# Echuca West

## Precinct Structure Plan

August 2022

Victorian Planning Authority

Campaspe Shire Council

VICTORIA State Government

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# 1 INTRODUCTION

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

The PSP is a long-term plan for urban development. It describes how the land is to be developed as well as 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 relevant local and Victorian Government guidelines listed below;
- Enables the transition of non-urban to urban land;
- Sets the vision for how land should be developed and the outcomes achieved;
- 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, affordable lifestyle;
- Sets out objectives, guidelines and requirements for land use, development; and subdivision; and
- Provides Government agencies, the Council, developers, investors and local communities with certainty about future development.
- Acknowledges that development must also comply with other Acts and approvals where relevant.

The PSP is informed by:

- State and Local Planning Policy Framework as set out in the Campaspe Planning Scheme
- Plan Melbourne 2017 - 2050 (DELWP, 2017)
- Loddon Mallee North Regional Growth Plan (Department of Transport, Planning and Local Infrastructure, 2014)
- Precinct Structure Planning Guidelines (Growth Areas Authority, 2008)
- Echuca Housing Strategy (Beca Pty Ltd, 2011)
- Echuca Commercial Strategy, (Shire of Campaspe, 2018)
- Infrastructure Design Manual (Local Government Infrastructure Design Association).
- A series of technical background reports.

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

- Echuca West Background Report, as described in section 1.3 of the PSP
- Echuca West Development Contributions Plan, as described in section 1.4 of the PSP

# Plan 1 - Local Context

Echuca West Precinct Structure Plan

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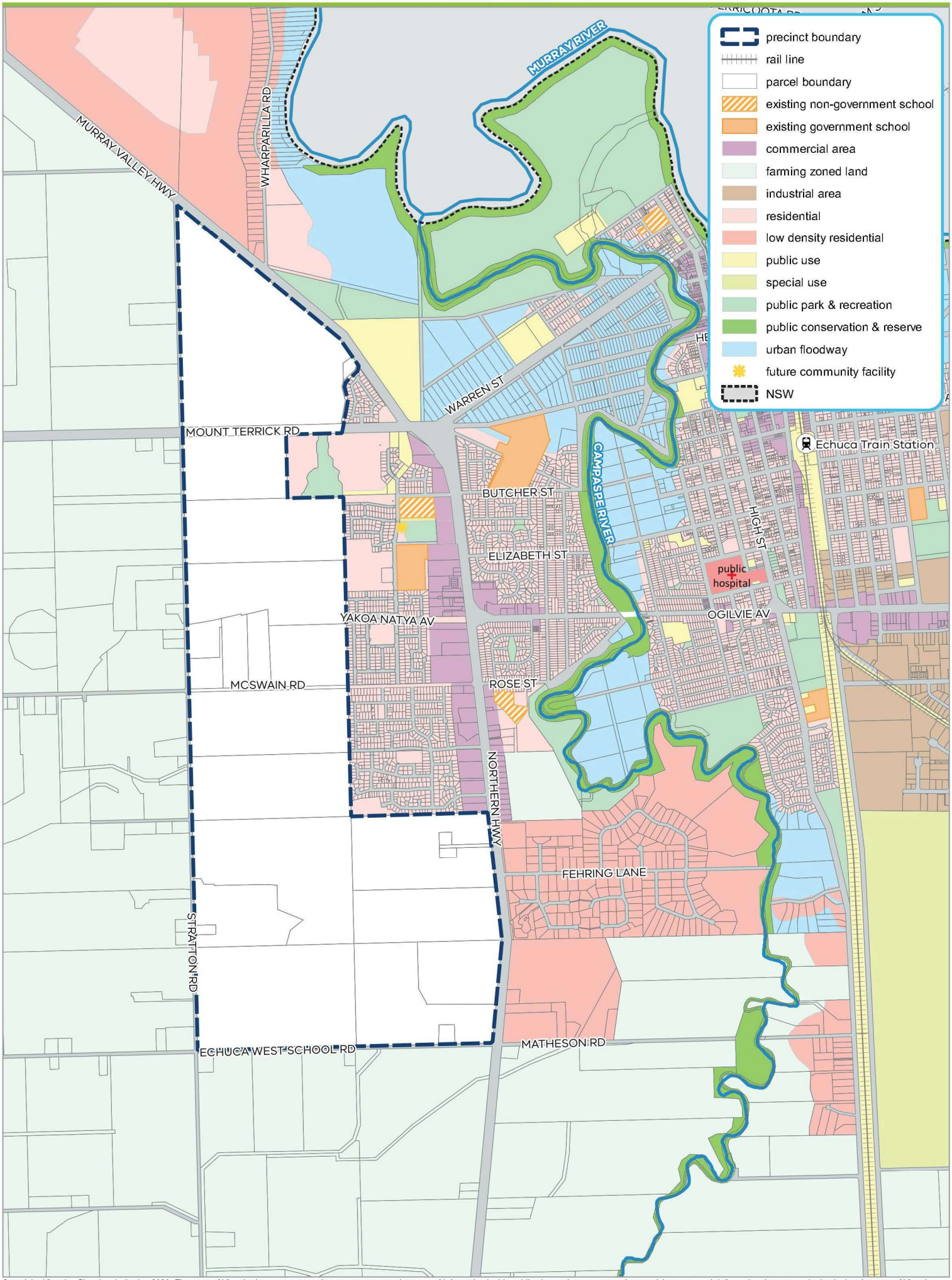

## 1.1 How to read this document

This PSP guides land use and development where a planning permit is required under the Urban Growth Zone Schedule 1 (Clause 37 of the Campaspe Planning Scheme), or any other provision of the planning scheme that references the PSP.

A planning application and planning permit must implement the outcomes of the PSP. The outcomes are expressed as the vision and objectives of the PSP.

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 this precinct structure plan. A requirement may reference a plan, table or figure in the PSP.

**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 reference a plan, table or figure in the PSP.

Meeting these requirements and guidelines will implement the outcomes of the PSP. Development must also comply with other Acts and approvals, where relevant (e.g. the Aboriginal Heritage Act 2006 in the case of cultural heritage, among others).

Not every aspect of land use and development is addressed in the PSP and a responsible authority may manage development and issue permits as relevant under its general discretion.

## 1.2 Land to which this Precinct Structure Plan applies

The PSP applies to approximately 615 hectares of land located to the west of the Echuca CBD. The PSP is generally bound by Murray Valley Highway to the north, established Echuca West and the Northern Highway to the east, Echuca West School Road to the south and Stratton Road to the west.

The PSP is the primary growth front in Echuca and will represent the next 40 years of residential land supply for the municipality. The precinct is topographically flat and historically has supported farming uses, including grazing; as such existing irrigation channels and drainage assets adjoin and transverse the precinct. Decommissioning of drainage channels will occur as part of the redevelopment of the precinct as guided by the drainage authorities and the Echuca West drainage strategy. The PSP adjoins existing development of Echuca West which includes a government and non-government primary school, the planned Echuca West Integrated Children's Facility and the Echuca West Neighbourhood Convenience Centre.

## 1.3 Background Information

Detailed background information on the precinct is available, including the local and municipal context, history, biodiversity, visual character, landform and topography, land contamination, cultural heritage, integrated water management, transport, economic and retail provision, and community infrastructure. This information is summarised in the Echuca West Precinct Structure Plan Background Report and has informed the preparation of the PSP.

## 1.4 Echuca West Development Contributions Plan

The Echuca West Development Contributions Plan (DCP) has been developed in parallel with the PSP to inform and direct the future planning and development of the Precinct. The DCP requires development proponents to make a contribution toward infrastructure.

The DCP sets out the requirements for infrastructure funding across the precinct. The DCP is a separate document incorporated into the Campaspe Planning Scheme and is implemented through Schedule 1 to Clause 45.06 Development Contributions Plan Overlay (DCPO).

# Plan 2 - Future Urban Structure

Echuca West Precinct Structure Plan

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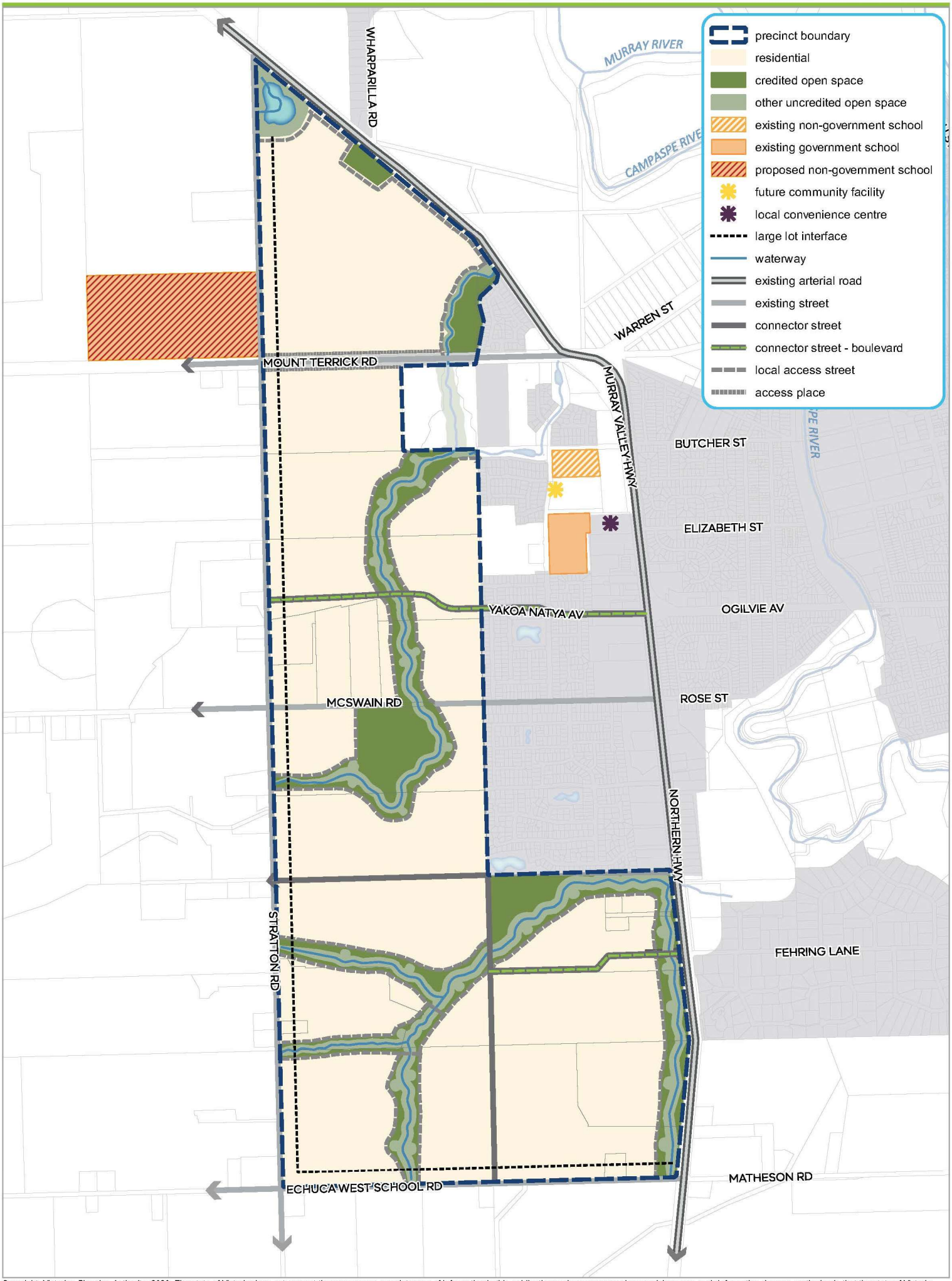

# 2 OUTCOMES

## 2.1 Vision

Located on the banks of the Murray River and Campaspe River, Echuca is a regional growth centre, attracting future residents with its natural amenity, history, lifestyle and employment opportunities.

The Echuca West precinct will be home to the majority of new residents to Echuca and thereby assist and strengthen the growth of this regional centre. The precinct will extend from existing development in Echuca West along Wilkinson Drive, Mount Terrick Road and McSwain Road and integrate cohesively as development extends to the west.

The Echuca West Precinct Structure Plan (PSP) provides a strong framework for the delivery of high-quality residential neighbourhoods in a rural setting. Development will be well connected to the existing Echuca township and neighbourhoods, with access to a range of facilities and efficient connection to the Northern and Murray Valley Highway and Warren Street.

The unique topography of the site offers the opportunity to provide bespoke housing with generous setbacks. Well-defined urban character that has a strong relationship to the surrounding rural landscape will be encouraged. Sustainable housing will have a strong emphasis on creating a high-quality urban environment supported by landscaping and open spaces.

Open spaces will incorporate existing native vegetation and places of Aboriginal cultural heritage with appropriate signage and informational resources. The drainage corridor running through the precinct will contribute to local amenity and local habitat biodiversity, via the provision of linear walking trails and passive park areas for informal recreation activities and indigenous and native species plantings.

The foundations for this vision are based on an urban structure comprising a walkable and cyclable street and trail network, housing and lifestyle choices, local schools, and safe, attractive and functional open spaces. In turn, it will foster a diverse local community in an attractive setting.

## 2.2 Objectives

The development of the Echuca West PSP area is guided by a set of key objectives.

| OBJECTIVES | |
|---|---|
| **Urban character, heritage and housing** | |
| **O1** | Create a high amenity urban environment through the provision of well-designed housing, pedestrian and cycle friendly streets and attractive open spaces and park networks. |
| **O2** | Promote a diversity of lots sizes and housing options that meet the needs of the future community. |
| **O3** | Provide urban design outcomes which recognise the history of the site, its relationship to neighbouring farmland and provide an appropriate transition from rural to urban landscapes. |
| **Retail Centres** | |
| **O4** | Reinforce the primacy of the Echuca CBD to provide the service, employment and retail needs for the new community. |
| **Open space, community facilities and education** | |
| **O5** | Establish public open space assets that are visually and physically linked via the local road network and associated pedestrian and cycling trails. |
| **O6** | Orientate development towards open spaces to maximise their activation and passive surveillance and create a catalyst for architectural diversity. |

| | |
|---|---|
| **Transport and movement** | |
| **O7** | Create a road network that is permeable and facilitates efficient and direct pedestrian, cyclist and vehicle movement and road based public transport. |
| **O8** | Provide alternatives to the use of private vehicles through the creation of direct links to commercial areas, schools and community assets for pedestrian, cyclists and public transport users. |
| **O9** | Create a shared path network that connects well with the existing and future planned connections to the Murray River and Campaspe River trails. |
| **Biodiversity, native vegetation and hazard management** | |
| **O10** | Ensure that the bushfire risk is considered in the layout, staging and design of development and the local street network. |
| **O11** | Create a linear drainage network that achieves a balance between water quality, biodiversity, recreation and visual amenity while maximising developable land. |
| **Integrated water management and utilities** | |
| **O12** | Deliver an integrated and resilient waterway system that supports liveable and sustainable communities, protects the environmental health of urban waterways including the Campaspe and Murray Rivers and that delivers an efficient and safe water service |
| **O13** | Maximise the amenity benefits of stormwater, drainage and water quality assets by integrating them into the urban landscape and open space network. |
| **Precinct infrastructure plan and staging** | |
| **O14** | Ensure all lots have timely access to potable water, electricity, reticulated sewerage, drainage, gas and telecommunications services. |
| **O15** | Install essential services in a way that does not impede the ability to plant canopy trees in streets and along easements and minimises the impact on existing landscape features. |
| **O16** | Ensure that development staging is co-ordinated with the delivery of key local and state infrastructure |
| **O17** | Ensure that development responds to the staged decommissioning of GMW drains/channels |

# Plan 3 - Land Use Budget

Echuca West Precinct Structure Plan

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## 2.3 Land Use Budget

The land use budget in Table 1 provides a summary of the land required for transport, community facilities, education facilities, and open space and identifies the total amount of land available for development in the precinct.

