



# BUNYIP

## Township Strategy

Adopted by Council  
21 September 2009



Wattletree Rd

Petty Rd



Flett St

Stacey St

ess St

High St

George St

Anderson St

Main St

Chambers Rd

Jolley Rd

Mary St



# CARDINIA

Prepared by:

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Strategic Planning Unit

in association with SM Urban

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# **1. INTRODUCTION**

The township of Bunyip is located approximately 80 kilometres south-east of Melbourne's Central Business District and is the most eastern town within Cardinia Shire. Nearby towns include Garfield (5kms west of Bunyip) and Pakenham (about 25kms also to the west of Bunyip). The dominant activities and uses within the strategy area include residential and rural residential land uses, open space, rural industries (horticulture and agriculture) and recreation.

## **1.1 Purpose of the strategy**

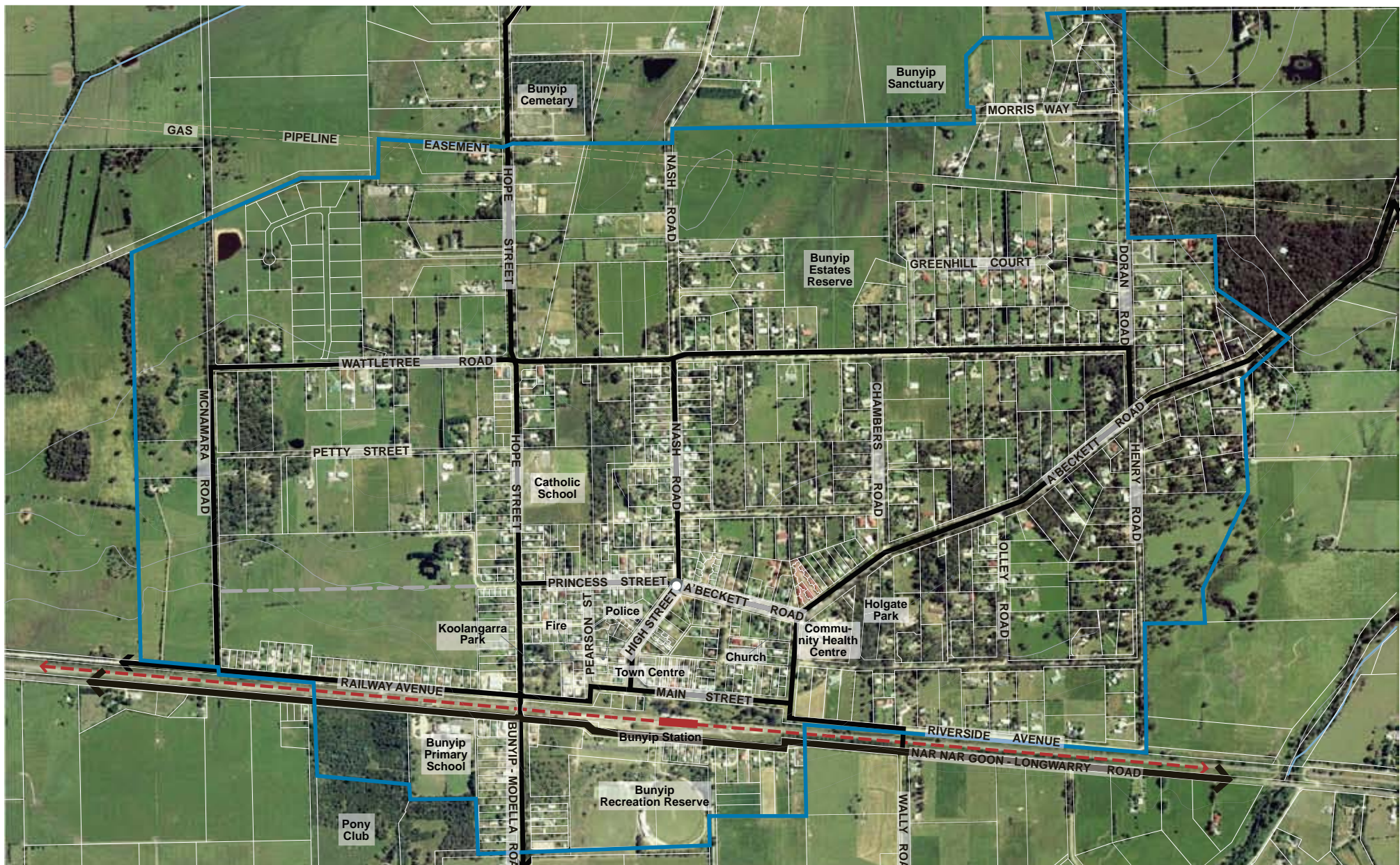
Cardinia Shire comprises 19 townships with a number of rural localities, each with a distinct identity, character and role. Both the Council Plan and the Municipal Strategic Statement (MSS) recognise the need for the preparation and implementation of a township strategy for each of the Shire's townships. The township strategies provide a strategic policy framework for the future development of each township. Each strategy provides clear direction in keys areas of:

- residential development
- economic development
- community development
- open space
- traffic and transport
- physical infrastructure
- environment
- urban design.

This strategy sets out the key issues facing the Bunyip Township and explains why they are important. The strategy then sets out objectives (what we are trying to achieve) and policies and actions (how the objectives will be achieved). Council, with the assistance of residents, local community groups and other government agencies, will play a critical role in implementing the policies and actions set out in this strategy.

## **1.2 Strategy area**

The area included in the Bunyip Township Strategy is generally bounded to the north by the Princes Freeway, to the east by A'Beckett Road and Henry Road, to the south by Nar Nar Goon Longwarry Road, and to the west by McNamara Road. The strategy area is shown in Figure 1.



#### LEGEND

- |   |               |
|---|---------------|
| Township Boundary/Urban Growth Boundary | Railway Line  |
| Arterial Road                           | Train Station |
| Local Arterial Road                     |               |
| Proposed Road                           |               |

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**FIGURE 1: BUNYIP STRATEGY AREA**

## 2. SNAPSHOT OF BUNYIP

### 2.1 History

It is thought that the name Bunyip is derived from an Aboriginal legend of northern and south eastern tribes of the Koo Wee Rup swamp areas who avoided the region because of the mythical monster called a 'bunyip' which lived in the swamp.

Development of Bunyip began after a road was surveyed from Dandenong to 'Bunee', a heavily vegetated 30,000-acre cattle run between the Bunyip and Targo Rivers in 1847. During the 1850s, a small area of the run was surveyed for a township site and settlement was firmly established in October 1877 with the extension of the railway line from Oakleigh to 'Bunyip Bank'. The Bunyip to Moe section of the line was completed shortly after in 1878. The original township was located to the north-east of the existing Bunyip alongside the river that was developed as a timber area. During the 1860s the road was moved further to the south with the present day township site being surveyed at the same time as the Oakleigh to Bunyip section of the Gippsland railway in 1877.

