commercial and community facilities to suit the catchment that the Local Convenience Centre serves. • The design of the Local Convenience Centre should also encourage a pattern of smaller scale individual tenancies and land ownership patterns within the Local Town Centre to attract investment and encourage greater diversity and opportunities for local business investment. • Active building frontages should address the primary street frontage to maximise exposure to passing trade and promote pedestrian interaction. |
| <p>Principle 2 Design the Local Convenience Centre to be pedestrian friendly and accessible by all modes including public transport, while enabling private vehicle access</p> | <ul style="list-style-type: none"> • Public transport infrastructure/facilities should be planned for commuter friendly/convenient locations adjacent to the Local Convenience Centre. • Bus stops should be provided in accordance with the Public Transport Victoria Public Transport Guidelines for Land Use and Development, to the satisfaction of Public Transport Victoria. • Bicycle parking should be provided within the street network and public spaces in highly visible locations and close to pedestrian desire lines and key destinations. |

Any Local Convenience Centre should be easily, directly and safely accessible for pedestrians, cyclists, public transport modes, private vehicles, service and delivery vehicles with priority given to pedestrian movement, amenity, convenience and safety.

- The design of buildings within the Local Convenience Centre should have a relationship with and should interface to the public street network.
- Car parking areas should be located centrally to the site and to the rear and or side of street based retail frontages.
- Car parking areas should be designated to ensure passive surveillance and public safety through adequate positioning and lighting.
- Car parking areas should be designed to provide dedicated pedestrian routes and areas of landscaping.
- On street car parking should be provided either as parallel or angle parking to encourage short stay parking.
- Car parking ingress and egress crossovers should be grouped and limited.
- Car parking ingress or egress and car parking areas accommodating heavy vehicle movements should be designed to limit the pedestrian/vehicle conflict.
- Streets, public spaces and car parks should be well lit to Australian standards and with pedestrian friendly (generally white) light. Lighting should be designed to avoid unnecessary spill to the side or above.