The net developable area (NDA) is established by deducting the land requirements for transport, community facilities, public and private education facilities, open space (sports reserves and local parks), drainage corridors, conservation areas and other encumbered land from the gross developable area (GDA).

The Summary Land Use Budget for the Echuca West PSP is located in Table 1 below and a Site Specific Land Use Budget is located in Appendix A.

The PSP will generate approximately 5,000 dwellings to accommodate more than 14,000 new residents.

Table 1 Summary land use budget

| Description | HECTARES | % OF TOTAL | % OF NDA |
|---|---|---|---|
| **TOTAL PRECINCT AREA (ha)** | **614.91** | | |
| **Transport** | | | |
| Arterial Road Widening and Intersection Flaring (DCP land) | 0.44 | 0.07% | 0.09% |
| Non-Arterial Road Reserve – Existing Road Reserve | 7.85 | 1.28% | 1.57% |
| Sub-total Transport | 8.29 | 1.3% | 1.66% |
| **Open Space** | | | |
| **Uncredited open space** | | | |
| Waterway and Drainage Reserve | 13.70 | 2.23% | 2.74% |
| Waterway and Drainage Reserve (DCP land) | 38.61 | 6.28% | 7.71% |
| Sub-total uncredited open space | 52.31 | 8.51% | 10.45% |
| **Credited open space** | | | |
| Local sports reserve (DCP land) | 6.71 | 1.1% | 1.34% |
| Local Parks (via Cl 52.01) | 46.89 | 8.51% | 10.70% |
| Sub-total credited open space | 53.60 | 8.51% | 10.70% |
| Total All Open Space | 105.90 | 17.2% | 21.15% |
| **TOTAL NET DEVELOPABLE AREA - (NDA) Ha** | **500.72** | **81.43%** | |

*NOTE: The summary land budget included in this table clearly sets out the NDA for the PSP. The NDA will not be amended to respond to minor changes to land budgets that may result from the subdivision process for any other reason than those stated above, unless the variation is agreed to by the responsible authority.*

*The land budget has been prepared to reflect current advice from Campaspe Shire Council regarding land required for drainage assets as part of the preparation of the drainage scheme for the PSP area. The land required for drainage assets may be subject to minor refinement through the subdivision process.*

# Plan 4 - Urban Character, Heritage and Housing

Echuca West Precinct Structure Plan

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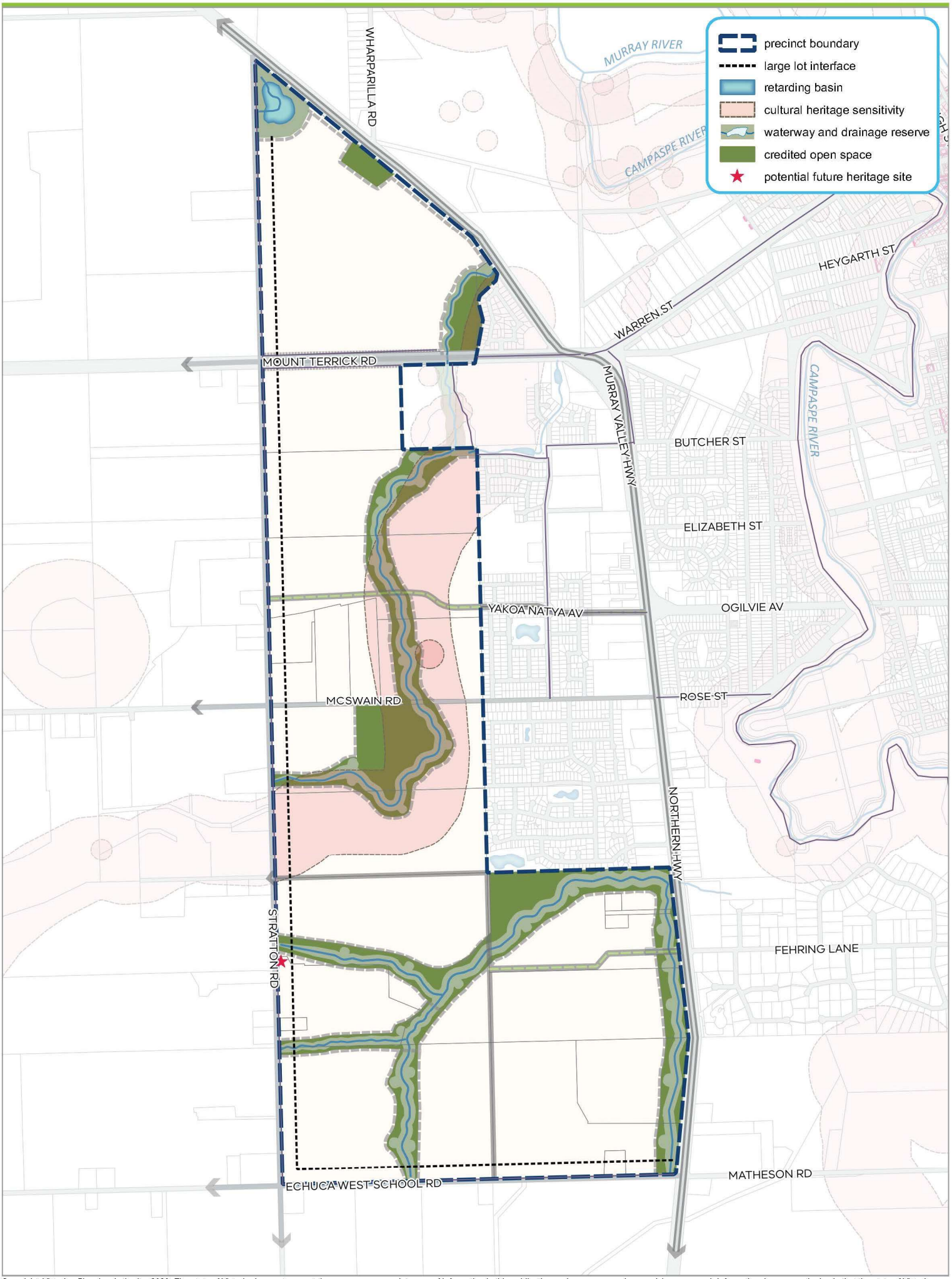

# 3 IMPLEMENTATION

## 3.1 Urban Character, Heritage & Housing

### 3.1.1 Urban Character

| REQUIREMENTS | |
|---|---|
| R1 | Street trees must be provided on both sides of all roads and streets (excluding laneways) at regular intervals appropriate to tree size at maturity, in accordance with relevant Council landscaping guidelines unless otherwise agreed by the responsible authority. |
| R2 | All public landscaped areas must be planted and designed to the satisfaction of the responsible authority. |
| R3 | Street tree planting must use locally appropriate species and be consistent with any guidance provided on the relevant cross section within this PSP, unless otherwise approved by the responsible authority. |
| **GUIDELINES** | |
| G1. | Street networks within subdivisions should be designed to maximise the number of connections and direct views to local parks and co-located serviced open space. |
| G2. | High quality landscape treatments should be provided throughout the precinct to reinforce the movement hierarchy and establish local character, most particularly in streetscapes and along waterway corridors. |
| G3. | Built form on corner lots should positively address both frontages through the use of architectural treatments and landscaping. |
| G4. | A consistent suite of lighting and furniture should be used across neighbourhoods, appropriate to the type and role of street or public space, unless otherwise agreed by the responsible authority. |
| G5. | Hard landscaped areas within open space should incorporate local materials, natural colours and finishes to complement the landscape heritage. |
| G6. | Incorporate materials salvaged from decommissioned farming operations in the precinct should be incorporated into landscape features, where appropriate. |

### 3.1.2 Heritage

| REQUIREMENTS | |
|---|---|
| R4 | Any subdivision and/or development of land adjoining a future heritage site identified on Plan 4, must be respectful of the scale, form, siting and heritage significance of the place or building to the satisfaction of the responsible authority. |
| R5 | A mandatory Cultural Heritage Management Plan must be prepared prior to development or disturbance of land in areas identified for Aboriginal Cultural Heritage Sensitivity as shown on Plan 4. |
| R6 | Sites of Aboriginal Cultural Heritage significance conserved within the PSP area must be incorporated into development to the satisfaction of the Yorta Yorta (or Aboriginal Victoria in its absence), and in accordance with any future Cultural Heritage Management Plan. |
| **GUIDELINES** | |
| G7. | Development of land adjoining 437 Stratton Road, Echuca West identified on Plan 4 as a potential heritage site should respect the heritage character of the property. |
| G8. | For area outside the area of Aboriginal Cultural Heritage Significance a voluntary Cultural Heritage Management Plan or cultural heritage due diligence assessment should be undertaken prior to development or disturbance of that land. |

| | |
|---|---|
| **G9.** | Proponents undertaking development of land identified on the Victorian Aboriginal Heritage Register, and/or with high Aboriginal cultural heritage values including those identified on Plan 4, should liaise with the Yorta Yorta (or Aboriginal Victoria in its absence) to ascertain whether heritage interpretation is appropriate in these identified locations, and how the heritage site(s) should be incorporated into the design of the subdivision. |

### 3.1.3 Housing

#### Lot Size and Housing Density

The overall housing density target for the precinct is based on Net Developable Area (NDA), which is defined as:

- The total amount of land within the precinct that is available for development of housing including, lots, local streets and connector streets. It excludes land set aside for community facilities, education facilities, arterial roads, unencumbered open space and encumbered open space such as waterways, ecological and heritage conservation.

The precinct is divided into two housing density areas (large lot interface and standard neighbourhood) that are illustrated on Plan 4 and located in response to:

- Large lot interface – lots that immediately interface the farming zone boundary of the precinct.
- Standard residential – lots that make up the balance of developable land area of the PSP

Table 2: Estimated housing yield and distribution

| Residential | NDA (Ha) | Approx. Dwelling Density (ha) | Approx. Dwellings | Assumed approx. avg lot size ($m^2$) | % of total lots | % of NDA |
|---|---|---|---|---|---|---|
| **Large lot interface** | 44.56 | 5 | 223 | 2,000 | 4.25% | 8.8% |
| **Standard residential** | 456.40 | 11 | 5,020 | 900 | 95.75% | 91.2% |
| **Total yield against NDA** | 500.90 | | 5,243 | | 100% | 100% |

Table 3 provides an example of the typical housing types that might be provided on a range of lot sizes that support the housing diversity objective.

Table 3: Housing delivery guide

| Character area | Housing Type Range |
|---|---|
| **Large lot interface** | All developments within the identified large lot interface on Plan 4, should be sited and designed to protect the existing rural landscape character of the adjacent areas. |
| **Standard residential** | All developments within the balance of residential areas shown on Plan 4 should provide a lot range that supports the delivery of a diversity of housing types. Smaller lots are encouraged in areas within proximity to retail etc. |

| **REQUIREMENTS** | |
|---|---|
| **R7** | Subdivision of land must deliver an overall minimum average density of as outlined in table 2 |

| | |
|---|---|
| | Where a subdivision proposal represents a single stage or limited number of stages, proponents should demonstrate how the subdivision will contribute to the eventual satisfaction of this requirement through further stage of development to the satisfaction of the responsible authority. |
| **R8** | Residential subdivisions must deliver a broad range of lot sizes capable of accommodating a variety of housing types to cater to a range of lot prices and promote affordability. Table 3 should be used as a guide to demonstrate this requirement has been met. |
| **R9** | Subdivision of land in the designated large lot interface area shown in Plan 4 must:<br>• Provide a building envelope to address the rural interface<br>• Not exceed a maximum lot size of 2,000 square metres<br>• Provide rural fencing that is low scale and visually permeable to facilitate the rural lifestyle character of this area, and<br>• maximise side setbacks and create openness between the dwellings. |
| **R10** | Dwellings must front or side:<br>• Waterway, drainage reserve and the open space network (including local parks)<br>• Arterial roads, connector and local streets<br>The siding of lots to waterways, open space and primary street frontages must be kept to a minimum. |
| **R11** | Residential subdivision applications must demonstrate how the subdivision has been designed to minimise adverse amenity impacts on any existing lots directly abutting the development, where appropriate. |
| **R12** | Subdivision applications must include indicative layouts for any lots identified for future development of medium density or integrated housing that suitably demonstrate:<br>• Potential dwelling yield<br>• Active interfaces with adjacent street, open space and waterways<br>• Safe and effective internal vehicle and pedestrian circulation<br>• Delivery of dwelling diversity and lot size diversity<br>• Servicing arrangements. |
| **R13** | Any development in proximity to roadways that trigger the VicRoads Requirements of Developers – Noise Sensitive Uses document must respond to its requirements to the satisfaction of the responsible authority |
| **R14** | Any subdivision abutting a bushfire prone interface or within the Bushfire Management Overlay as defined on Plan 8 must be designed to minimise the impact of potential bushfires, including:<br>• The provision of appropriate development setbacks from the break of slope, or other potential sources of threat<br>• Building guidelines |
| **GUIDELINES** | |
| **G10.** | Where there are opportunities for specialised housing forms such as lifestyle communities, retirement living or aged care facilities they should be:<br>• Integrated into the wider urban structure<br>• Accessible by public transport<br>• Have appropriate road networks and accessibility<br>• Located in close proximity to community facilities |

| | |
|---|---|
| **G11.** | Subdivision of land within a 400-metre walkable catchment of community facilities and designated public transport routes illustrated on Plan 5 and Plan 7 should create a range of lot sizes suitable for the delivery of medium density housing. |
| **G12.** | Dwellings on Echuca West School Road and Stratton Road should achieve a minimum 10 metre setback from the street. |

## 3.2 Retail Centres

### 3.2.1 Echuca West Local Convenience Centre

The Echuca Commercial Strategy identifies a retail floorspace need of 5,000m$^2$ in Echuca West to support population growth of the area up to 2036. The Echuca Commercial Strategy identifies a future Echuca West neighbourhood centre which will provide Echuca West residents with their local convenience shopping needs. A 2ha site along the Murray Valley Highway has been identified for the development of the Echuca West Local Convenience Centre (LCC). This site is located in close proximity to existing and planned community facilities including a government and non-government primary school, specialist school and future Echuca West Integrated Children's Centre (community centre).

The Echuca West LCC will act as the primary retail and service hub for the Echuca West PSP. Foreseeable demand does not generate the need for an additional retail centre to be planned for within the Echuca West PSP.