The Swamp had become Crown Land in 1874 and drainage of the Great Swamp, which began during the 1890s, increased the amount of land available for farming purposes. This period of time occurred during an economic depression, making it an era of hardship. In order to assist people affected by unemployment and to stop the drift of people to the cities, the *Village Settlements Act 1892* was introduced. The aim of the Act was to establish 'village settlements' in country areas of possible employment. This was achieved by providing the men who worked on the swamp drainage scheme with a 20-acre parcel of land and in return the men were required to work for two weeks then work two weeks on their own properties.

By the turn of the century, the township was supported by two hotels, a general store, a post office, and a state school and was the largest shire township in the region. Bunyip had an estimated population of 1,000 with other established townships including Pakenham (180), Beaconsfield (200) and Nar Nar Goon (140). In 1926, Bunyip was devastated by bushfire and, as a result of the damage caused by the fire, a number of the original buildings including the Bunyip Commercial and Civil Precinct were rebuilt.

*Main Street, Bunyip 1908.*



*Source: Nest, DM, 1990, Call of the Bunyip, Bunyip Historical Committee, Bunyip.*

The historical significance of the Bunyip Township is noteworthy in that it marks a transition from a period of initial hardship for those who settled in the area to a time of prosperity when Bunyip became

the largest township in the Shire. Present day Bunyip is a smaller community with a great sense of pride. Like many Victorian rural towns, advances in transport and communications technology since the 1950s has changed the role of the township with a rationalisation of commercial and community services as they are more accessible either in larger centres or electronically.

## 2.2 Population

Over the past 10 years, Bunyip has experienced moderate population growth as a result of an increase in dwelling and surprisingly an increase in the number of people living in each dwelling. During the period 1996 to 2006, the enumerated population (excluding overseas visitors), has increased by 20.5 per cent (or 347 people) in Bunyip (from 1,693 in 1996 to 2,040 in 2006).

**Table 1: Population and age structure**

Year	1996	2001	2006
<b>Total population</b>	1,672	1,919	2,039
0 to 4	117	134	131
5 to 11	230	252	256
12 to 17	153	197	225
18 to 24	110	120	132
25 to 34	210	218	172
35 to 49	424	481	525
50 to 59	172	243	253
60 to 69	106	122	178
70 to 84	129	124	119
85 and over	9	29	48

*Source: Profile Id: Community Profile 1996, 2001 and 2006 Census Information for Bunyip*

Analysis of the age structure of Bunyip in 2006 compared to Cardinia Shire shows that there was a similar proportion of people in the younger age groups (0–17) but a larger proportion of people in the older age groups (60+).

Overall, 30.0 per cent of the population was aged between 0 and 17, and 16.8 per cent were aged 60 years and over, compared with 29.8 per cent and 13.7 per cent respectively for Cardinia Shire.

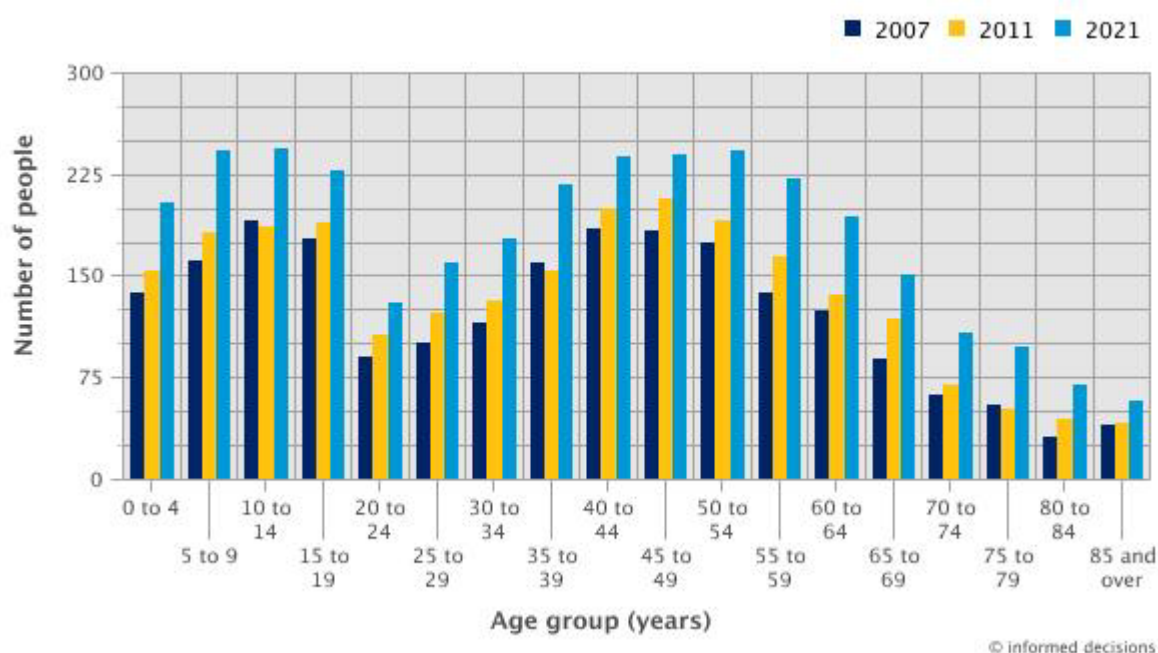
The major differences between the age structure of Bunyip and Cardinia Shire were:

- A larger percentage of 35 to 49 year olds (25.7% compared to 23.9%);
- A larger percentage of 60 to 69 year olds (8.7% compared to 7.2%);
- A smaller percentage of 25 to 34 year olds (8.4% compared to 12.2%), and;
- A smaller percentage of 18 to 24 year olds (6.5% compared to 8.4%).

The largest change in age structure in the area between 2001 and 2006 was in the age group:

60 to 69 (+56 persons)

**Table 2: Bunyip forecast age structure (5-year age groups) 2007, 2011 and 2021**



Source: Cardinia Forecast Age Structure: [www.id.com.au](http://www.id.com.au)

Bunyip has the potential for substantial future growth and it is projected to increase to approximately 3,215 people by the year 2021.