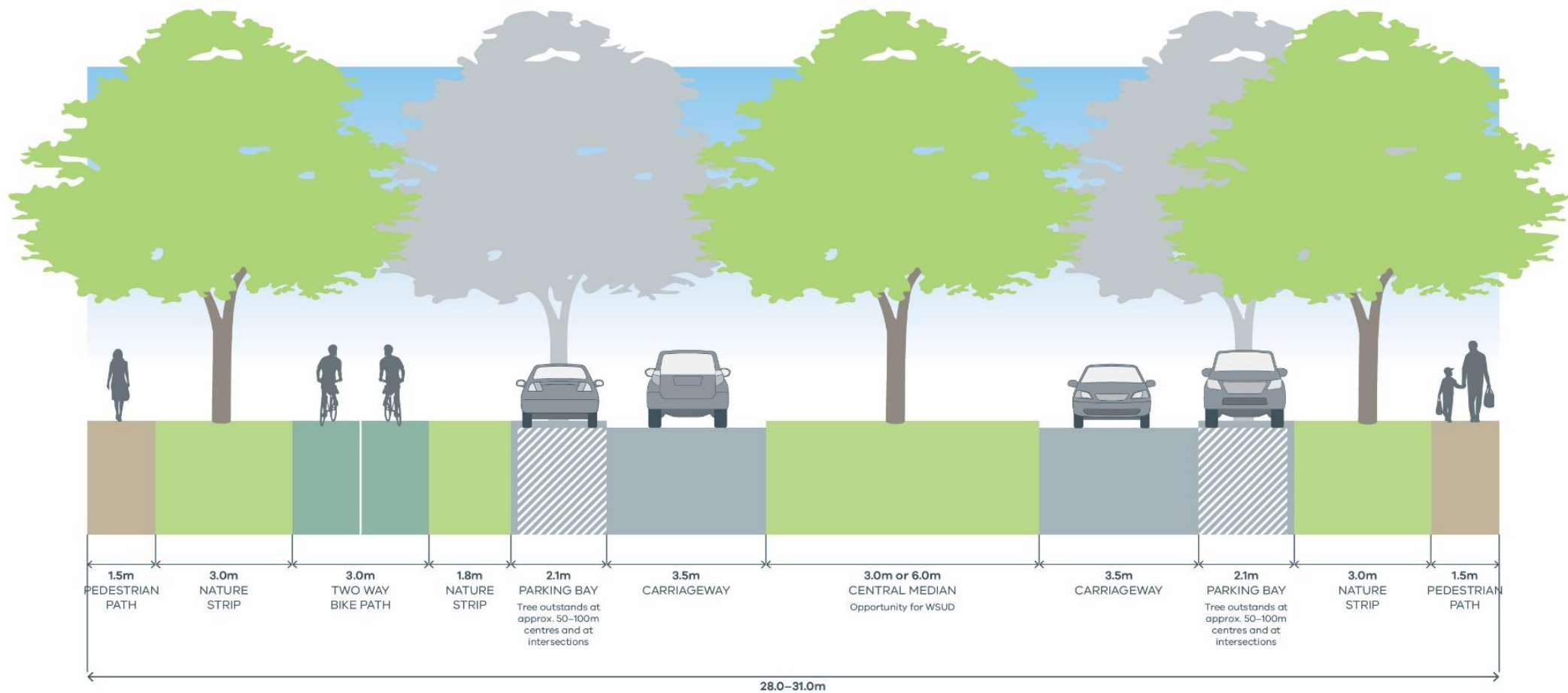
4.5 Street Cross Sections





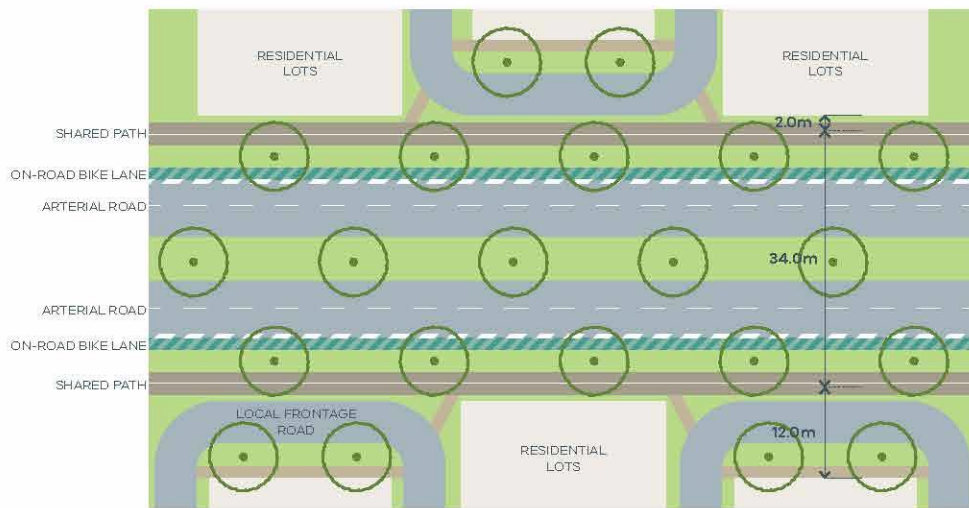
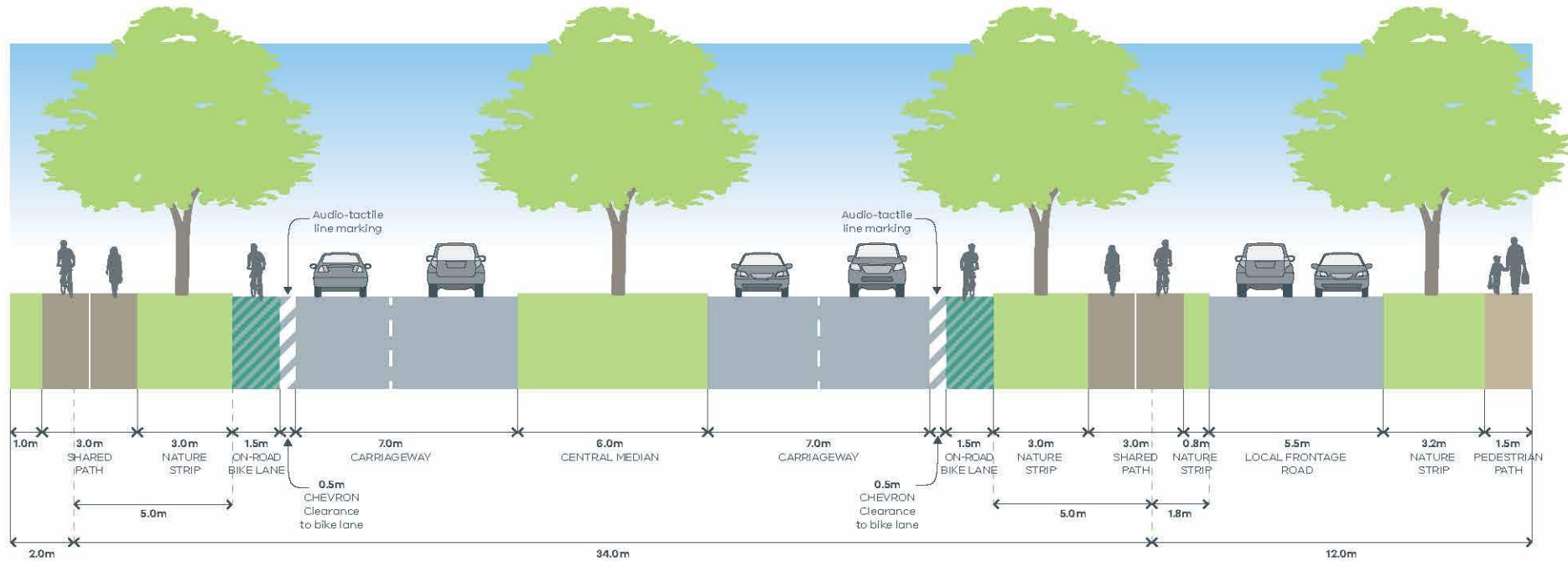
NOTES:

- Minimum street tree mature height 12 metres
- All kerbs are to be B2 Barrier Kerb
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.