# Plan 5 - Open Space and Community

Echuca West Precinct Structure Plan

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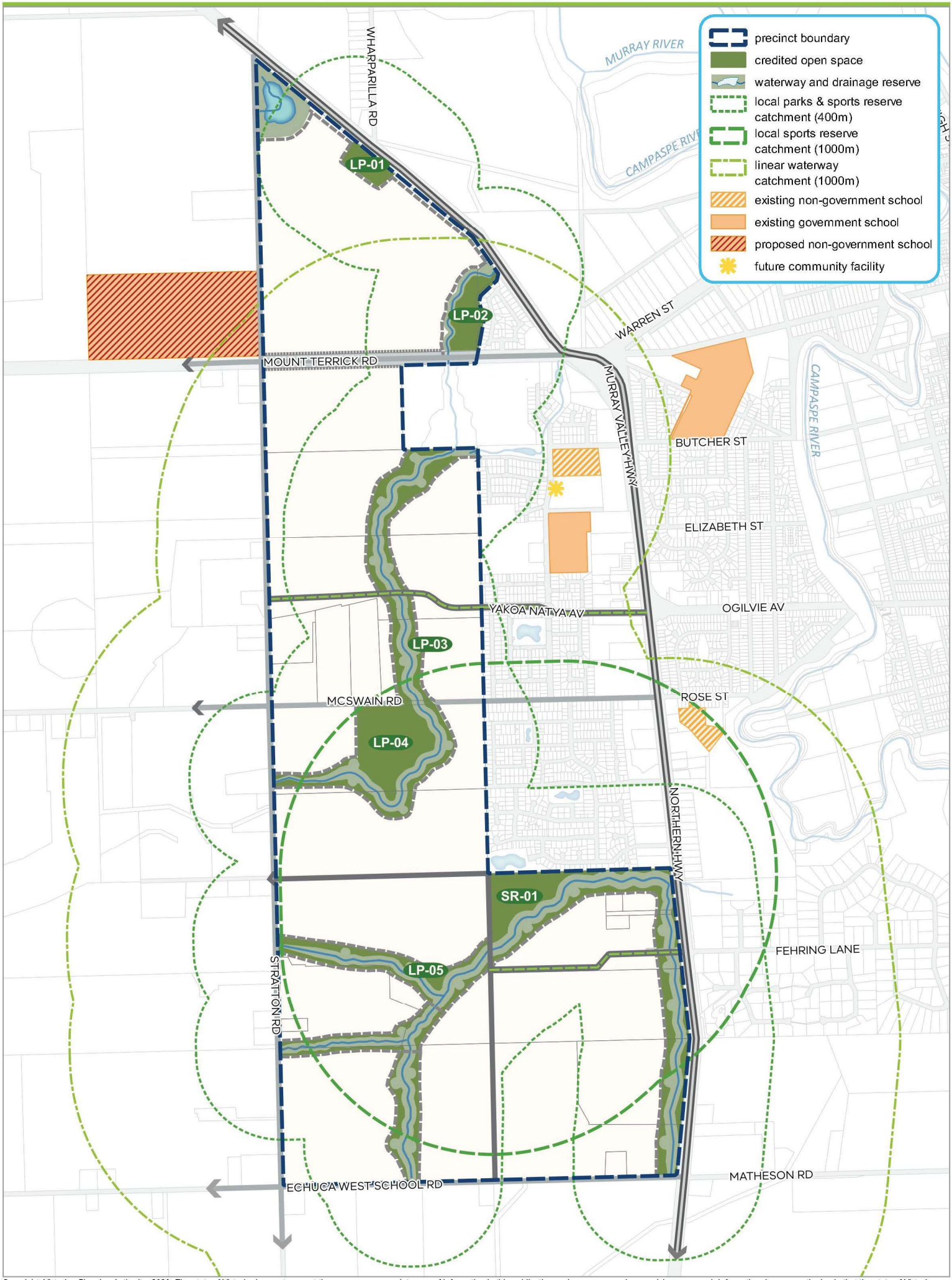

## 3.3 Open Space, Community Facilities & Education

### 3.3.1 Open Space

The Echuca West PSP is located on the urban edge of the Echuca township, surrounded by extensive farmland to its south and west. The Wharparilla Flora Reserve and Murray River environs sits to the north of the precinct with the Campaspe River environs and Rotary Park to its east. The Precinct's open space network has been designed to respond and connect to the existing and proposed surrounding context.

Local parks and active recreation areas have been located to create a well-connected and integrated network. Where possible, they have been located along spines of waterways and with areas of native vegetation to be retained to create a comprehensively connected network.

| REQUIREMENTS | |
|---|---|
| **R15** | All parks must be located, designed and developed to the satisfaction of the responsible authority in accordance with Plan 5 and Table 4, unless otherwise approved by the responsible authority. An alternative provision of land for a local park will be considered, provided it meets the following criteria:<br>• The location does not reduce the walkable access to local parks demonstrated on Plan 5<br>• The design does not diminish the quality or usability of the space for passive recreation<br>• The land area is equal to or more than the park provision outlined in Table 4. |
| **R16** | All parks and open spaces must contain extensive planting of large-canopy trees that are suitable to the urban environment, local climate and soil conditions to the satisfaction of the responsible authority. |
| **R17** | The open space network within the precinct must link into the existing open space network of Echuca via pedestrian and cyclist links. |
| **R18** | Where a local park shown on Plan 4 spans multiple properties, the first permit application for residential subdivision must prepare a master plan for the entire park unless otherwise agreed by the Responsible Authority. |
| **R19** | The open space network must:<br>• Provide flexible recreational opportunities that allow for the anticipated range of sporting reserves and local parks required by the community, as informed by planning undertaken by the Council and State Sporting Associations,(where appropriate)<br>• Maximise the amenity and value of encumbered open space associated with the waterway through the provision of shared paths, trails and other appropriate recreation elements. |
| **R20** | Design and layout of waterway corridors, retarding basins, wetlands and any other encumbered open space must maximise the biodiversity, amenity values and potential for integration of recreation uses where this does not conflict with the primary function of the land to the satisfaction of the responsible authority. |
| **R21** | Fencing of open space where required, whether encumbered or unencumbered, must be:<br>• Low-scale and visually permeable to facilitate public safety and surveillance<br>• Designed to guide appropriate movement and access<br>• Constructed using materials that complement the park setting. |
| **R22** | Development of the local park (LP-04) must respond to Figure 1, and provide appropriate car parking, playground, landscaping and paths to the satisfaction to the responsible authority. |

| GUIDELINES | |
|---|---|
| **G13.** | A proponent delivering a master plan for a local park that traverses multiple property ownerships should consult with the landowners of parcels covered by the park to ensure an integrated design. |
| **G14.** | Open spaces should have a road frontage to the majority of edges except when adjoining the drainage network, abutting community facilities or in the event where future development fronts open space with a paper road to the satisfaction of the responsible authority. |
| **G15.** | Path networks should include way-finding signage which clearly identifies key destinations both within and outside the precinct. |

The following table sets out the open space provision expected to be delivered within the PSP area. The table is linked to Appendix 4.4 open space delivery guide.

Table 4: Open Space delivery guide

| Open Space ID | Type | Land Use Budget Parcel | Area (Hectares) | Attributes | Responsibility |
|---|---|---|---|---|---|
| **LP-01** | Local Park | 1 | 2.38 | Neighbourhood park | Campaspe Shire Council |
| **LP-02** | Local Park | 1,2,3 | 4.37 | Neighbourhood park, adjoining drainage network | Campaspe Shire Council |
| **LP-03** | Linear Park | 5,6,10,12,13 | 9.43 | Linear, adjoining drainage network | Campaspe Shire Council |
| **LP-04** | Local Park | 12 | 10.79 | District, adjoining drainage network | Campaspe Shire Council |
| **LP-05** | Linear Park | 14,15,17,19,20 ,22,23,24 | 20.17 | Linear, adjoining drainage network | Campaspe Shire Council |
| **SR-01** | Sports reserve | 15 | 6.71 | Local sports reserve | Campaspe Shire Council |

# Figure 1 - Local Park Concept Plan (LP-04)

**Echuca West Precinct Structure Plan**

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Note:
A masterplan should be prepared for the local park prior to a subdivision that creates the reserve. The master plan should respond to this concept plan. Where a masterplan identifies potential uses that would not be permitted under the current zone for the land, a planning scheme amend ment may be required, to the satisfaction of the Responsible Authority.

### 3.3.2 Community Facilities & Education

Echuca West is well serviced by existing education facilities, containing the Echuca Twin Rivers P-6 Primary School, St. Mary's P-6 Primary School and the Echuca Specialist School. A future P-12 non-government school is also proposed to the immediate west of the PSP along Mount Terrick Road. The Echuca College 7-12 and the River City P-10 Christian College are located 2km east of the precinct.

Planning is underway for the delivery of the Echuca West Integrated Children's Centre adjacent the Echuca West LCC and existing schools. The future centres design has accommodated for population growth and community needs associated with the PSP for the foreseeable future. Due to this there is no immediate need to include further land within the PSP for community facilities as the identified site will enable the centre to grow to meet the need of the future community.

Whilst every effort has been made to anticipate future community needs over the lifetime of the PSP, the 40+-year land supply that it represents requires a flexible approach to identification of specific uses to ensure the PSP can adapt to changes in service type and delivery over time. Demand for community facilities should be monitored by Council over the lifetime of the PSP and opportunities should be explored between Council and relevant parties for their provision when identified.

| REQUIREMENTS | |
|---|---|
| R23 | Community facilities must be co-located with other complementary uses such as retail, commercial or open space. |
| R24 | The location of key entries to community facilities must allow for safe and convenient pedestrian and cyclist access for all ages and abilities. |
| R25 | Connector or local access streets abutting a school must incorporate a shared path and be designed to achieve slow vehicle speeds and provide designated pedestrian crossing points as required by the responsible authority. |
| **GUIDELINES** | |
| G16. | Schools and community facilities should be designed to front and be directly accessed from a public street with car parking located away from the main entry. |
| G17. | School site should be provided with three street frontages, where practical. |
| G18. | Community facilities should be planned and designed to have the flexibility and capacity to meet the changing needs of the community and provide for a range of uses. |

# Plan 6 - Street Network

Echuca West Precinct Structure Plan

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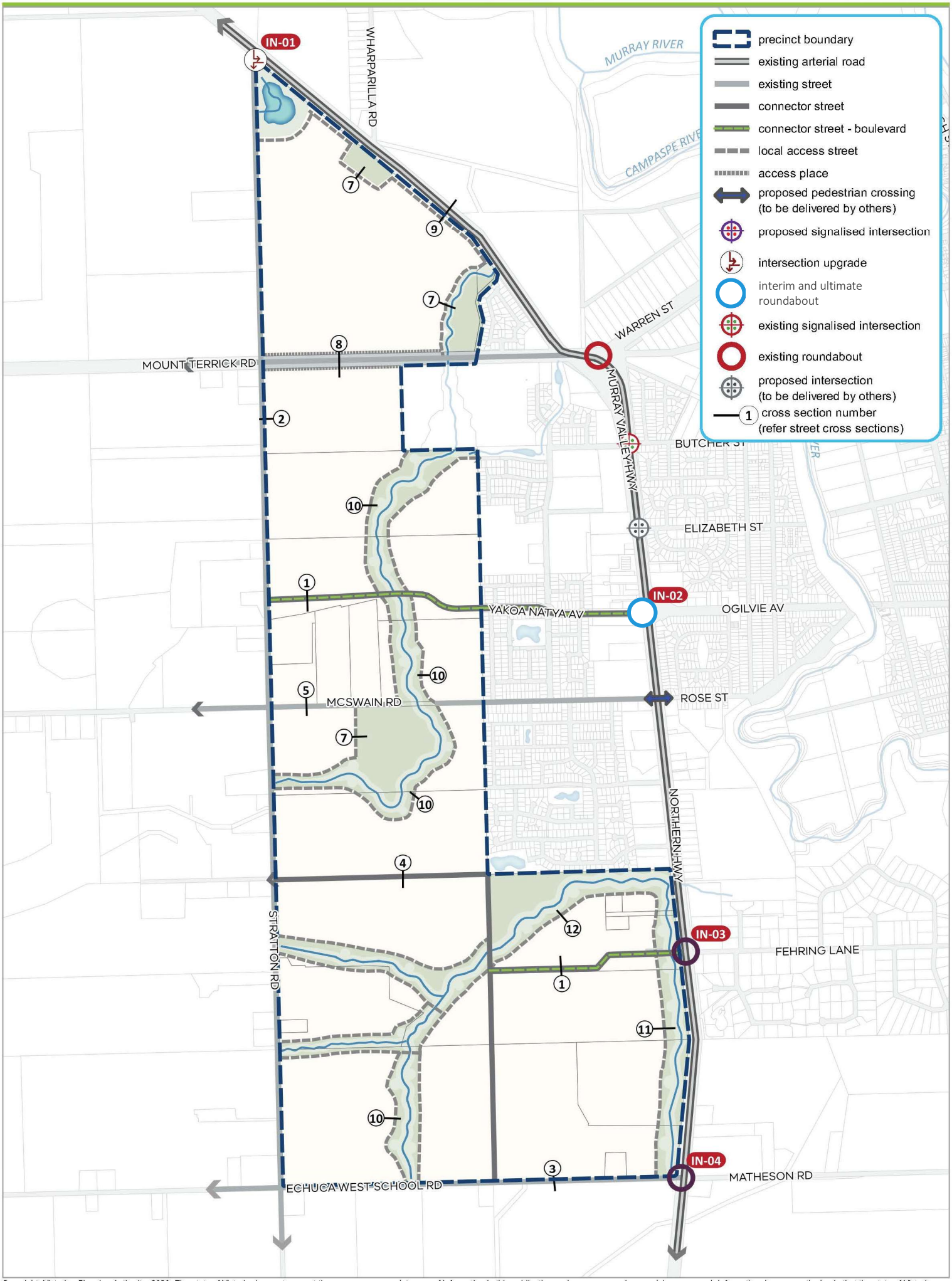