**Table 3: How many people will live here in the future?**

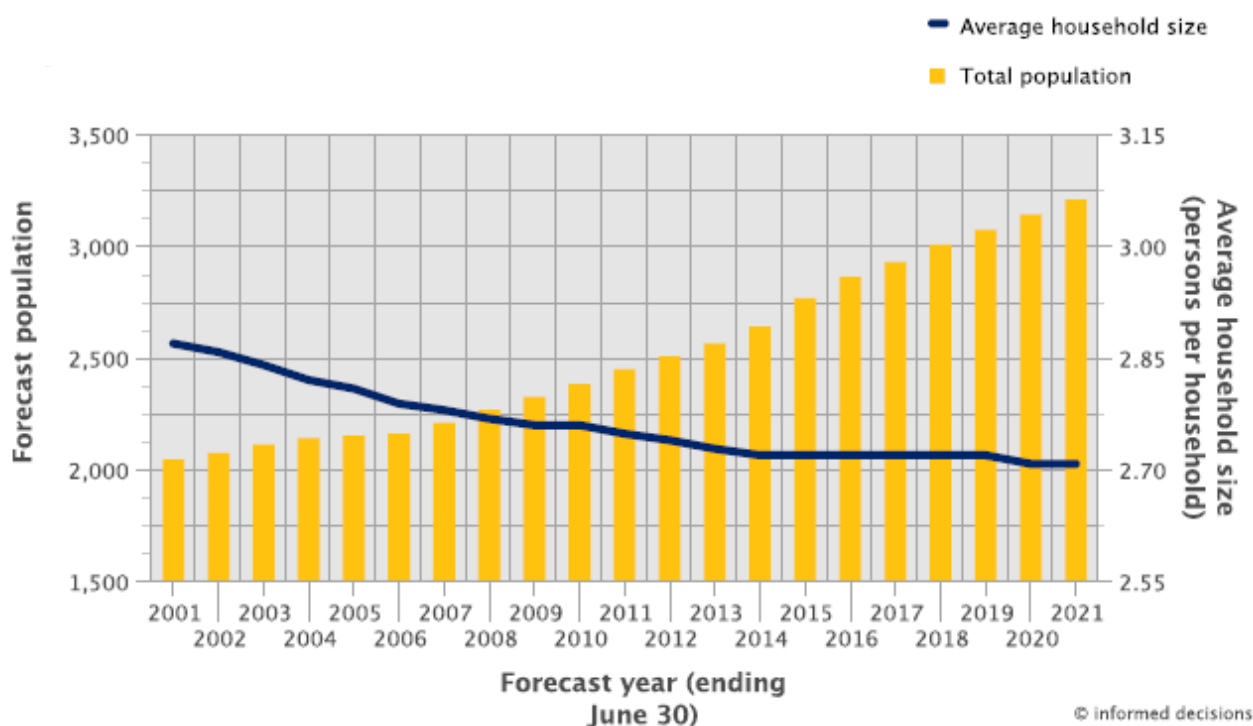
Date			Forecast year		
	2001	2006	2011	2016	2021
Total population	2,045	↗2,159	↗2,448	↗2,861	↗3,215
Households	700	↗760	↗877	↗1,025	↗1,160
Dwellings	727	↗790	↗912	↗1,066	↗1,206
Average household size	2.87	↘2.79	↘2.75	↘2.72	↘2.71

↔ stable\* from previous year   ↗ increase from previous year   ↘ decrease from previous year

\* stable refers to between +/- 0.5% change

Source: Cardinia Community and Household Forecasts: [www.id.com.au](http://www.id.com.au)

**Table 4: Bunyip forecast population and average household size 2001 to 2021**



Source: Cardinia Community and Household Forecasts: [www.id.com.au](http://www.id.com.au)

The major migration assumptions over the period 2001 to 2021 include:

- stable migration profile expected across the 2001–21 period into Bunyip with a steady population influx
- moderate gain of young and mature families (30–49 years) with children (0–14 years)
- significant loss of population in the young adult age groups (18–24 years), as young home leavers seek employment and educational opportunities elsewhere
- little change through migration is expected in ages 50+.

## 2.3 Policy context

### Municipal Strategic Statement (MSS)

Both the Council Corporate Plan and the Municipal Strategic Statement (MSS) in the Cardinia Planning Scheme recognise the need for the preparation and the implementation of a township strategy for each of the shire’s townships. The MSS acknowledges the pattern of settlement in the Cardinia Shire is primarily focused in townships ranging from large urban centres to rural localities.

The Municipal Strategic Statement recognises that the capacity for growth varies depending on the environment and infrastructure capacities of each of the towns. An underlying principle of the large and small townships should be to consolidate development to create visual and physical links to existing development while avoiding the scattering of township development into the nearby landscape. This consolidation approach is critical if the scenic quality of the towns and surrounding landscape is to be maintained. The statement recognises that growth should preferably occur in the context of a strategy plan for each of the townships, and in general any further residential development in the townships of Garfield, Bunyip, Koo Wee Rup and Lang Lang are recognised in the Municipal Strategic Statement as having potential for substantial future growth.

There are a number of other objectives and strategic directions in the Municipal Strategic Statement in relation to issues such as vegetation and heritage, and these are identified where appropriate throughout this strategy. The Municipal Strategic Statement should be considered in conjunction with this strategy in relation to any proposal for the use, development and subdivision of land in Bunyip.

## **Melbourne 2030**

In October 2002, the State Government released *Melbourne 2030 – Planning for Sustainable Growth*. *Melbourne 2030* is a strategic policy focusing on the management of future growth, land use, development and infrastructure investment across metropolitan Melbourne and its surrounding regions. In an attempt to conserve rural resources and significant natural features outside the growth areas of metropolitan Melbourne the State Government introduced twelve green wedge regions in Victoria. The green wedge regions in metropolitan Melbourne contain elements that are of very high social, economic and environmental significance. Consequently, an area identified as green wedge is protected via the Green Wedge Provisions in the Planning Scheme from inappropriate use, development or subdivision of land.

The Bunyip area retains land located within the Westernport Green Wedge region and retains the following significant elements:

- internationally recognised wetlands, such as Western Port
- locations with productive agricultural potential, such as Koo Wee Rup and Cranbourne South
- areas with potential for waste-water recycling
- long-term potential for a regional airport
- areas of significant landscape and environmental qualities, such as Westernport environs.

## **Urban growth boundary**

As a result of Amendment C55 to the Cardinia Planning Scheme, approved by the Minister of Planning on 6 November 2003, the township of Bunyip is located within the Urban Growth Boundary defined as part of *Melbourne 2030*. The Urban Growth boundary is based on the following principles and constraints:

- maintaining a buffer to the Princes Freeway
- limiting development on flood prone land south of the Gippsland railway line
- the Bunyip River to the east of the township
- maintaining the character and scenic outlook of the township.

Land outside the urban growth boundary is predominately affected by the Green Wedge provisions of the Planning Scheme.

**Figure 2: Metropolitan green wedges**



*Source: Melbourne 2030*

## Cardinia Planning Scheme

A plan of the zones which apply in the Bunyip Township under the Cardinia Planning Scheme is set out in Figure 3. The following table sets out the primary purpose of the zones shown on the plan.