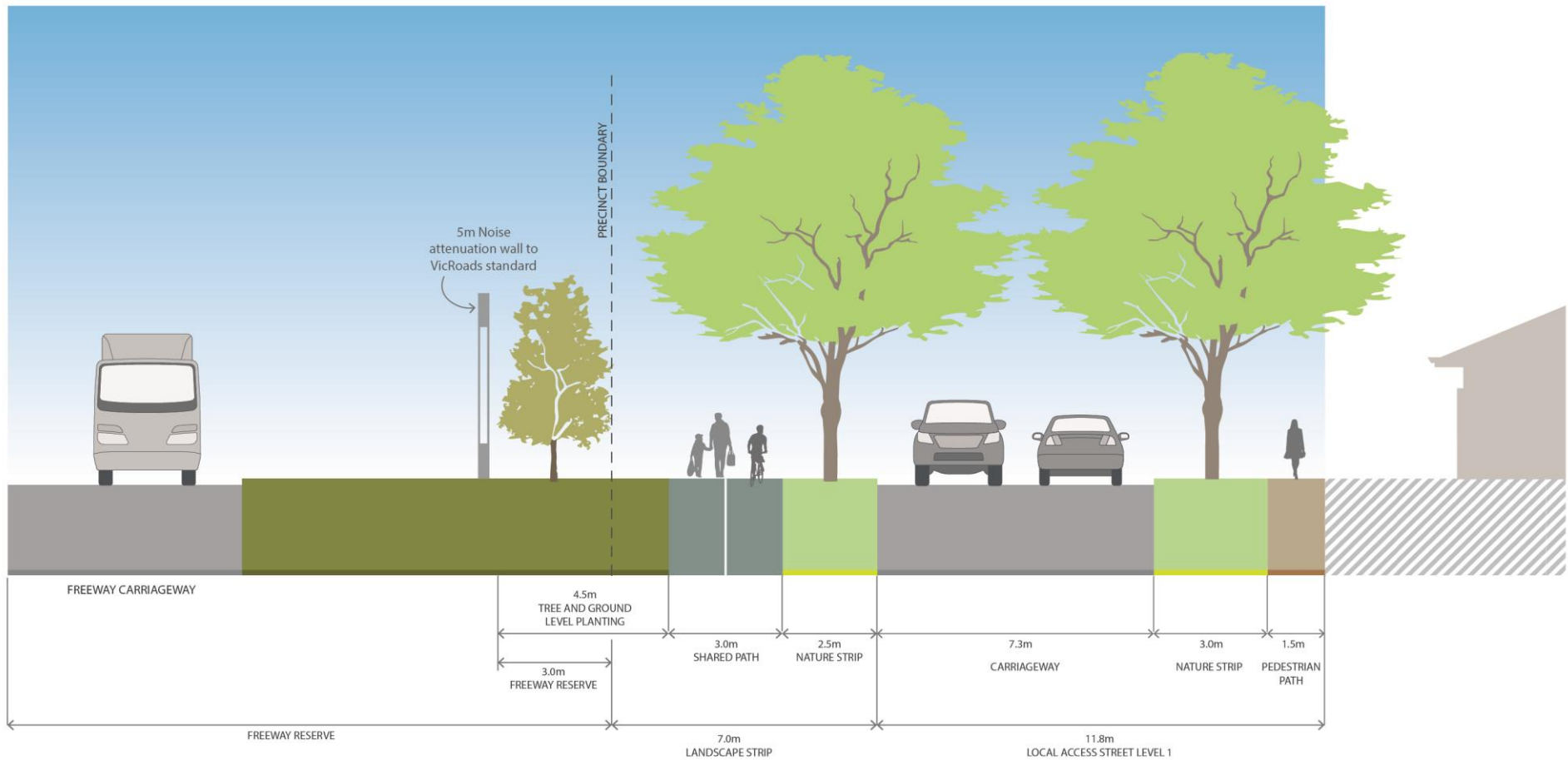
NOTES:

- Include a central median with large canopy trees to create a boulevard effect. Trees are to be centrally planted in median.
- Topsoil used in central medians is to be sandy loam, with a minimum depth of 200mm. The surface of medians is to be free-draining with a minimum cross fall of 2%, and is to be planted with warm season grasses.
- In areas where high pedestrian volumes are expected (e.g. around schools and town centres), central medians should be paved with harder wearing surfaces such as granitic sand or other pavements. Canopy tree planting must be incorporated into additional paved area.
- Any garden beds in central medians are to be offset 1.5m from back of kerb.
- Kerb to central median is to be SM2 semi-mountable kerb.
- Depending on the location of breaks in the median, provide intermediate pedestrian crossing points to accommodate mid-block crossings.
- An alternative boulevard treatment can be achieved through a wider verge on one side capable of accommodating a double row of canopy trees.
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.
- Variations to indicative cross-section may include water sensitive urban design (WSUD) outcome. These could include but are not limited to bioretention tree planter systems and/or median bioretention swales. Such variations must be to the satisfaction of the responsible authority.