## 3.4 Transport & Movement

### 3.4.1 Street network

| REQUIREMENTS | |
|---|---|
| R26 | Subdivision layouts must provide:<br>• A permeable and safe street network for walking and cycling<br>• A safe and low speed street network that encourages walking and cycling<br>• Convenient access to local points of interest and destinations for the effective integration with neighbouring properties. |
| R27 | Streets must be constructed to property boundaries where an inter-parcel connection is intended or indicated in the structure plan, by any date or stage of development required or approved by the responsible authority. |
| R28 | Where a single street spans across multiple properties that street may consist of multiple cross sections so long as a suitable transition has been allowed for between each. Where that street has already been constructed or approved for construction to a property boundary, the onus is on the development connecting into that street to adopt a consistent cross-section until that suitable transition can be made. |
| R29 | Vehicle access to lots fronting arterial roads must be provided from service road, local internal road or rear lane only to the satisfaction of the coordinating road authority. |
| R30 | Configuration of vehicle access to lots from public streets must ensure that there is sufficient separation between crossovers to allow for a minimum of one on-street car park for every two residential lots. |
| R31 | Where a lot is 7.5 metres or less in width, vehicle access must be via rear laneway, unless otherwise approved by the responsible authority. |
| R32 | Any connector street or local access street abutting a school must be designed to achieve slow vehicle speeds and provide designated pedestrian crossing points as required by the responsible authority. |
| R33 | Roundabouts, where determined to be required at cross road intersections, must be designed to slow vehicles, provide for pedestrian visibility and safety, and ensure connectivity and continuity of shared paths and bicycle paths. |
| R34 | Residential subdivision applications adjoining Echuca West School Road and Stratton Road must demonstrate that lots fronting the road reserve meet appropriate setbacks and adhere to the relevant street cross section in Appendix B. |
| R35 | Development must positively address all waterway and drainage reserve land through the use of interface streets outlined in Appendix B to the satisfaction of the responsible authority. |
| R36 | Road networks and street types must be designed and developed in accordance with the street cross sections outlined in Appendix B unless otherwise agree by the responsible authority. |
| **GUIDELINES** | |
| G19. | Street layouts should provide multiple convenient routes to major destinations such as the local convenience centre and the arterial road network. |
| G20. | Street block lengths should not exceed 240 metres to ensure safe, permeable and low speed environment for pedestrians, cycle and vehicles is achieved. |
| G21. | Cul-de-sacs should not detract from convenient pedestrian, cycle and vehicular connections. |
| G22. | Slip lanes should be avoided in areas of high pedestrian activity and only be provided at any other intersection between connector roads and arterial roads where they are necessitated by high traffic volumes to the satisfaction of the coordinating roads authority. |
| G23. | The frequency of vehicular crossovers on widened verges (a verge in excess of six metres) should be minimised through the use of a combination of:<br>• Rear loaded lots with laneway access; |

| | |
|---|---|
| | • Vehicular access from the side of the lot;<br>• Combined or grouped crossovers; and<br>• Increased lot widths. |
| **G24.** | Approximately 30% of local streets (including connector streets) within a subdivision should apply an alternative cross section to the 'standard' cross section for these streets outlined in Appendix B.<br>• Varied street tree placement;<br>• Varied footpath or carriageway placement;<br>• Introduction of elements to create a boulevard effect;<br>• Varied carriageway or parking bay pavement material; and<br>• Differing tree outstand treatments. For the purposes of this requirement, changes to street tree species between or within streets does not constitute a variation.<br><br>Alternative cross sections must ensure that:<br>• 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;<br>• The performance characteristics of standard cross sections as they relate to pedestrian and cycle use are maintained;<br>• Street cross section elements are to be in accordance with the requirements of the Infrastructure Design Manual; and<br>• Relevant minimum road reserve widths for the type of street (illustrated in Appendix B are maintained. |

# Plan 7 - Public Transport and Path Network

Echuca West Precinct Structure Plan

1:22,500 @A4

0 0.25 0.5 0.75 1 km

### 3.4.2 Public Transport

| REQUIREMENTS | |
|---|---|
| **R37** | Bus stop facilities must be designed as an integral part of activity generating land uses such as schools, community facilities, sports reserves and local convenience centres. |
| **R38** | Bus stops must be provided in accordance with the Department of Transport Public Transport Guidelines for Land Use and Development to the satisfaction of Public Transport Victoria. |
| **R39** | Roads and intersections shown as bus capable on Plan 7 must be constructed to accommodate ultra-low-floor buses to the satisfaction of Public Transport Victoria and the Responsible Authority. |
| **R40** | The street network must be designed to ensure all household are able to directly and conveniently walk to public transport services. |

### 3.4.3 Walking & Cycling

| REQUIREMENTS | |
|---|---|
| **R41** | Design of all streets and arterial roads must give priority to the requirement of pedestrians and cyclists by providing:<br>• Footpaths on both sides of all streets and roads (unless otherwise specified by the PSP);<br>• Shared paths or bicycle paths where illustrated on Plan 7 or as show on the relevant street cross sections illustrated at Appendix B or as specified in another requirement in the PSP;<br>• Safe, accessible and convenient crossing points of connector roads and local streets at all intersections, key desire lines and locations of high amenity;<br>• Pedestrian and cyclist priority crossing on all slip lanes;<br>• Safe and convenient transition between on- and off-road bicycle networks; and<br>• Safe and convenient transition between shared paths and bicycle paths on arterial roads and connector streets.<br>All to the satisfaction of the coordinating Road Authority and Responsible Authority. |
| **R42** | Shared and pedestrian paths along waterways and drainage reserves must be constructed to a standard that satisfies the requirement of the Responsible Authority and must be:<br>• Delivered by development proponents consistent with the network illustrated on Plan 7;<br>• Positioned above 1:10 year flood levels with a crossing of the waterway designed above 1:100 flood level to maintain hydraulic function of the waterway; and<br>• Positioned above the 1:100 year flood level where direct access is provided to the dwelling from the waterway. |
| **R43** | Bicycle parking facilities including way-finding signage must be provided by development proponents in convenient locations at key destinations such as community facilities, local convenience centres and across the open space network. |
| **R44** | Lighting must be installed along shared, pedestrian, and cycle paths linking to key destinations, unless otherwise agreed by the Responsible Authority. |

# Plan 8 - Biodiversity, Native Vegetation, and Hazard Management

Echuca West Precinct Structure Plan

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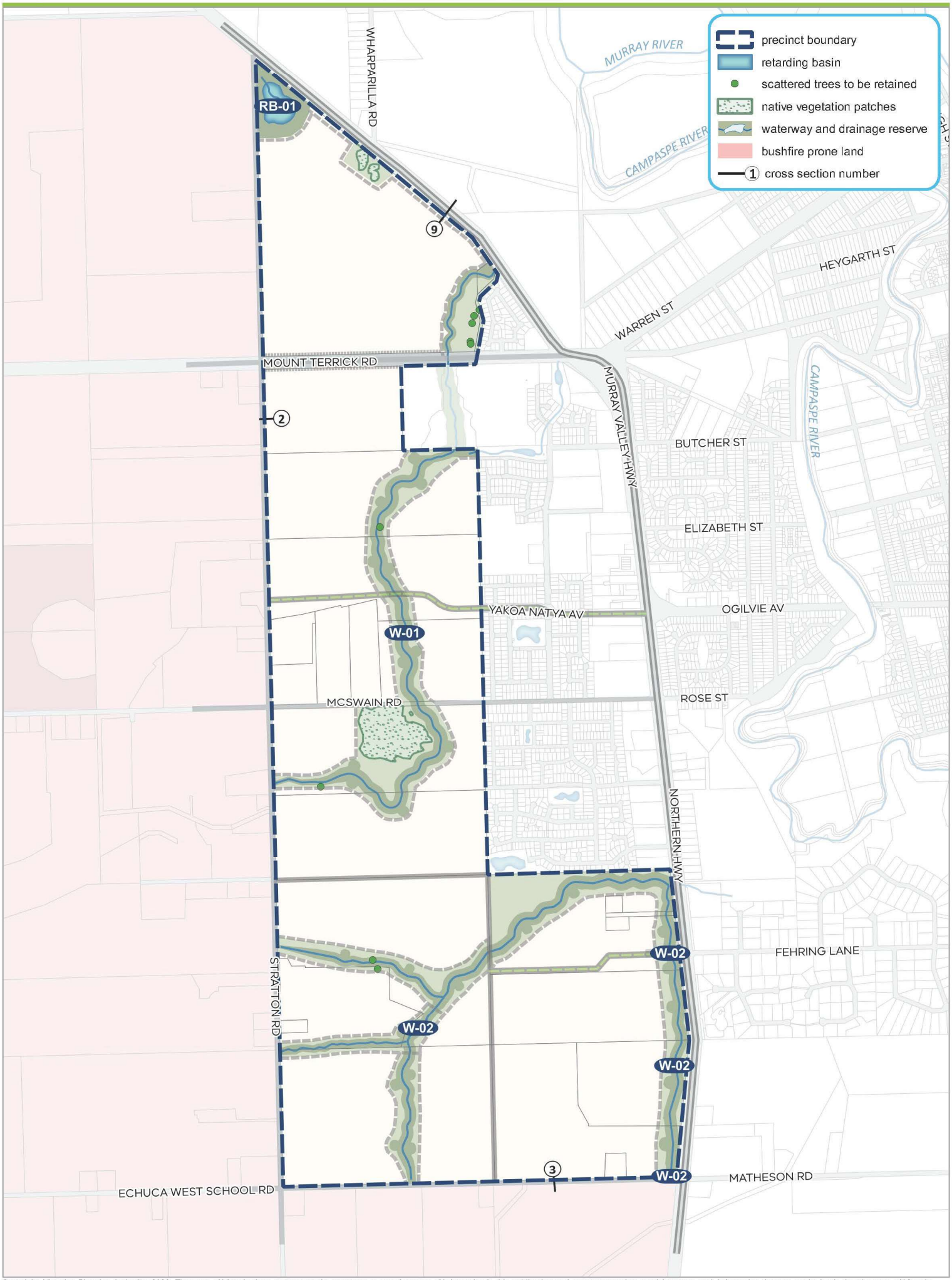
0 0.25 0.5 0.75 1 km



## 3.5 Biodiversity, Native Vegetation and Hazard Management

### 3.5.1 Biodiversity and native vegetation

| REQUIREMENTS | |
|---|---|
| R45 | Any public infrastructure to be located adjacent to retained biodiversity assets must be designed and located in a manner so as to avoid or minimise negative impacts. |
| R46 | Native vegetation must be retained as illustrated on Plan 8. |
| R47 | To meet EPBC legislation prior to any future development within identified areas of potential significance within the PSP, targeted flora surveys must be undertaken to identify the presence of any species listed under the EPBC Act. These include the Red Swainson-pea and Turnip Copperburr. |
| R48 | To meet EPBC legislation prior to any future development within identified areas of potential significance within the PSP, targeted fauna surveys must be undertaken to identify the presence of any species listed under the EPBC Act. This include the Growling Grass Frog. |
| R49 | Future development must not degrade or negatively impact the environs of the Murray River and its tributaries recognising their importance for nature conservation, biodiversity, ecological and cultural values of the area. |
| **GUIDELINES** | |
| G25. | Street trees and public open space landscaping should contribute to habitat for indigenous fauna species, in particular arboreal animals and birds, where practical. |
| G26. | Passive or low impact recreational activities should be located closest to retained native vegetation or habitat, with active or higher impact activities to be located further away. |
| G27. | Strategic revegetation or restoration should link and develop retained native vegetation or habitat areas with emphasis on enhancing corridors along and around waterways and wetlands. |

### 3.5.2 Hazard Management

| REQUIREMENTS | |
|---|---|
| R50 | Bushfire protection measures must be considered in the layout, staging and design of development and the local street network |
| R51 | Where a lot capable of accommodating a dwelling is adjacent to a Bushfire prone area or Bushfire Management Overlay (BMO) as identified in Plan 8, a road in accordance with the corresponding cross section in Appendix B must be established. |
| R52 | Subdivision must provide a road network that enables at least two safe egress routes away from the fire hazard. |

# Plan 9 - Integrated Water Management

Echuca West Precinct Structure Plan

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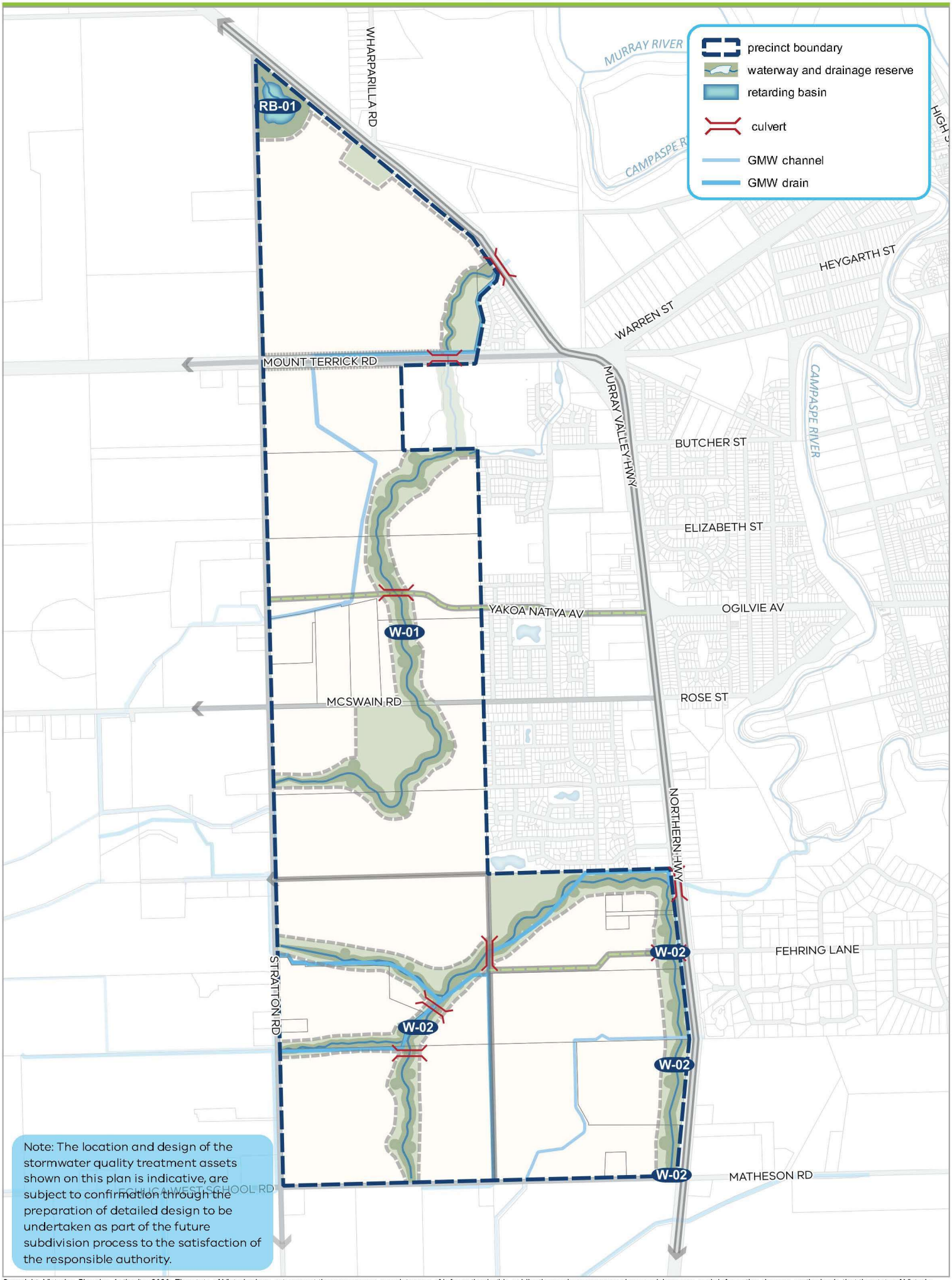
0 0.25 0.5 0.75 1 km

N




Note: The location and design of the stormwater quality treatment assets shown on this plan is indicative, are subject to confirmation through the preparation of detailed design to be undertaken as part of the future subdivision process to the satisfaction of the responsible authority.