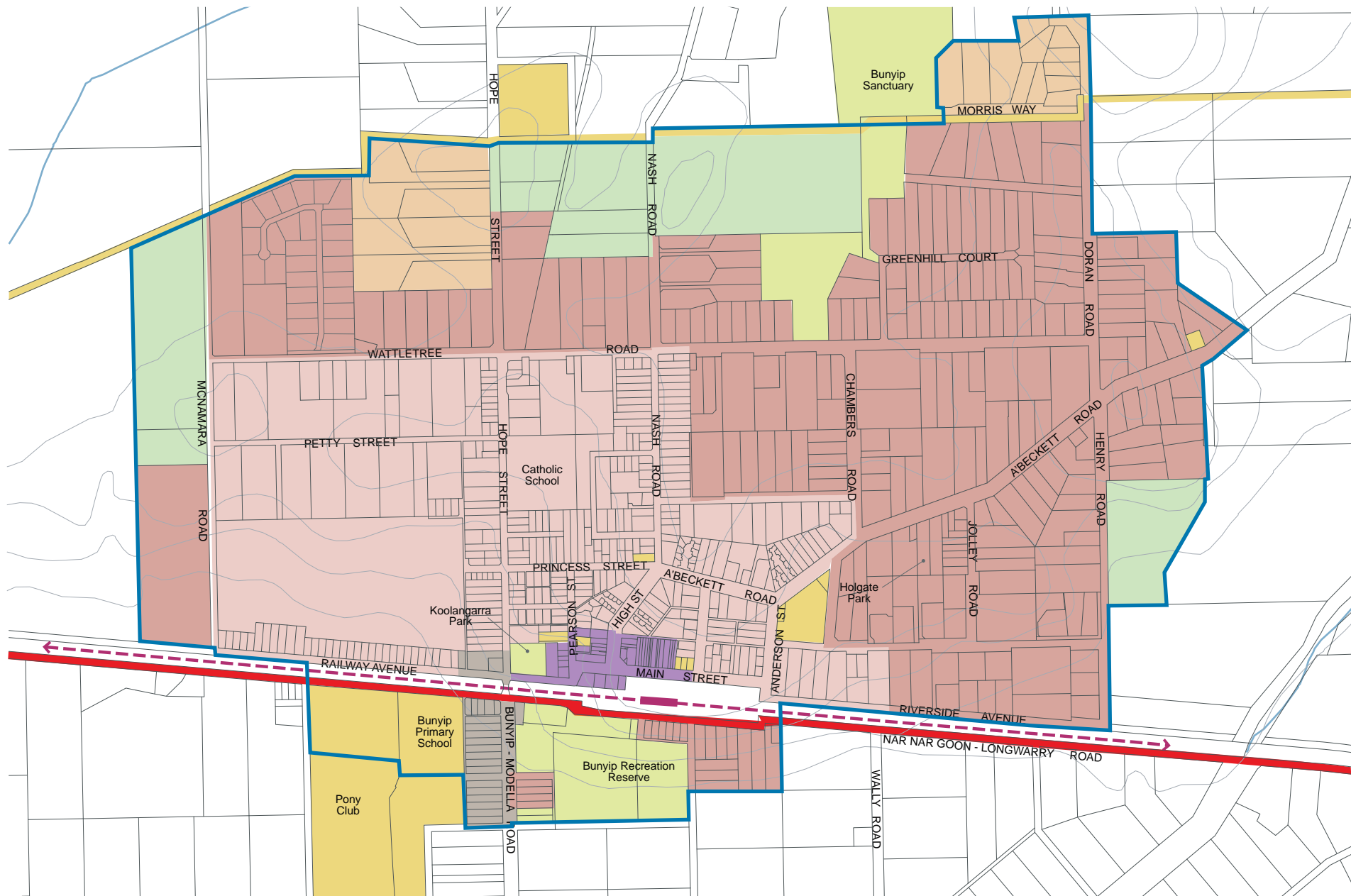
**Table 5: Primary purpose of zones**

Zone	Purpose
<b>Business 1 Zone</b>	To encourage the intensive development of business centres for retailing and other complementary commercial, entertainment and community uses.
<b>Industrial 1 Zone</b>	To provide for manufacturing industry, the storage and distribution of goods and associated uses in a manner which does not affect the safety and amenity of local communities.
<b>Residential 1 Zone</b>	To provide for residential development at a range of densities with a variety of dwellings to meet the housing needs of all households and in appropriate locations, to allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs.  To encourage residential development that respects the neighbourhood character.
<b>Low Density Residential Zone</b>	To provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.
<b>Public Park and Recreation Zone</b>	To recognise areas for public recreation and open space, protect and conserve areas of significance where appropriate and to provide for commercial uses where appropriate.
<b>Public Use Zone</b>	To recognise public land use for public utility and community services and facilities and to provide for associated uses that are consistent with the intent of the public land reservation or purpose.
<b>Rural Living Zone</b>	To provide for residential use in a rural environment. To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses. To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area. To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.
<b>Farming Zone</b>	To provide for the use of land for agriculture. To encourage the retention of productive agricultural land. To ensure that non-agricultural uses, particularly dwellings, do not adversely affect the use of land for agriculture. To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision. To protect and enhance natural resources and the biodiversity of the area.
<b>Road Zone Category</b>	To identify significant existing roads. To identify land which has been acquired for a significant proposed road.

The Cardinia Planning Scheme also includes overlay provisions which identify issues which need to be addressed in the development of the land. A plan of the overlays which apply in the Bunyip Township under the Cardinia Planning Scheme is set out in Figure 4. The following table sets out the primary purpose of the overlays shown on the plan.

**Table 6: Primary purpose of overlays**

Overlay	Purpose
<b>Vegetation Protection Overlay</b>	<p>To protect areas of significant vegetation.</p> <p>To ensure that development minimises loss of vegetation.</p> <p>To preserve existing trees and other vegetation.</p> <p>To recognise vegetation protection areas as locations of special significance, natural beauty, interest and importance.</p> <p>To maintain and enhance habitat and habitat corridors for indigenous fauna.</p> <p>To encourage the regeneration of native vegetation.</p>
<b>Environmental Significance Overlay</b>	<p>To identify areas where the development of land may be affected by environmental constraints.</p> <p>To ensure that development is compatible with identified environmental values.</p>
<b>Design and Development Overlay</b>	<p>To identify areas which are affected by specific requirements relating to the design and built form of new development.</p>
<b>Heritage Overlay</b>	<p>To conserve and enhance heritage places of natural or cultural significance.</p> <p>To conserve and enhance those elements which contribute to the significance of heritage places.</p> <p>To ensure that development does not adversely affect the significance of heritage places.</p> <p>To conserve specifically identified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.</p>
<b>Land Subject to Inundation Overlay</b>	<p>To conserve and enhance heritage places of natural or cultural significance.</p> <p>To conserve and enhance those elements which contribute to the significance of heritage places.</p> <p>To ensure that development does not adversely affect the significance of heritage places.</p> <p>To conserve specifically identified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.</p>
<b>Restructure Overlay</b>	<p>To identify old and inappropriate subdivisions which are to be restructured.</p> <p>To preserve and enhance the amenity of the area and reduce the environmental impacts of dwellings and other development.</p>



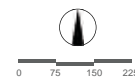
#### LEGEND

- Township Boundary/Urban Growth Boundary
- Railway Line
- Rail Station

#### ZONES

- Business 1 Zone
- Industrial 1 Zone
- Residential 1 Zone
- Low Density Residential Zone
- Public Park and Recreation Zone