NOTES:

- Includes typical residential interface both sides.
- Minimum street tree mature height 15 metres.
- Kerbs for arterial carriageways are to be SM2 Semi Mountable Kerb, and local frontage roads are to be B2 Barrier Kerb.
- Cross section indicative, final location of infrastructure and landscaping to be developed at detailed design stage.
- Variations to indicative cross section may include water sensitive urban design (WSUD) outcomes. These could include but are not limited to bioretention tree planter systems and/or median bioretention swales. Such variations must be to the satisfaction of the responsible authority.



NOTES:

- The shared path is to be located outside of the freeway reserve, unless a proposal to locate the path within the freeway reserve is approved in writing by VicRoads
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority
- Shared paths to be delivered as developer works.

4.6 Service Placement Guidelines

4.6.1 Standard road cross sections

Figures 003 and 004 in the *Engineering Design and Construction Manual for Subdivision in Growth Areas (April 2011)* outline placement of services for a typical residential street environment. This approach is appropriate for the majority of the 'standard' road cross sections outlined in Appendix C containing grassed nature strips, footpaths and road pavements.

4.6.2 Non-standard road cross sections

To achieve greater diversity of streetscape outcomes in Melbourne's growth areas, which enhances character and amenity of these new urban areas, non-standard road cross sections are required. Non-standard road cross sections will also be necessary to address local needs, such as fully sealed verges for high pedestrian traffic areas in town centres and opposite schools. This PSP contains suggested non-standard 'variation' road cross sections, however other non-standard outcomes are encouraged.

For non-standard road cross sections where service placement guidance outlined in Figure 003 and 004 in the *Engineering Design and Construction Manual for Subdivision in Growth Areas (April 2011)* is not applicable, the following service placement guidelines will apply.

| | UNDER PEDESTRIAN PAVEMENT | UNDER NATURE STRIPS | DIRECTLY UNDER TREES ¹ | UNDER KERB | UNDER ROAD PAVEMENT | WITHIN ALLOTMENTS | NOTES |
|----------------|---------------------------|---------------------|-----------------------------------|------------|---------------------|-----------------------|--|
| SEWER | Preferred | Possible | Possible | No | Possible | Possible ³ | |
| POTABLE WATER | Possible ⁴ | Preferred | Preferred | No | No | No | Can be placed in combined trench with gas |
| RECYCLED WATER | Possible ⁴ | Preferred | Preferred | No | No | No | |
| GAS | Possible ⁴ | Preferred | Preferred | No | No | No | Can be placed in combined trench with potable water |
| ELECTRICITY | Preferred ⁴ | Possible | Possible | No | No | No | Pits to be placed either fully in footpath or nature strip |
| FTTH/TELCO | Preferred ⁴ | Possible | Possible | No | No | No | Pits to be placed either fully in footpath or nature strip |

| | | | | | | | |
|-----------------------|----------|----------|----------|---------------|-----------|-----------------------|--|
| DRAINAGE | Possible | Possible | Possible | Preferr ed | Preferred | Possible ³ | |
| TRUNK SERVICES | Possible | Possible | Possible | Possibl e | Preferred | No | |

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| NOTES | <p>1 Trees are not to be placed directly over property service connections</p> <p>2 Placement of services under road pavement is to be considered when service cannot be accommodated elsewhere in road reserve. Placement of services beneath edge of road pavement/parking bays is preferable to within traffic lanes</p> <p>3 Where allotment size/frontage width allows adequate room to access and work on a pipe</p> <p>4 Where connections to properties are within a pit in the pedestrian pavement/footpath</p> |
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4.6.3 General principles for service placement:

- place gas and water on one side of road, electricity on the opposite side
- place water supply on the high side of road
- place services that need connection to adjacent properties closer to these properties
- place trunk services further away from adjacent properties
- place services that relate to the road carriageway (eg. drainage, street light electricity supply) closer to the road carriageway

Maintain appropriate services clearances and overlap these clearances wherever possible



Beveridge North West Precinct Structure Plan – August 2019