## 3.6 Integrated Water Management & Utilities

### 3.6.1 Integrated Water Management

| REQUIREMENTS | |
|---|---|
| R53 | Stormwater conveyance and treatment must provide best practice stormwater quality treatment and must be designed in accordance with the relevant drainage strategy and with Plan 9 to the satisfaction of the responsible authority and relevant water authority (if not the same). |
| R54 | All new lots must be filled above the 1:100 year flood level, or otherwise agreed by the relevant water authority. |
| R55 | Final design of constructed waterways (including widths), waterway corridors, retarding basins, wetlands, and associated paths, boardwalks, bridges, and planting, must be to the satisfaction of the responsible authority. |
| R56 | Development staging must provide for the delivery of ultimate waterway and drainage infrastructure, including stormwater quality treatment and flood protection, listed in Table 5.<br>Where this is not possible, development proposals must demonstrate to the satisfaction of the responsible authority how any interim solution:<br>• Manages flood protection and flood conveyance<br>• Manages stormwater from the subdivision to pre-development flows<br>• Manages on site treatment of stormwater from the subdivision<br>• Delivers a free draining outfall if required. This must be arranged to the satisfaction of the responsible authority and affected downstream property owner(s) with written acceptance of the downstream property owner(s); and<br>• Will enable the delivery of the ultimate drainage solution. |
| R57 | Subdivision applications must demonstrate how:<br>• Waterways and integrated water management design enables land to be used for multiple recreation and environmental purposes<br>• Overland flow paths and piping within road reserves will be connected and integrated across property / parcel boundaries<br>• Council freeboard requirements for overland flow paths will be adequately contained within road reserves<br>All to the satisfaction of the Responsible Authority and relevant Water Authority (if not the same). |
| **GUIDELINES** | |
| G28. | The design and layout of roads, road reserves and open space should maximise water efficiency and be planned for long term viability of vegetation, overland flow paths and water sensitive urban design initiatives, including use of locally treated stormwater for irrigation purposes, where practical. |
| G29. | Development should reduce reliance on potable water by increasing the utilisation of fit-for-purpose alternative water sources such as storm water, rainwater and recycled water. |
| G30. | Development should have regard to relevant policies and strategies being implemented by the responsible authority, North Central Catchment Management Authority, Goulburn-Murray Water and Coliban Water including any approved Integrated Water Management Plan. |
| G31. | Integrated water management systems should be designed to:<br>• Support and enhance habitat values for local flora and fauna species<br>• Enable future harvesting and/or treatment and re-use of stormwater. |

Table 5: Drainage Infrastructure Delivery Guide

| Open Space ID | Land Use | Approx. land area (hectare) | Land use budget parcel | Responsibility |
|---|---|---|---|---|
| RB-01 | Retarding Basin | 6.07 | 1 | Campaspe Shire Council |
| W-01 | Waterway | 19.09 | 1,2,5,6,10,12,13 | Campaspe Shire Council |
| W-02 | Waterway | 27.14 | 14,15,17,19,20,22,23,24 | Campaspe Shire Council |

### 3.6.2 Utilities

| REQUIREMENTS | |
|---|---|
| R58 | Before development commences on a property, functional layout plans of the road network must be submitted that illustrate the location of all:<br>• Underground services<br>• Driveways and crossovers<br>• Intersection devices<br>• Shared, pedestrian and bicycle paths<br>• Street lights<br>• Street trees.<br>A typical cross section of each street must be submitted showing above- and below-ground placement of services, street lights and trees.<br>The plans and cross sections must demonstrate how services, driveways and street lights will be placed to achieve the required road reserve width (consistent with the road cross sections outlined in Appendix B) and accommodate the minimum street tree planting requirements. The plans and cross sections are to be approved by the responsible authority and all relevant service authorities before development commences. |
| R59 | Delivery of underground services must be coordinated, located, and bundled (utilising common trenching) to facilitate the planting of trees and other vegetation within road verges. |
| R60 | All new electricity supply infrastructure (excluding substations and cables of a voltage greater than 66kV) must be provided underground. |
| R61 | Where existing above ground electricity cables of 66kV voltage are retained along road ways, underground conduits must be provided as part of the upgrade of these roads to allow for future undergrounding of the electricity supply. |
| R62 | Above ground utilities must be identified at the subdivision design stage to ensure effective integration with the surrounding neighbourhood and to minimise amenity impacts and be designed to the satisfaction of the relevant service authorities. Where that infrastructure is intended to be located in the open space network, land required to accommodate the infrastructure will not be counted as contributing to open space requirements specified in Table 4. |
| R63 | All services must be located outside of Tree Protection Zone areas if applicable. |

| GUIDELINES | |
|---|---|
| G32. | Above-ground utilities should be located outside of key view lines and screened with vegetation, as appropriate. |
| G33. | Design and placement of underground services in new or upgraded streets should utilise the service placement guidelines outlined in Appendix C. - |
| G34. | Utility easements to the rear of lots should only be provided where there is no practical alternative. |
| G35. | Existing above ground 66kV electricity cables should be removed and placed underground as part of the upgrade of existing roads. |

### 3.6.3 Development Staging

| REQUIREMENTS | |
|---|---|
| R64 | Development staging must provide for the timely provision and delivery of:<br>• Drainage infrastructure<br>• Road links and intersections to the connector and arterial road network<br>• Street links between properties, constructed to the parcel boundary<br>• Connection of the on- and off-road pedestrian and bicycle network |
| R65 | Staging will be determined largely by the development proposals on land within the precinct and the availability of infrastructure services. Development applications must demonstrate how the development will:<br>• Integrate with adjoining developments, including the timely provision of drainage infrastructure and road and path connections<br>• Provide open space and amenity to new residents in the early stages of the development, where relevant<br>• Provide sealed road access to each new allotment<br>• Deliver any necessary trunk services extensions, including confirmation of the agreed approach and timing by the relevant service provider. |
| R66 | Development stages adjoining any decommissioned, or future decommissioned Goulburn–Murray Water (GMW) channel must respond to or incorporate the land as part of the subdivision process to the satisfaction of GMW and the responsible authority.<br>Where this land is located on public or Crown land, the future of this land must be resolved with GMW, the current land manager and the Department of Environment, Land, Water and Planning (DELWP) prior to development taking place. |
| **GUIDELINES** | |
| G36. | Early delivery of local parks and playgrounds is encouraged within each neighbourhood and may be delivered in stages, to the satisfaction of the responsible authority. |

## 3.7 Precinct Infrastructure Plan

The Precinct Infrastructure Plan (PIP) in Table 6 sets out the infrastructure and services required to meet the needs of proposed development within the precinct. The infrastructure items and services are to be provided through a number of mechanisms including:

- Subdivision construction works by developers
- Agreement under section 173 of the Planning and Environment Act 1987
- Utility service provider requirements
- The DCP, including separate charge areas for local items
- Relevant development contributions from adjoining areas
- Capital works projects by Council, State government agencies and non-government organisations
- Works-in-kind projects undertaken by developers on behalf of Council or State government agencies.

Drainage for the precinct is covered by the DCP as the relevant drainage authority for outfall drainage is Shire of Campaspe Council. The drainage assets have been costed as follows:

- Civil works are based on engineering estimates of the costs of the various drainage works
- Civil works will be adjusted by the adjustment methodology explained in the DCP to keep pace with rising construction costs and land values.

Alternative stormwater quality treatment arrangements may be provided subject to agreement with Council.Table 6 Precinct Infrastructure Plan

| Project ID | Title and Description | Lead agency | Indicative timing | Included in DCP |
|---|---|---|---|---|
| **Intersection Projects** | | | | |
| IN-01 | **Murray Valley Highway and Stratton Road**<br><br>Construction of an axillary turn lane on the Murray Valley Highway (ultimate standard) | Campaspe Shire Council , | M | Yes (Ultimate) |
| IN-02A<br><br>IN-02B | **Yakoa Natya Avenue/Murray Valley Highway and Northern Highway**<br><br>Construction of a roundabout (interim standard)<br><br>**Yakoa Natya Avenue/Murray Valley Highway and Northern Highway**<br><br>Construction of an upgraded roundabout intersection (ultimate standard). | Campaspe Shire Council , | L | Yes (Ultimate) |
| IN-03 | **Northern Highway and Fehring Lane: Connector Level 2**<br><br>Purchase of land for intersection and construction for a single lane roundabout (ultimate standard) | Campaspe Shire Council , | M | Yes (Ultimate) |
| IN-04 | **Northern Highway, Echuca West School Road and Matheson Road** | Campaspe Shire Council ,, | M | Yes (Ultimate) |

| | | | | |
|---|---|---|---|---|
| | Purchase of land for intersection and construction for a single lane roundabout (ultimate standard) | | | |
| **Shared Path Projects** | | | | |
| SP-01 | **Off Road Shared Path Trail**<br><br>Construction an off road shared path trail along W-01 and W-02 (ultimate standard) | Campaspe Shire Council | **S** | Yes (Ultimate) |
| **Recreation Projects** | | | | |
| SR-01 | **Purchase of land for a local sports reserve** | Campaspe Shire Council , | **M** | Yes (ultimate) |
| **Drainage Projects** | | | | |
| RB-01 | **Northern Retarding Basin**<br><br>Purchase of land and construction of retarding basin | Campaspe Shire Council | **S** | Yes (Ultimate) |
| W-01 | **Northern Waterway**<br><br>Purchase of land and construction of waterway and culverts/discharge point upgrades. | Campaspe Shire Council | **S** | Yes (Ultimate) |
| W-02 | **Southern Waterway**<br><br>Purchase of land and construction of waterway and culverts/discharge point upgrades. | Campaspe Shire Council | M | Yes (Ultimate) |

*Note: S= Short term; M= Medium term; L= Long term.*

# 4 EXPIRY

## 4.1 Expiry of this Precinct Structure Plan

This Precinct Structure Plan will not be an incorporated document in this planning scheme and will have no force or effect more than 12 months from the date of gazettal of Amendment C117camp unless this expiry time is extended by the Minister for Planning.

# 5 APPENDICES

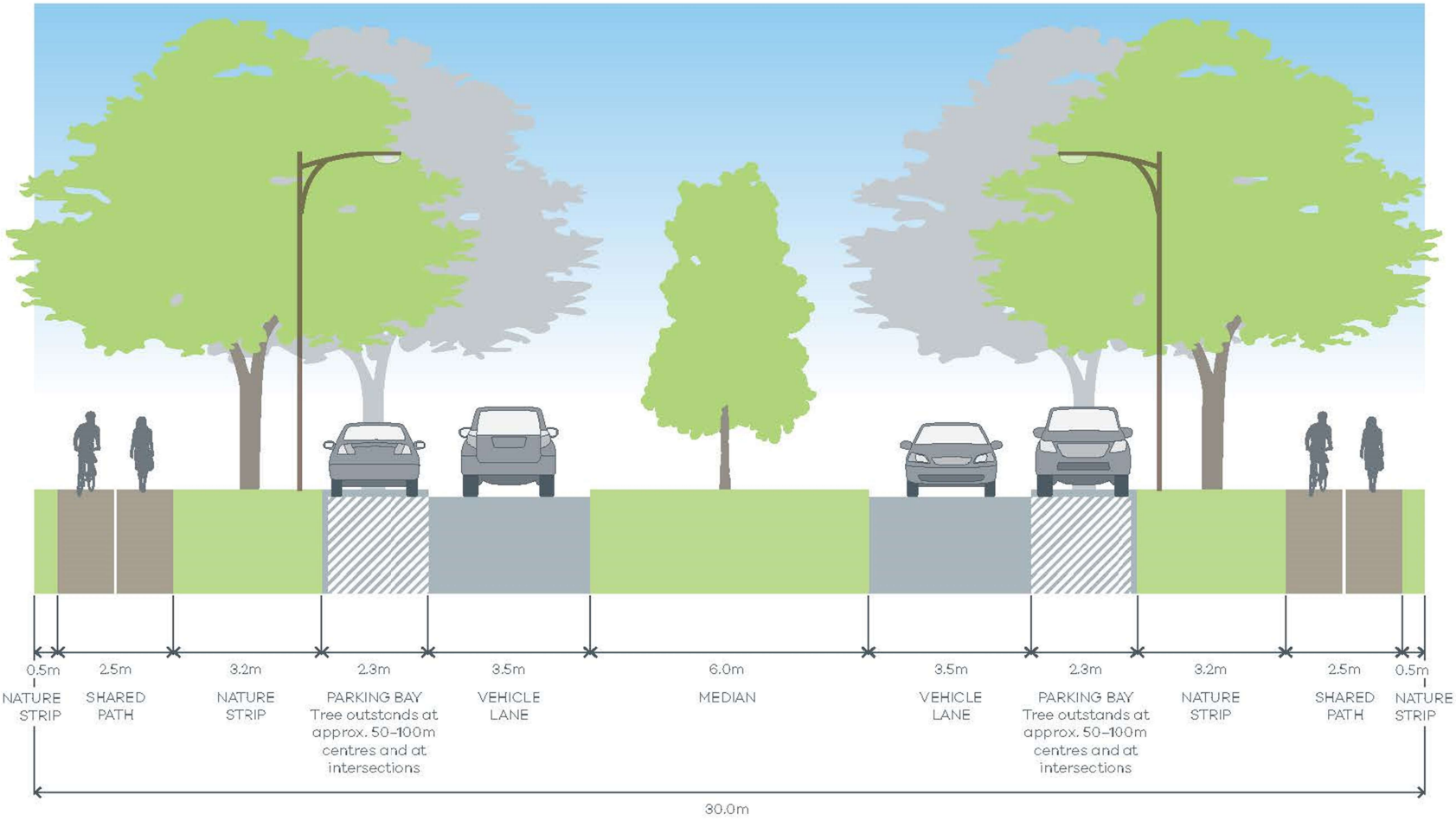
## 5.1 Appendix A: Detail land use budget (parcel specific)