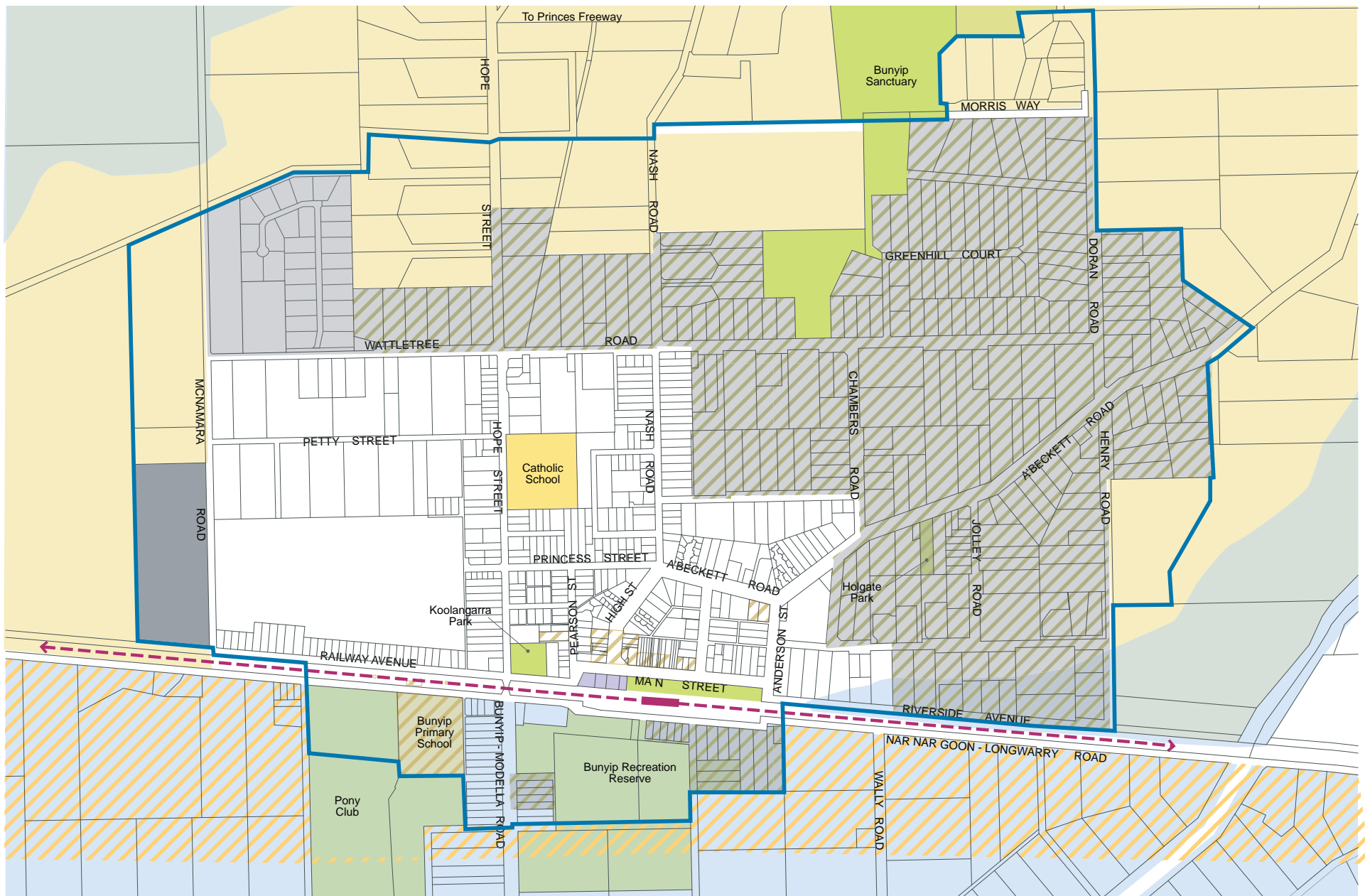
- Public Use Zone
- Rural Living Zone - Schedule 2
- Farming Zone - Schedule 1
- Road Zone Category



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Rev.: B

**FIGURE 3: PLANNING SCHEME ZONES**



#### LEGEND

- Township Boundary/Urban Growth Boundary
- Railway Line
- Train Station

#### OVERLAYS

- Vegetation Protection Overlay
- Environmental Significance Overlay - Schedule 1
- Design & Development Overlay - Schedule 1
- Design & Development Overlay - Schedule 3
- Heritage Overlay
- Land Subject to Inundation Overlay
- Restructure Overlay

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 Rev.: B  
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**FIGURE 4: PLANNING SCHEME OVERLAYS**

### **3. STRATEGIC OBJECTIVES AND VISION**

#### **3.1 Vision**

The vision for Bunyip is:

A rural township with extensive recreational opportunities, potential for substantial growth and a commercial and retail centre providing an extensive range of services to the township and nearby residents.

The Bunyip Township will contain a range of housing types that respect the rural character of the town and the natural landscape. Open space areas will be diverse, to allow access for active and passive recreation while ensuring the protection of remnant vegetation and wildlife corridors to allow the movement of species throughout the landscape.

The township strategies provide a strategic policy framework for the future development of each township for a period of 7–10 years. Each strategy provides clear direction in key areas of Residential Development, Economic Development, Community Development, Environment, Urban Design, Traffic Management and Physical Infrastructure. Each strategy contains an implementation plan that set out priorities in key areas. Council, with the assistance of township committees, local community groups and other government agencies will play a critical role in implementing the actions set out in this strategy.