| PSP PROPERTY ID | TOTAL AREA (HECTARES) | Transport | | | | Uncredited Open Space | | Credited Open Space | | | Total Net Developable Area (Hectares) | Net Developable Area % of Property |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DCP flaring for intersections | | | Other Transport | | | DCP Sportfields | | Local Parks | | |
| | | IN-03 | IN-04 | Arterial Road - Widening and Intersection Flaring (DCP land) | Non-Arterial Road - Existing Road Reserve | Waterway and Drainage Reserve (DCP Land) | Waterway and Drainage Reserve | SR-01 | Local Sports Reserve (DCP land) | Local Network Park (via Cl 52.01) | | |
| 1 | 99.38 | - | - | - | | 6.48 | 1.15 | | | 5.75 | 86.01 | 86.54% |
| 2 | 0.79 | - | - | - | | 0.25 | 0.22 | | | 0.33 | 0.00 | 0.00% |
| 3 | 0.67 | - | - | - | | | 0.00 | | | 0.67 | 0.00 | 0.00% |
| 4 | 26.30 | - | - | - | | | - | | | | 26.30 | 100.00% |
| 5 | 40.71 | - | - | - | | 0.91 | 3.23 | | | 3.39 | 33.18 | 81.51% |
| 6 | 37.47 | - | - | - | | 1.29 | 1.59 | | | 1.56 | 33.03 | 88.14% |
| 7 | 4.66 | - | - | - | | | | | | | 4.66 | 100.00% |
| 8 | 7.35 | - | - | - | | | | | | | 7.35 | 100.00% |
| 9 | 6.62 | - | - | - | | | | | | | 6.62 | 100.00% |
| 10 | 18.97 | - | - | - | | 2.82 | | | | 1.60 | 14.56 | 76.74% |
| 11 | 4.48 | - | - | - | | - | | | | | 4.48 | 100.00% |
| 12 | 40.89 | - | - | - | | 3.50 | 2.29 | | | 12.74 | 22.36 | 54.69% |
| 13 | 40.68 | - | - | - | | 0.03 | 1.30 | | | 0.78 | 38.57 | 94.81% |
| 14 | 58.49 | - | - | - | | 4.89 | 1.71 | | | 6.19 | 45.71 | 78.15% |
| 15 | 40.06 | 0.41 | - | 0.41 | | 6.37 | 2.21 | 6.71 | 6.71 | 4.24 | 20.13 | 50.24% |
| 16 | 0.64 | - | - | - | | | | | | - | 0.64 | 100.00% |
| 17 | 0.67 | - | - | - | | 0.10 | | | | 0.07 | 0.50 | 74.60% |
| 18 | 0.69 | - | - | - | | - | | | | - | 0.69 | 100.00% |
| 19 | 21.86 | - | - | - | | 1.87 | | | | 1.41 | 18.58 | 85.01% |
| 20 | 30.90 | - | - | - | | 1.92 | | | | 1.57 | 27.41 | 88.70% |
| 21 | 0.80 | - | - | - | | - | | | | - | 0.80 | 100.00% |
| 22 | 65.32 | - | - | - | | 4.29 | | | | 3.49 | 57.54 | 88.09% |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 36.95 | - | 0.03 | 0.03 | | 1.45 | | | 0.98 | 34.48 | 93.34% |
| 24 | 20.21 | - | - | - | | 2.33 | | | 1.98 | 15.90 | 78.67% |
| 25 | 1.23 | - | - | - | | | | | - | 1.23 | 100.00% |
| **SUB-TOTAL** | **606.79** | **0.41** | **0.03** | **0.44** | **-** | **38.48** | **13.70** | **6.71** | **6.71** | **46.74** | **500.72** | **82.52%** |
| **Road Reserve** | | | | | | | | | | | | |
| R1 | 6.10 | - | - | - | 6.10 | | | | - | - | 0.00 | 0.00% |
| R2 | 2.02 | - | - | - | 1.75 | 0.13 | | | - | 0.14 | 0.00 | 0.00% |
| **SUB-TOTAL** | **8.12** | **-** | **-** | **-** | **7.85** | **0.13** | | | **-** | **0.14** | **0.00** | **0.00%** |
| **TOTALS PSP 1721** | **614.91** | **0.41** | **0.03** | **0.44** | **7.85** | **38.61** | **13.70** | **6.71** | **6.71** | **46.89** | **500.72** | **81.43%** |

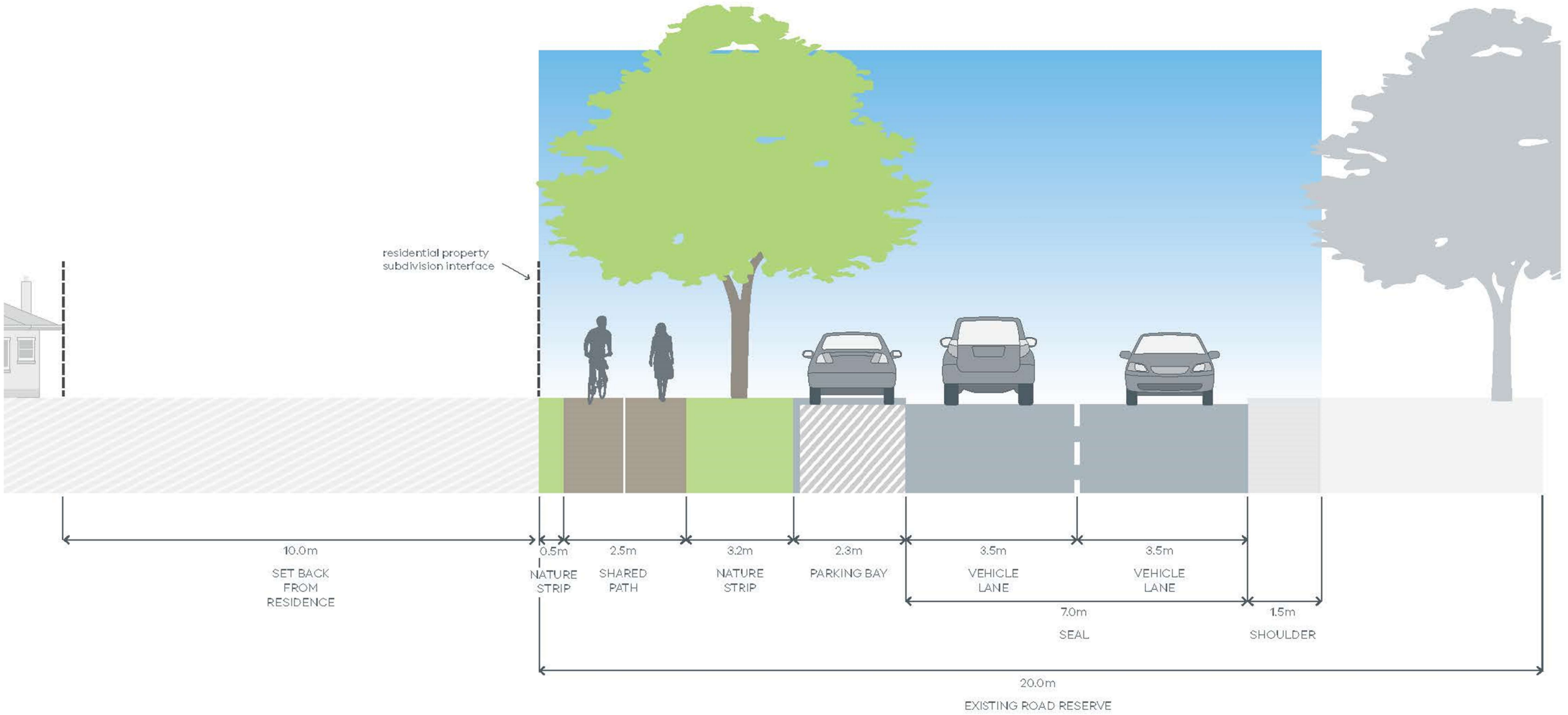
## 5.2 Appendix B: Street Cross Sections

- Cross section 1: Connector Street Level 2 - Boulevard
- Cross Section 2: Bushfire Prone Interface – Stratton Road
- Cross Section 3: Bushfire Prone Interface – Echuca West School Road
- Cross Section 4: Connector Street Level 1
- Cross Section 5: Local Access Street Modified: McSwain Road
- Cross Section 6: Local Access Street
- Cross Section 7: Local Access Street – Local Park and Drainage interface
- Cross Section 8: Mount Terrick Road
- Cross Section 9: Bushfire Interface – Murray Valley Highway
- Cross Section 10: Waterway Interface
- Cross Section 11: Waterway Interface - Northern Corridor
- Cross Section 12: Waterway Interface – Sportified




**NOTES:**

- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb as per the Infrastructure Design Manual.
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.

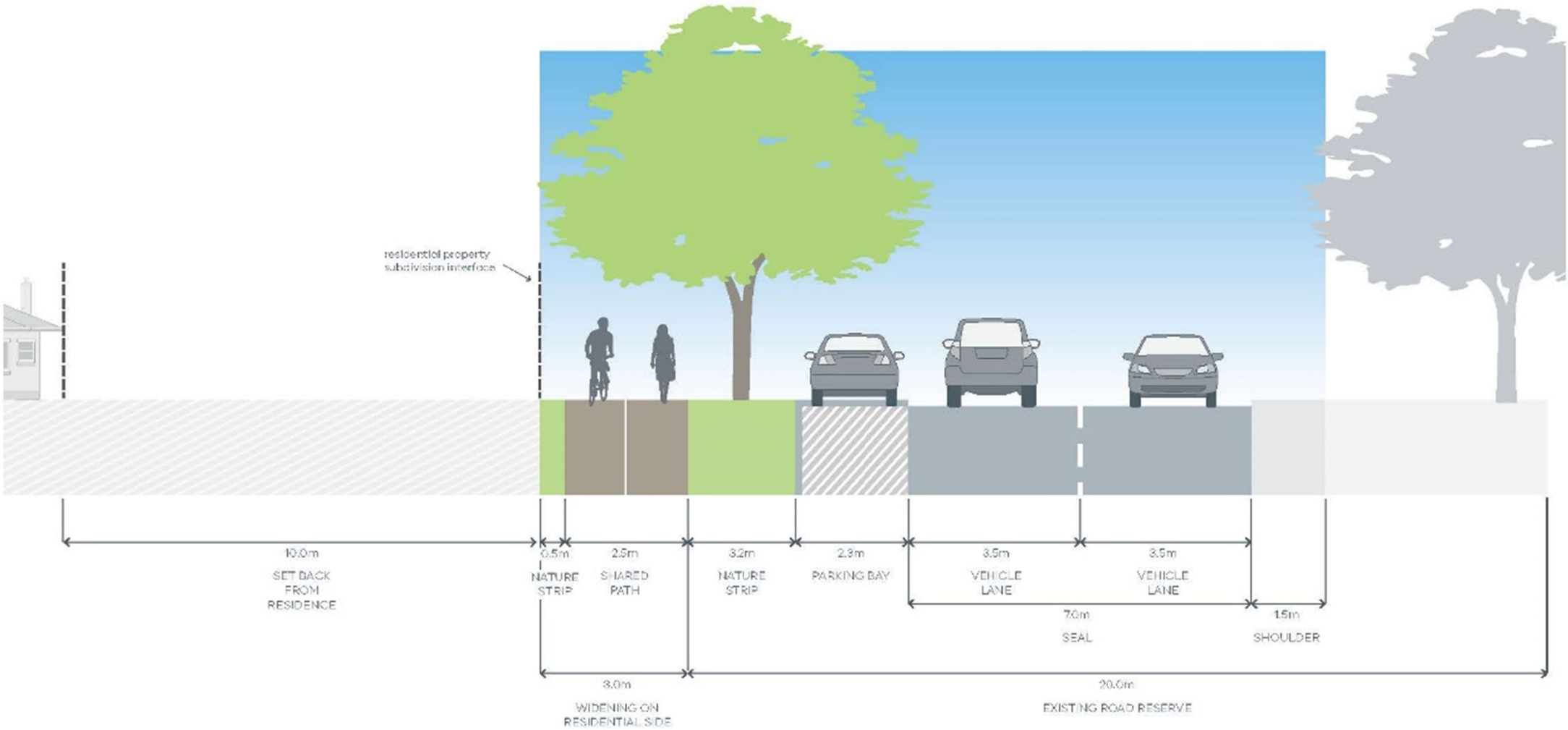



**NOTES:**

- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb as per the Infrastructure Design Manual.
- Where roads abut school drop off zones and thoroughfares, grassed nature strip should be replaced with pavement. Canopy tree planting must be incorporated into any additional pavement.
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.
- Residential subdivision will need to incorporate setbacks to ensure that a BAL 12.5 rating under AS 3959 2000 can be achieved at all dwellings.

## Section 2
## Connector Street Interface (20.0m)
## Bushfire prone area interface – Stratton Road

Victorian Planning Authority

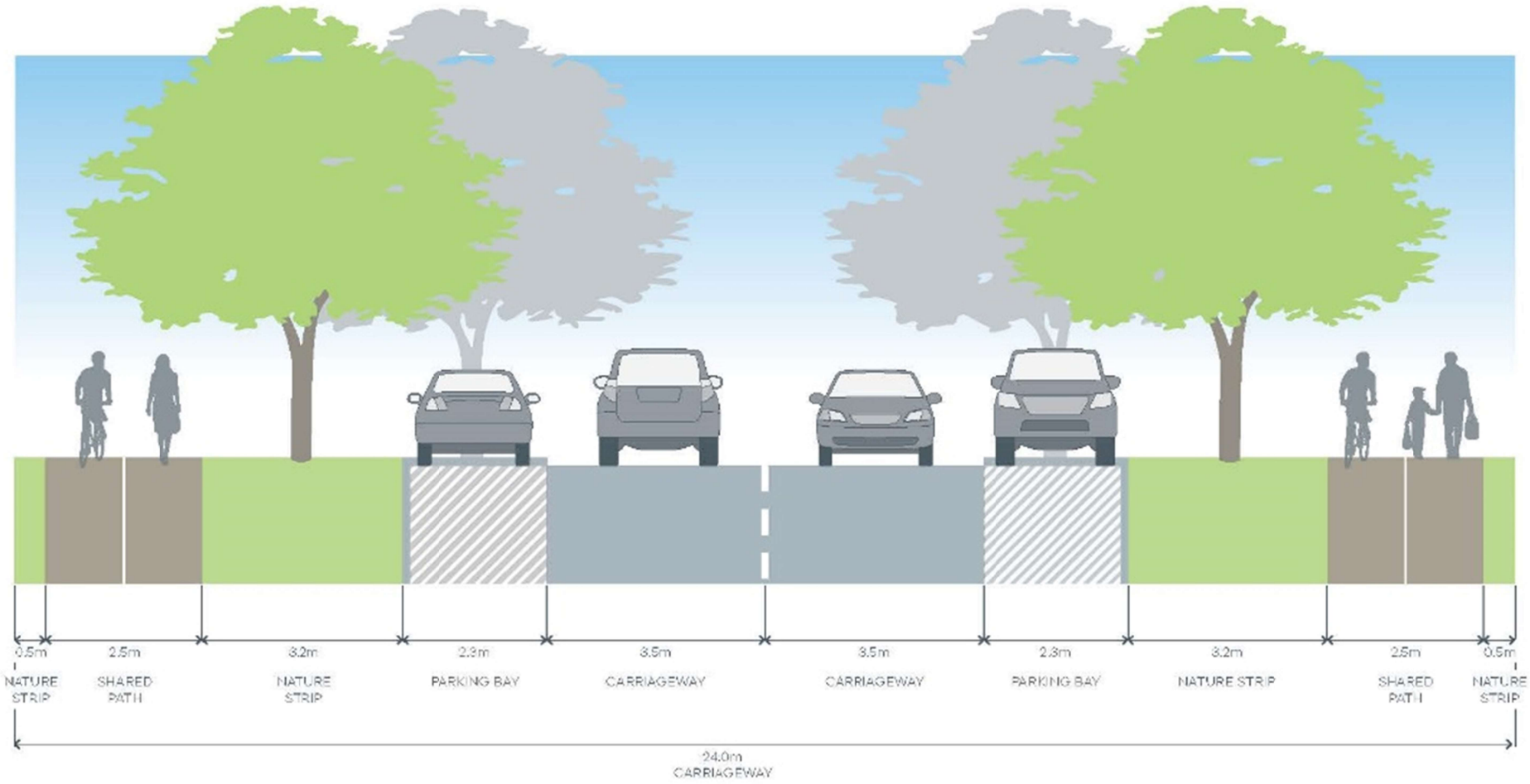



**NOTES:**

- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb as per the Infrastructure Design Manual.
- Where roads abut school drop off zones and thoroughfares, grassed nature strip should be replaced with pavement. Canopy tree planting must be incorporated into any additional pavement.
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.
- Residential subdivision will need to incorporate setbacks to ensure that a BAL 12.5 rating under AS 3959 2009 can be achieved at all dwellings.

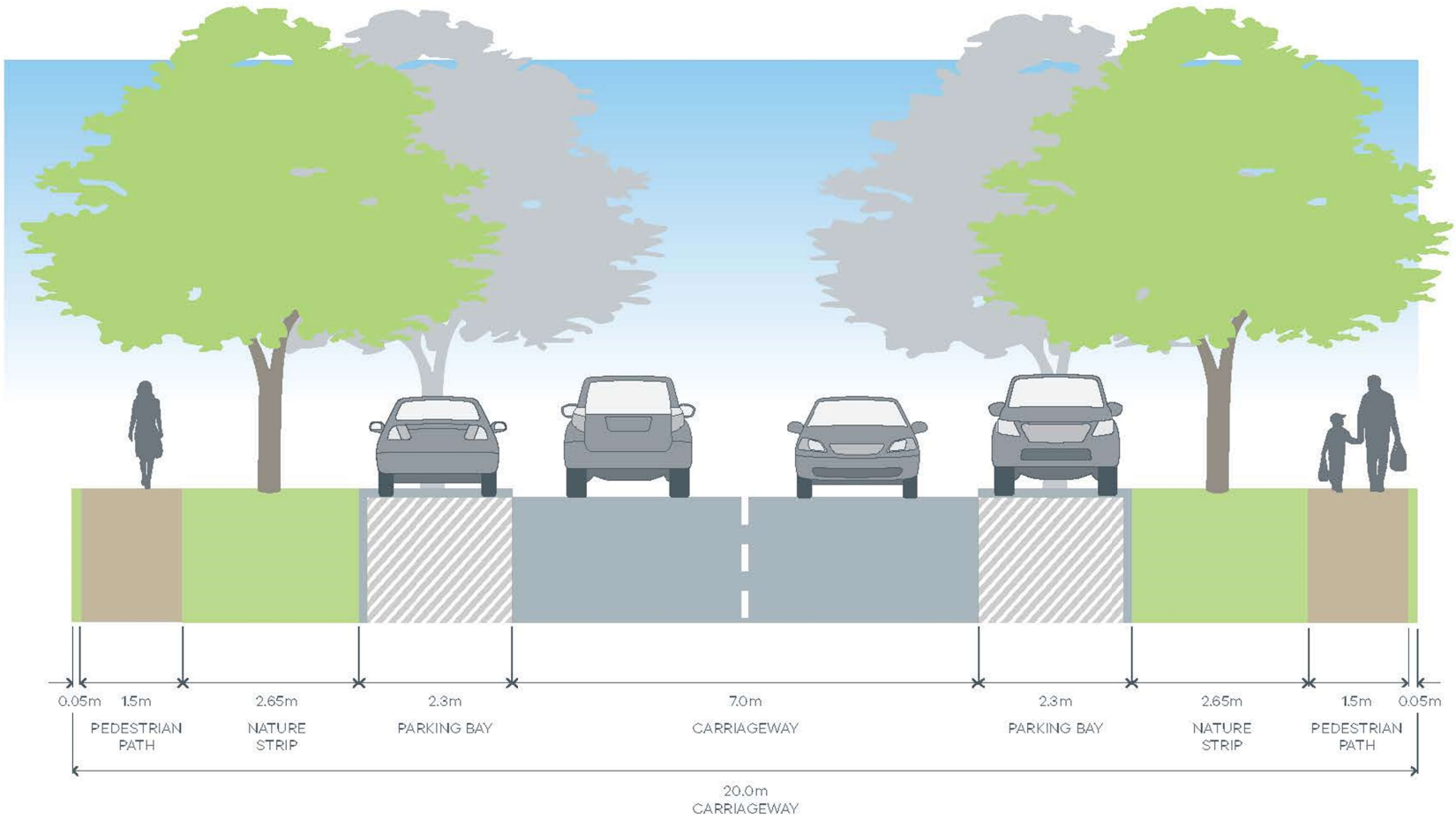
## Section 3
## Connector Street Interface (23.0m)
## Bushfire prone area interface – Echuca West School Road

Victorian Planning Authority



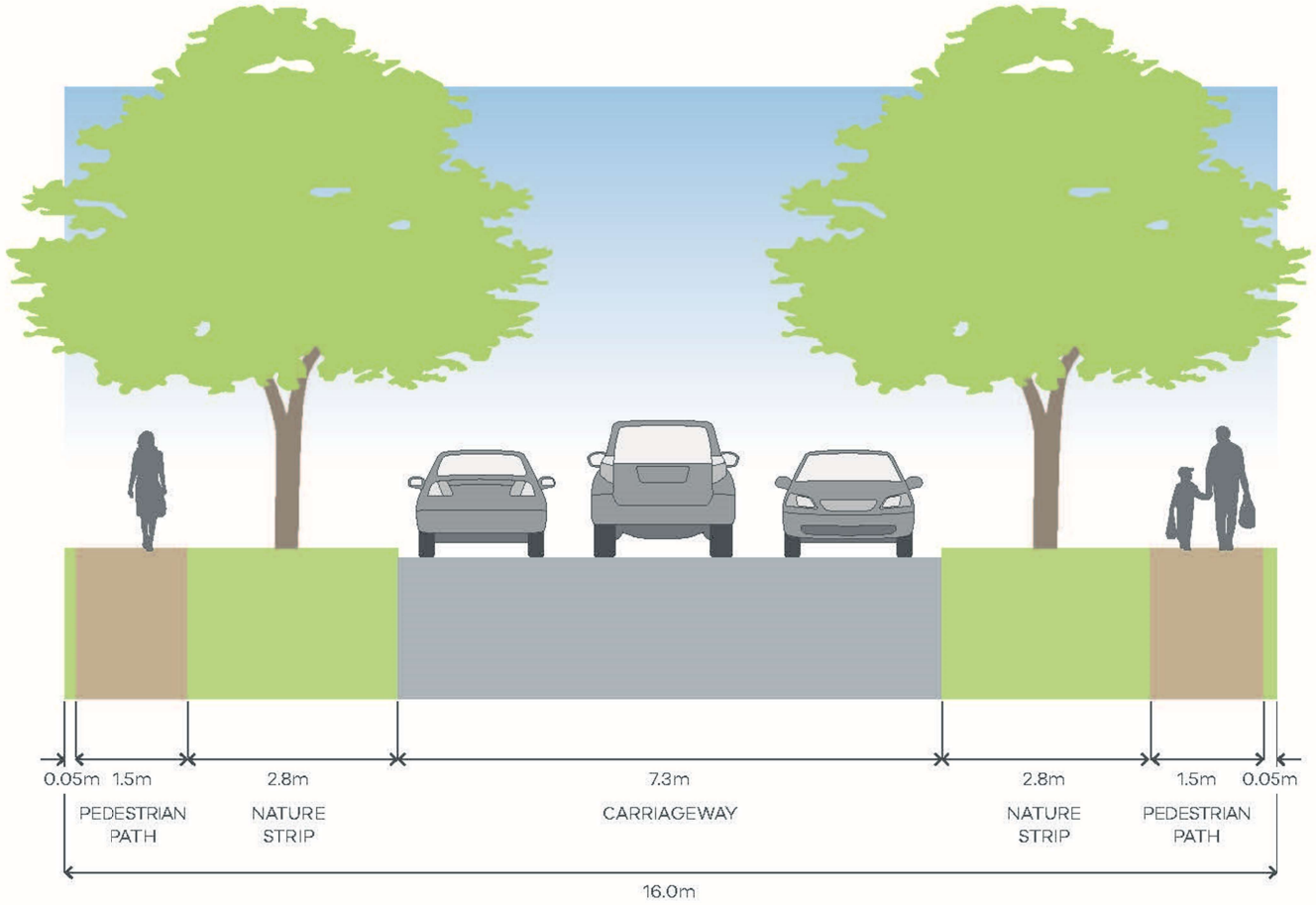

**NOTES:**

- Minimum street tree mature height 15 metres.
- All kerbs are to be B2 Barrier Kerb (refer to the Infrastructure Design Manual).
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.



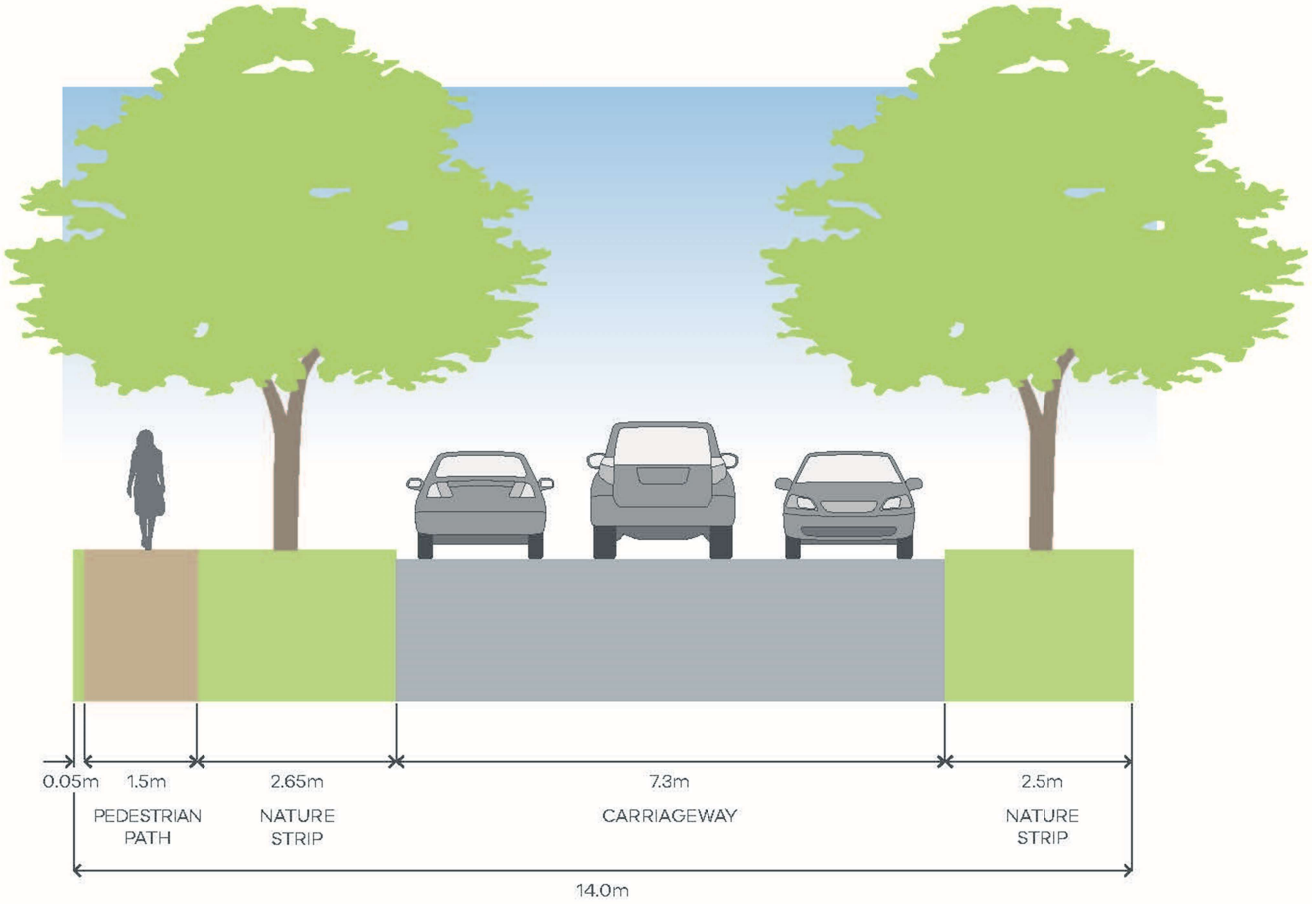

**NOTES:**

- Minimum street tree mature height 12 metres.
- All kerbs are to be SM modified (refer to the Infrastructure Design Manual).
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.




**NOTES:**

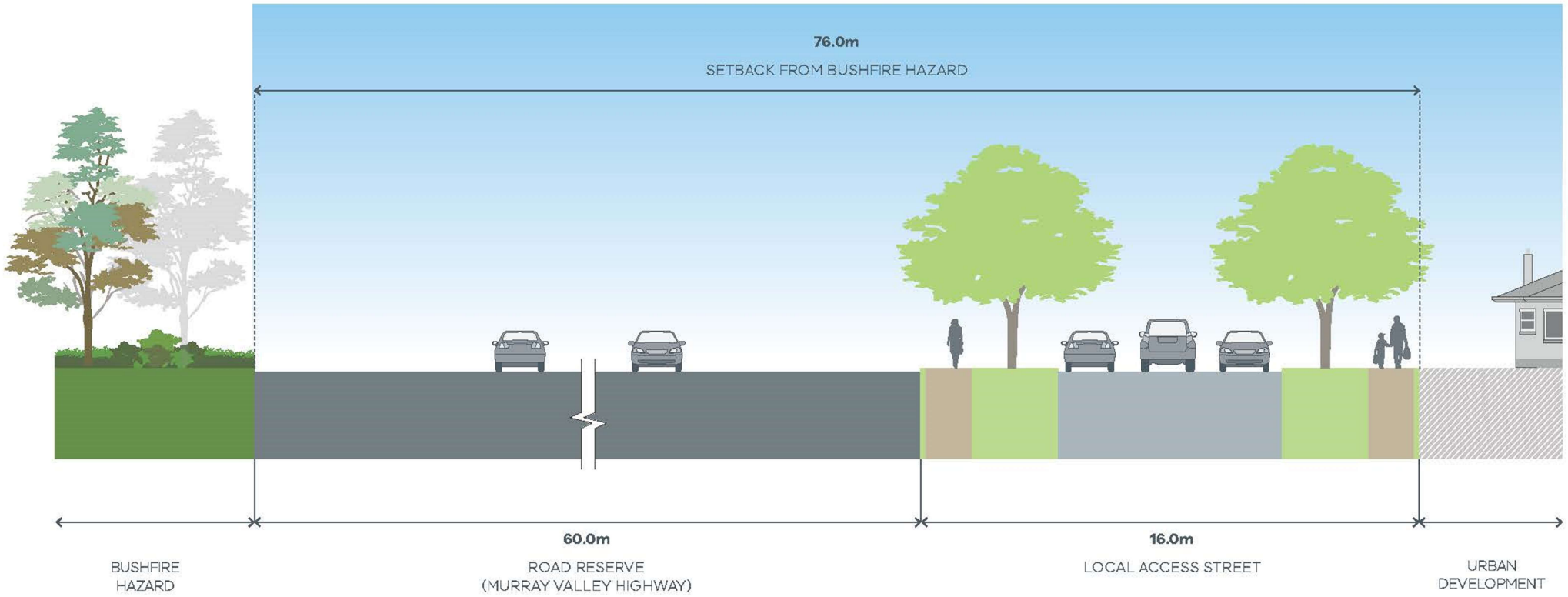
- Minimum street tree mature height 12 metres.
- All kerbs are to be SM modified (refer to the Infrastructure Design Manual).
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.