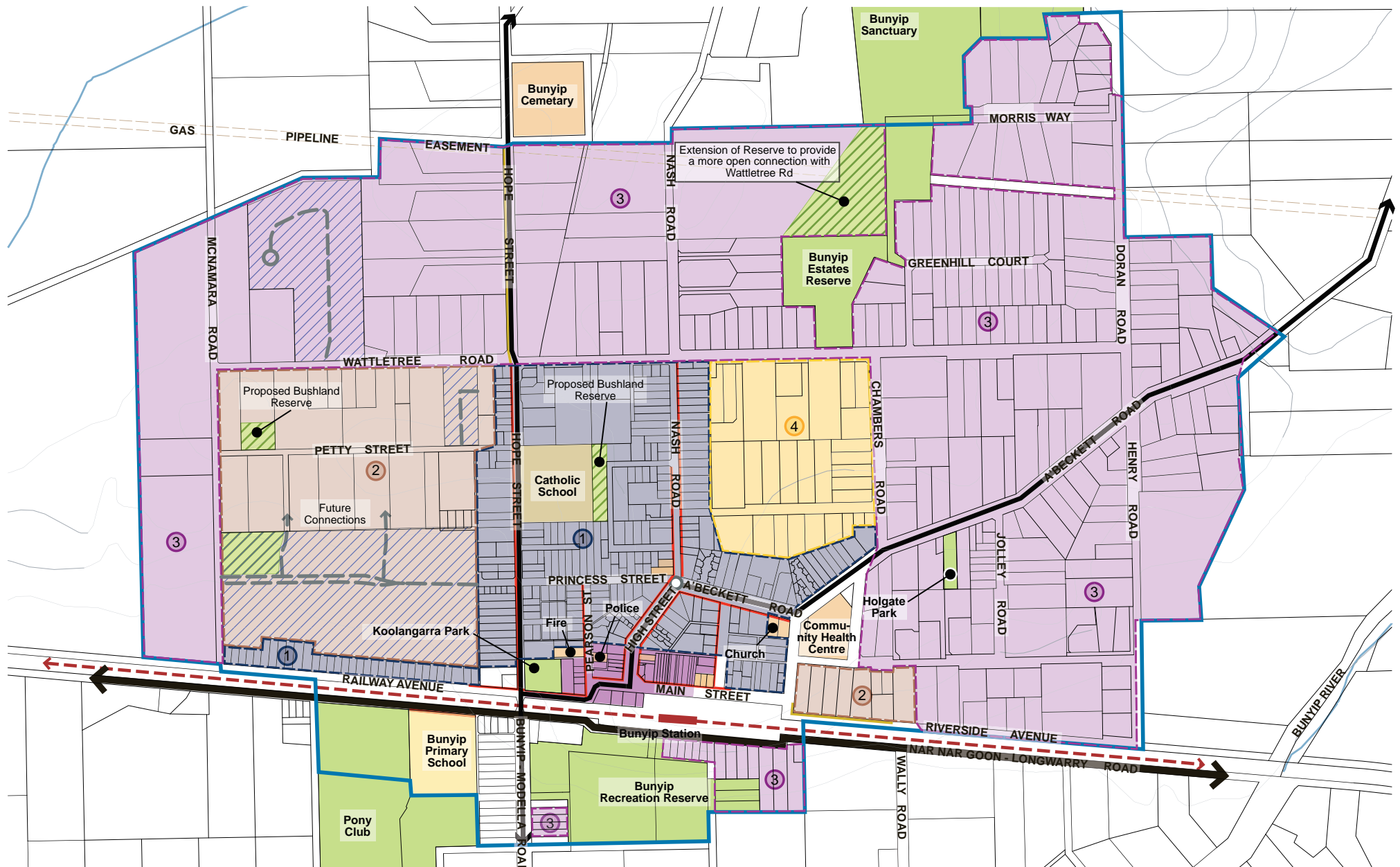
#### **3.2 Strategic objectives**

The objectives for the Bunyip Township Strategy are to:

- provide for the growth of Bunyip as an attractive rural township
- maintain the rural township character
- provide a range of lot sizes and types to accommodate a mix of household and lifestyle types
- provide opportunities for local employment and services in the Bunyip Township
- promote tourism opportunities in the Bunyip area
- maintain and augment the range of community and commercial facilities provided to meet the needs of the community
- protect and enhance the environment, especially those elements which contribute to the character of the Bunyip Township
- maintain and enhance existing public transport
- improve pedestrian safety and movement in the town centre.

#### **3.3 Strategic framework plan**

The future of the Bunyip Township is shown in the strategic framework plan in Figure 5. The framework plan sets out the general pattern of the use, development and subdivision of land in the township. The purpose of the plan is to provide a strategy for guiding redevelopment opportunities, encouraging a better mix of retail uses, creating a sense of place and preserving the existing township assets.



#### LEGEND

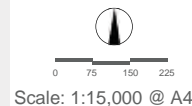
- Township Boundary/Urban Growth Boundary
- Arterial Road
- Local Arterial Road
- Proposed Road
- Railway Line
- Railway Station

- Town Centre
- Community Facility
- Schools
- Open Space
- Approved Subdivision

- Proposed Retarding Basin (including wetland features)
- Proposed Open Space
- Existing Sealed Pathway
- Existing Gravel Pathway

#### PRECINCTS

- ① Established Residential Area
- ② New Residential Estates
- ③ Low Density Residential Area
- ④ Special Residential Area



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**FIGURE 5: STRATEGIC FRAMEWORK PLAN**

## **4. RESIDENTIAL DEVELOPMENT**

### **4.1 Existing pattern of development**

Residential development in Bunyip reflects a number of housing styles from Edwardian to modern designs with the initial stages of the present day township site having been surveyed during the 1860s. A key characteristic of Bunyip is the significantly higher proportion of large lot sizes compared with other townships. Lot sizes generally range from 500 square metres to 1.5 hectares and the larger lots on the fringe of the township help to integrate the township with the surrounding rural properties. Lots in Bunyip's residential precincts predominantly retain single-storey detached dwellings with generous setbacks from the street.

### **4.2 Key characteristics**

The key characteristics of Bunyip Township are:

- interesting and distinctive town centre with the prominent setting of the commercial area with its heritage buildings, the central median and views to the south
- significantly higher proportion of large lots compared to other townships
- less defined urban to rural edge
- reasonable views from many houses
- extensive treed areas particularly in and around A'Beckett Road
- hard to navigate around the township; mixture of grid and winding street pattern that is different to Garfield with its court bowls
- mainly south-facing slopes and undulating to the north
- rural buffer from the highway
- rural country town feel, because of the character of the town centre and the extensive areas of undulating rural residential development
- large areas of open space and community and recreation facilities contribute to a feeling of spaciousness.

Figure 6 maps the existing character conditions of the Bunyip Township.

**In Association With:**  
Peter McNabb & Associates P/L  
Sustainable Development Consultants

### **4.3 Land capability**

The Bunyip Township is located in an attractive setting due to the majority of the township being located north of the railway line on the undulating land, and to significant areas of native vegetation being retained in the township. Existing vegetation is an intrinsic part of the character of the Bunyip Township, and the strategy should seek to maintain and further enhance this vegetation.

The town centre is located on a moderate slope which rises from the railway line to the south, and which provides excellent views south over the Koo Wee Rup Swamp to Westernport Bay and the Strzelecki Ranges. To the north of the town centre, a prominent ridgeline runs through the township following an approximate alignment (from east to west) along A'Beckett Road, Nash Road and Wattletree Road. The ridgeline is 70–80 metres AHD compared with the land south of the railway which is 35 metres AHD. From the ridgeline and areas to the north, there are excellent views of the Great Dividing Range including Mt Baw Baw.

The soils in the Bunyip area are either of quaternary alluvial or devonian granite origin. The soils of quaternary alluvial occur south of the railway line and along the floodplains associated with the Bunyip River and Ti Tree Creek. The soils of devonian granite origin occur on the steeper undulating land to the north of the railway line where the majority of development has occurred in the Bunyip Township. These soils have limitations in terms of the capacity for on site disposal of waste water. In addition, these soils of devonian granite origin are subject to erosion on moderate to steep slopes, and therefore careful site management is required to minimise the potential for erosion.

There are two watercourses in close proximity to the Bunyip Township: the Bunyip River to the east and Ti Tree Creek to the north. The floodplain of the Bunyip River has a significant impact on land to the south of the Gippsland railway line and to the south-east A'Beckett Road, Henry Road and Mary Street. Any further development in this flood prone area should be limited.

Consideration should also be given to the disposal and treatment of effluent generated by households and other land uses, and the quality of stormwater generated in urban areas. As further development is likely to precede the stormwater drainage plan, systems should be designed to improve the quality of water entering local watercourses through the use of measures such as wetlands and pollution traps.

Bunyip contains a number of sites of heritage and cultural significance. Heritage consists of archaeological sites such as aboriginal sacred sites, scarred trees, and artefact sites and historic sites such as buildings, gardens and trees and streetscapes. These sites contribute significantly to the character and identity of the township and should be maintained, protected and restored appropriately.

### **4.4 Trends in residential development**

#### ***Types of housing***

There is a significant concentration of separate houses in Bunyip, which is consistent with a greater degree of similarity in residential land uses. The greater share of separate houses means that this area is more likely to appeal to families. Bunyip had a similar share of separate houses compared to Cardinia Shire at approximately 86.4 per cent of all dwellings in 2001, with a greater number of flats and apartments compared to semi-detached and other types of dwellings.

#### ***Housing tenure***

The major housing market role of this area was providing opportunities for families, which is indicated by the strong concentration of owners and purchasers in 2001. Compared with the overall Shire, Bunyip had higher shares of home owners, while the proportion of purchasers was similar and the overall percentage of renters was lower. There was also a greater share of private renters than public renters in Bunyip in 2001.

## Development approvals – buildings and planning

A comparison of development approvals and planning permits from 2002–06 can provide an indication of the level of investment in Bunyip. The main proposals for use and development in the area relate to houses, outbuildings works and vegetation removal. Council's building data shows that, on average, 12 new dwellings were constructed per annum between 2002 and the end of 2006.

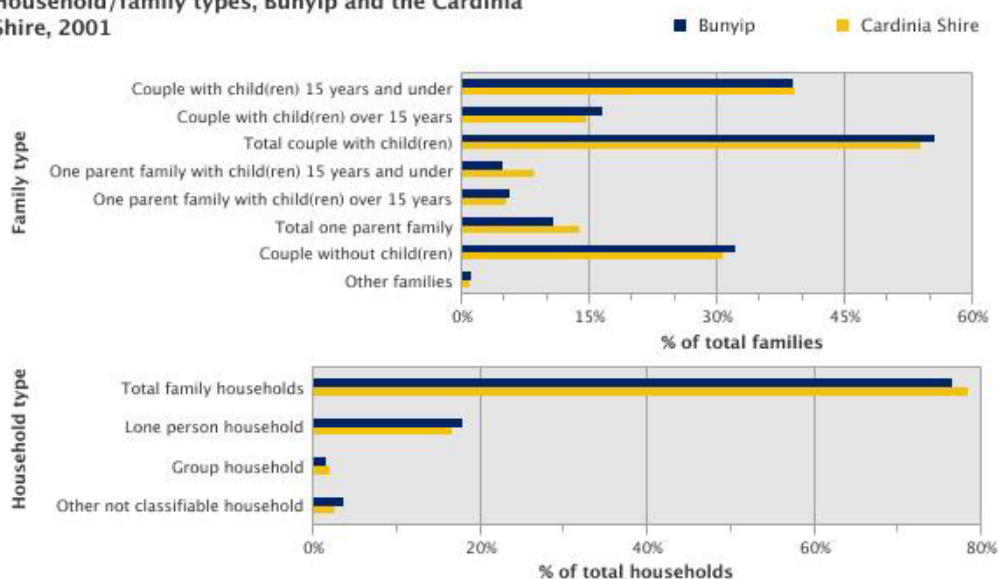
**Table 7: Building approvals in Bunyip 2002–06**

Types of permit issued	2002	2003	2004	2005	2006	Av. pa
Building permits	23	7	6	12	11	12

Source: Development Services Unit, Cardinia Shire Council, 2007

**Table 8: Household and family types, Bunyip 2001**

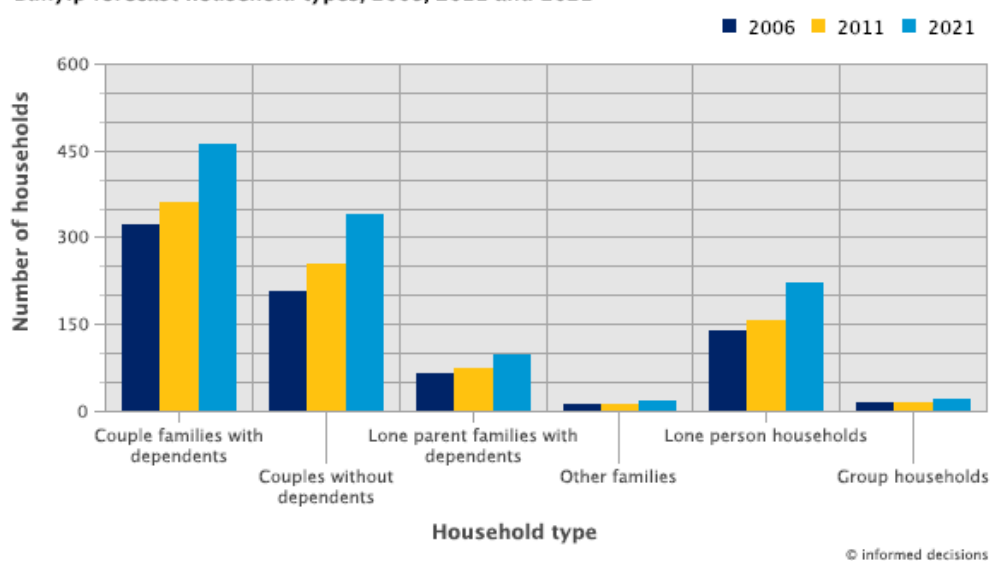
Household/family types, Bunyip and the Cardinia Shire, 2001



Source: Profile Id: Community Profile 2001 Census Information for Bunyip

**Table 9: Household types**

Bunyip forecast household types, 2006, 2011 and 2021



Source: Profile Id: Community Profile 2001 Census Information for Bunyip

Given the nature of demographic trends in Bunyip it is important that appropriate housing facilities for the various household types are built to accommodate the growing population while remaining respectful of the existing township character.

The existing pattern of development comprises urban residential development around the historical core of the township, and more recent low density residential development to the north, east and west of the town centre. Future development is to be focused on medium density infill development and low density residential development on a range of lot sizes with Bunyip. By the year 2021, Bunyip's population is expected to reach 3,215. The existing Bunyip Township (as defined by the Urban Growth Boundary) currently contains sufficient undeveloped land to accommodate future residential development in accordance with this projection.

#### **4.5 Township character – preferred character precincts**

The township character assessment was adopted by Council in December 2006. The objectives of the study are to:

- assess the existing character of the townships
- breakdown the townships into precincts which display particular character attributes
- provide guidelines for the preferred character for each of the townships.

The character study divided Bunyip into nine existing precincts and delineated four preferred character residential precincts. The residential precincts include the following:

- established residential area
- new residential estates
- low density residential area
- special residential area.

The non-residential precincts include:

- the town centre
- open space and community function
- railway line corridor
- light industrial
- existing open rural land use.

The township character assessment provides guidelines and recommendations for lot size, minimum side and front setbacks, maximum building site coverage and minimum lot width for each residential precinct. As a result, the four precinct areas have been defined, reflecting differences in desired future character being:

##### **Precinct 1 – Established residential area preferred character**

The established residential areas will retain a reasonable proportion of large lots, wide nature strips and roads, and street trees throughout the area. Significant views particularly to the south will be protected. There will be some unit development near the town centre. Development will integrate with the undulating landform which is a defining characteristic of the area. The strong legible grid layout of roads is a precedent for future development. The existing mixture of native trees and large shrubs will also be a feature of new developments.