**NOTES:**

- Minimum street tree mature height 12 metres.
- All kerbs are to be SM modified (refer to the Infrastructure Design Manual).


residential property subdivision interface
residential property subdivision interface
1.0m PED PATH
2.0m NATURE STRIP
6.0m ACCESS PLACE CARRIAGEWAY
2.0m NATURE STRIP
2.5m SHARED PATH TWO WAY
10.0 - 15.0m VEGETATION
7.0 - 7.3m CARRIAGEWAY NO PARKING
10.0 - 15.0m VEGETATION
2.5m SHARED PATH TWO WAY
2.0m NATURE STRIP
6.0m ACCESS PLACE CARRIAGEWAY
2.0m NATURE STRIP
1.0m PED PATH
60.0m
ROAD RESERVE

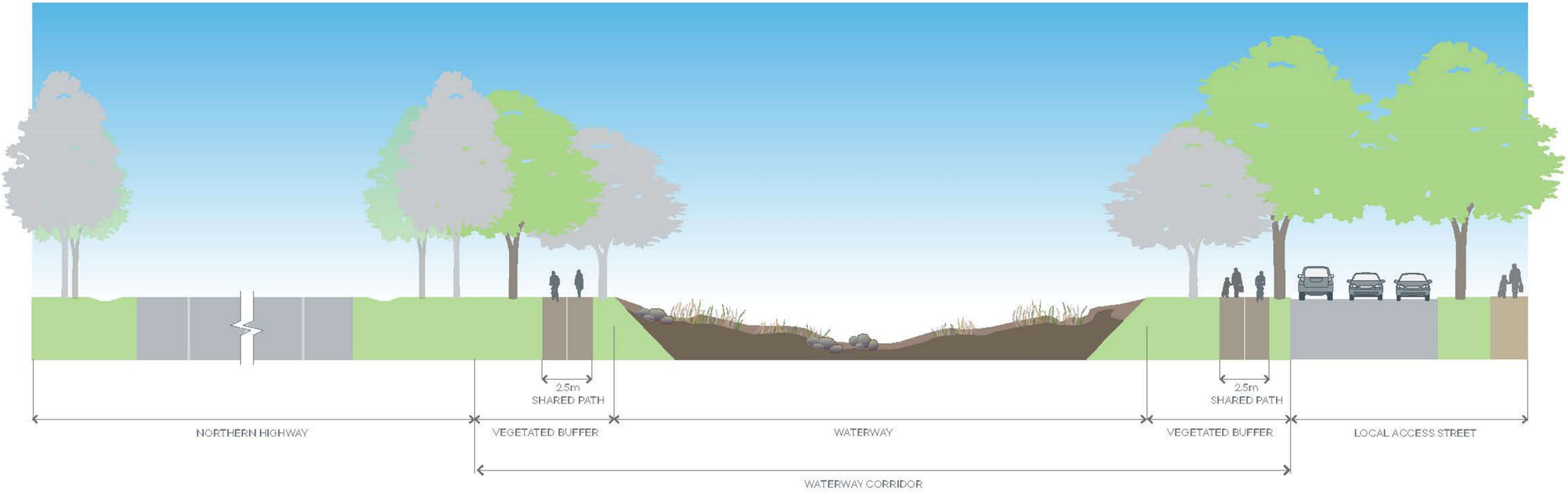



**NOTES:**

- Minimum street tree mature height 12 metres.
- All kerbs are to be SM modified (refer to the Infrastructure Design Manual).
- Verge widths may be reduced where roads abut open space with the consent of the responsible authority.
- Residential subdivision will need to incorporate setbacks to ensure that a BAL 12.5 rating under AS 3959 2000 can be achieved at all dwellings.

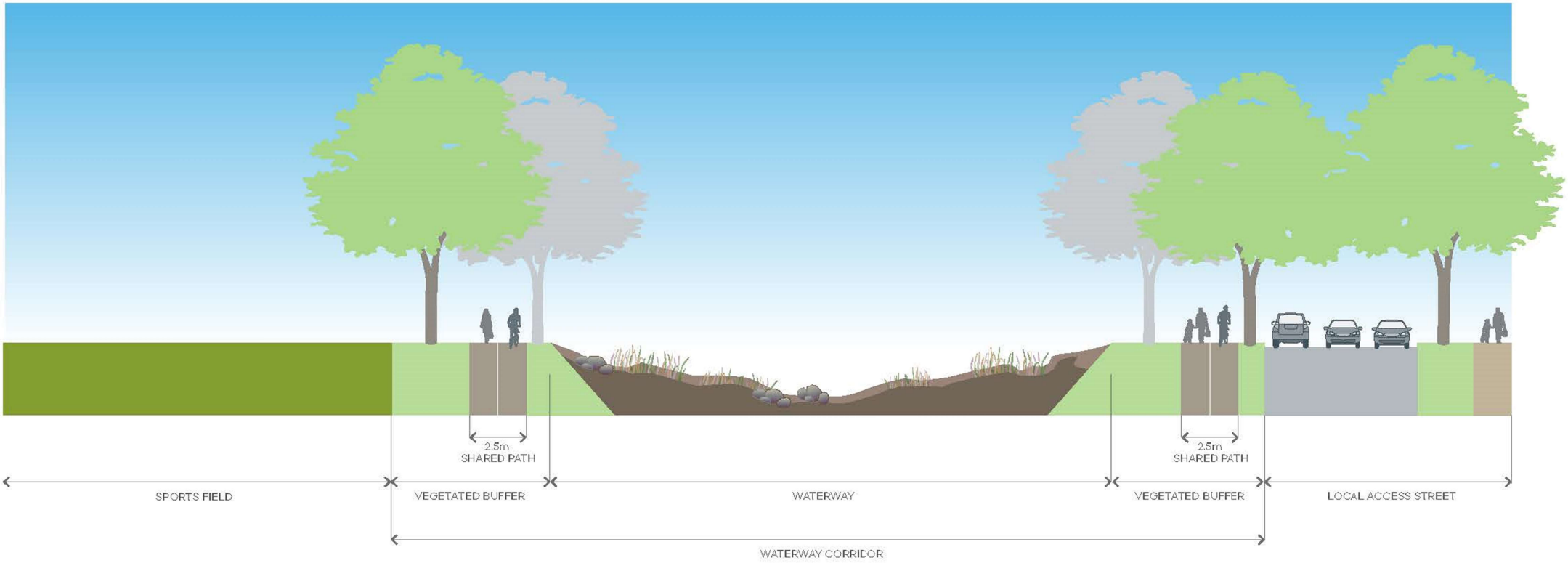

**NOTES:**

- Shared path placement is shown for local access street interfaces for indicative purposes.
- Indicative open space and road cross section shown abutting waterway.
- The design of the waterway channel and stormwater quality treatment assets shown on this cross section are indicative and subject to confirmation through the preparation of detailed design to be undertaken as part of the future subdivision process to the satisfaction of the responsible authority.




**NOTES:**

- Shared path placement is shown for local access street interface for indicative purposes.
- Indicative open space and road cross section shown abutting waterway.
- The design of the waterway channel and stormwater quality treatment assets shown on this cross section are indicative and subject to confirmation through the preparation of detailed design to be undertaken as part of the future subdivision process to the satisfaction of the responsible authority.




**NOTES:**

- Shared path placement is shown for both sports field and local access street interfaces for indicative purposes.
- Indicative open space and road cross section shown abutting waterway.
- The design of the waterway channel and stormwater quality treatment assets shown on this cross section are indicative and subject to confirmation through the preparation of detailed design to be undertaken as part of the future subdivision process to the satisfaction of the responsible authority.

## 5.3 Appendix C: Service Placement Guide

### 5.3.1 Standard street cross sections

The Infrastructure Design Manual outlines placement of services for typical residential street environments. This approach is appropriate for the majority of the 'standard' street cross sections outlined in Appendix B containing grassed nature strips, footpaths and road pavements.

### 5.3.2 Non-standard street cross sections

To achieve greater diversity of streetscape outcomes, which enhances character and amenity of these new urban areas, non-standard street cross sections are encouraged. Non-standard street cross sections will also be required to address local needs, such as fully sealed verges for high pedestrian traffic areas in town centres and opposite schools.

For non-standard street cross sections where service placement guidance outlined in the Infrastructure Design Manual is not applicable, the following service placement guidelines will apply.

Table 7: Service Placement Guidelines

| | Under pedestrian pavement | Under nature strips | Directly under trees[1] | Under kerb | Under road pavement[2] | Within allotments | Notes |
|---|---|---|---|---|---|---|---|
| **Sewer** | Possible | Preferred | Possible | No | Possible | Possible[3] | |
| **Potable water** | Possible[4] | Preferred | Preferred | No | Possible | No | Can be placed in combined trench with gas |
| **Recycled water** | Possible[4] | Preferred | Preferred | No | Possible | 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 | Preferred | Preferred | Possible[3] | |
| **Trunk services** | Possible | Possible | Possible | Possible | Preferred | No | |

*Notes:*

1. *Trees are not to be placed directly over parcel service connections.*
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.*
3. *Where allotment size/frontage width allows adequate room to access and work on a pipe.*
4. *Where connections to properties are within a pit in the pedestrian pavement/footpath*

### 5.3.3 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 (e.g. drainage, street light electricity supply) closer to the road carriageway
- Maintain appropriate services clearances and overlap these clearances wherever possible
- Services must be placed outside of natural waterway corridors or on the outer edges of these corridors to avoid disturbance to existing waterway values.

## 5.4 Appendix D: Open Space delivery guidelines

### 5.4.1 Passive recreation park

Passive Recreation Park: a park that provides opportunities for a variety of recreational and social activities in a green space setting. Passive recreation parks come in a variety of landforms, and in many cases provide opportunities to protect and enhance landscape amenity.

### 5.4.2 Neighbourhood local park

- Passive recreation park suitable for local recreation/social activities
- Junior play emphasis
- Attracts users from the local area (i.e. 400 metre catchment)
- Recreational/social facilities suitable for local activities/events.
- Minimal support facilities (seats, bin etc.)
- Footpath/bikeway links

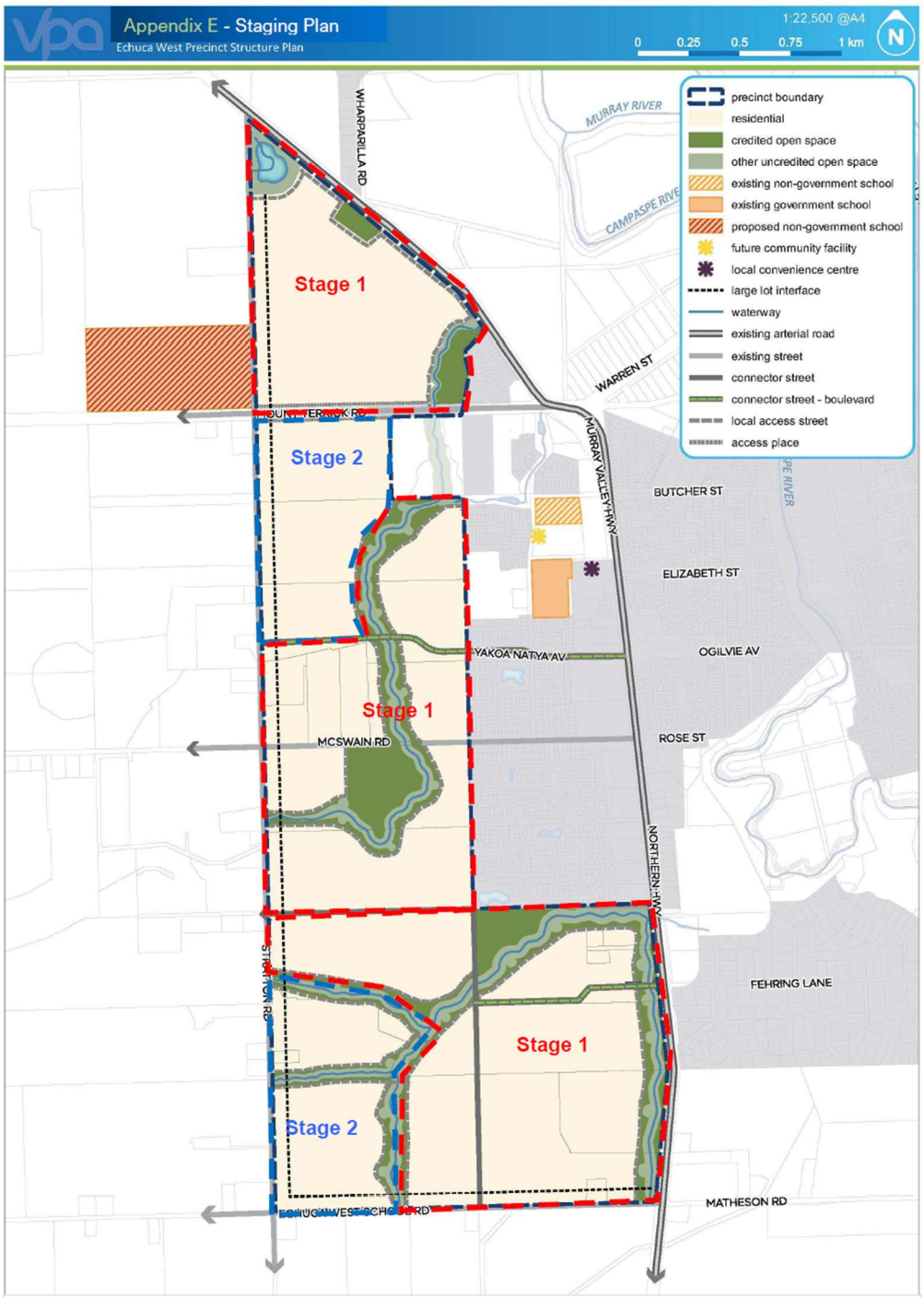
### 5.4.3 District local park

- Passive recreation park suitable for district-level recreation/social activities
- Junior and youth play emphasis
- Attracts users from the district (i.e. two kilometre catchment)
- Recreational/social facilities suitable for district activities/events
- Basic support facilities (e.g. amenities, barbecue, picnic tables, shelters, seats, etc.)
- Footpath/bikeway links

### 5.4.4 Linear open space

- Passive recreation park suitable for district-level recreation/social activities
- Attracts users from the district (i.e. two kilometre catchment)
- Recreational/social facilities suitable for district activities/events
- Minimal support facilities (seats, bin etc.)
- Footpath/bikeway links

## 5.5 Appendix E: Echuca West PSP Staging Plan




The development of the precinct must be generally in accordance with this staging plan, generally in accordance with the staging of projects under the Echuca West Development Contributions Plan, July 2022 and guided by the Integrated Transport Assessment, all to the satisfaction of the responsible authority.

# Echuca West

Precinct Structure Plan – August 2022

Victorian Planning Authority

Campaspe Shire Council

VICTORIA State Government