##### **Precinct 2 – New residential estates**

New residential estates will retain the rural character with a high proportion of large lots, combined with wide nature strips and roads, and a significant canopy of street trees. New development will integrate with the sloping and undulating terrain, and be designed and constructed to a high standard.

### **Precinct 3 – Low density residential area**

The rural character of Bunyip's low density residential areas will be maintained and enhanced through the retention of existing indigenous trees and vegetation, the provision of very large allotments with wide frontages and considerable garden areas. New developments will be designed and constructed to a high standard.

### **Precinct 4 – Special residential area**

The topography, particularly with the ridgeline, the significant tree coverage and the diversity of lots in this area will be retained. There will be a continuation of open wire fences to reinforce the sense of spaciousness. New development will complement the sloping and undulating landforms, allowing views to the surrounding landscape.

Further subdivision and residential development within the Bunyip township will impact on existing vegetation, place additional pressure on the environment and physical infrastructure and could potentially alter the character of the township.

It is important that any further subdivision taking place in Bunyip is respectful of the character of the township and responds accordingly to the various constraints. An assessment of the township character emphasised the interesting and distinctive town centre with the prominent setting of the commercial area, its heritage buildings, the central median and views to the south.

Other significant characteristics of the township include a significant proportion of large lots, extensive treed areas, a rural buffer from the highway and large areas of open space and community recreation facilities.

## **4.6 Key issues**

- Bunyip has several large areas of undeveloped land within the township boundary. Developing vacant land within the township will provide the opportunity to increase the township's population and therefore create economic and social benefits, making the town more sustainable in the long term.
- While increasing the number of lots to increase the population is important, the general character of Bunyip is that of a rural township and it is important to maintain that character in all new developments.
- Increasing the diversity of lots and dwelling types will allow people a broader range of housing options, as well as accommodate existing residents of Bunyip as they age and their housing needs change.

## **4.7 Objectives**

- Facilitate growth of residential development in Bunyip to a population of approximately 3,500 people.
- Ensure that the long-term residential capacity and township boundaries are clearly defined.
- Ensure the long-term sustainability of the community by providing residential development for a range of lifestyle opportunities.
- Ensure that infill residential development is integrated and respects the existing character of the township.
- Maintain generous street, footpath and easement width in new developments.

## **4.8 Policy**

- Accommodate the growth of Bunyip within the defined urban growth boundary.
- Protect and enhance the character of the township as an attractive rural township through lot size mechanisms.

- Ensure Bunyip is developed in a manner that:
  - maintains a balanced mix of old and new houses with a diversity of architectural styles
  - creates a balance of both standard and medium to large sized residential lots
  - retains wide road verges in the approach to the township
  - maintains the existing street grid pattern
  - is consistent with the township character assessment guidelines adopted by Council in December 2006 (see table 10 for preferred character guidelines).

**Table 10: Precinct character guidelines**

Precinct 1	Established residential area	
	Normal lots	Units
Lot characteristics	<ul style="list-style-type: none"> <li>70% of lots to remain larger than 700sqm</li> <li>Minimum front setback of 7 metres or not less than the average setback of two adjoining dwellings</li> <li>Minimum side boundary setback of 2.5 metres</li> <li>Maximum building site coverage to not exceed 40% of the lot</li> <li>Minimum lot width of 18 metres</li> </ul>	<ul style="list-style-type: none"> <li>Minimum lot density of 450sqm per unit including open space and common areas</li> <li>Minimum setback 7 metres or not less than the average setback of two adjoining dwellings</li> <li>Maximum site coverage to not exceed 50% of lot including garages and other outbuildings</li> <li>Minimum lot width of 18 metres</li> </ul>
General	<ul style="list-style-type: none"> <li>Encourage diversity of development styles</li> <li>Encourage the inclusion of native vegetation including street trees and roadside vegetation</li> <li>Maintain continuity of building rhythm along streets with appropriate building frontage</li> <li>Maintain a sense of spaciousness between allotments of the residential areas through:               <ol style="list-style-type: none"> <li>No front fences or if fenced, low front fences or open wire fences to allow gardens and nature strips to merge</li> <li>Provide sufficient open space or garden areas</li> <li>Retaining existing vegetation</li> <li>Providing new trees and garden spaces</li> </ol> </li> <li>Ensure building height respects the existing character of the surrounding area and that significant views, particularly to the south, are maintained and encouraged</li> </ul>	<p>Ensure protection and conservation of native vegetation including street trees and roadside vegetation</p> <ul style="list-style-type: none"> <li>Encourage unit developments within the vicinity of the town centre</li> <li>Require a landscape plan to accompany all applications for unit development.</li> <li>Avoid repetitive and uniform siting and design of dwellings</li> <li>Maintain a sense of spaciousness in unit developments by:               <ol style="list-style-type: none"> <li>Providing a minimum 30% site coverage of the allotment as private open space</li> <li>Retain existing vegetation</li> <li>Provide new trees and garden spaces</li> <li>Encouraging no front fence to allow gardens and nature strips to merge</li> <li>On larger blocks, orientating the driveway along one side of the property instead of down the middle and encouraging a curvilinear driveway with tree planting</li> </ol> </li> <li>Maintain a high level of quality in design and construction of new buildings as well as a continuity with the character of the areas built form</li> </ul>
Subdivision	<ul style="list-style-type: none"> <li>Clearly outline how the new development relates to the existing and intended use and development of adjoining land</li> <li>Encourage a clear interconnected street network incorporating the existing grid layout with links between the town centre and surrounding areas, providing good accessibility and streetscape detailing to make walking and cycling pleasant, efficient and safe.</li> <li>Maintain generous street, footpath and easement widths.</li> </ul>	

**Table 10: Precinct character guidelines (continued)**

Precinct 2	New residential estates
	<b>Normal lots</b>
Lot characteristics	<ul style="list-style-type: none"> <li>• 80% of lots to remain larger than 700sqm</li> <li>• Minimum lot size of 600sqm</li> <li>• Minimum front setback of 7 metres</li> <li>• Minimum side boundary setback of 2.5 metres</li> <li>• Maximum building site coverage should not exceed 40% of lot</li> <li>• Minimum lot width of 18m</li> </ul>
General	<ul style="list-style-type: none"> <li>• Encourage a diversity of development styles</li> <li>• Maintain a sense of spaciousness between allotments of the residential areas through               <ol style="list-style-type: none"> <li>1. No front fences or if fenced, low front fences or open wire fences to allow gardens and nature strips to merge</li> <li>2. Providing sufficient open space or garden areas</li> <li>3. Retaining existing vegetation</li> <li>4. Providing new trees and garden spaces</li> </ol> </li> <li>• Discourage small allotments of less than 600sqm</li> <li>• Require a landscape plan to accompany all applications for new subdivisions</li> <li>• Vegetation along McNamara and Petty Road to be retained</li> <li>• Maintain wide street reserves of 16-18m for local streets</li> <li>• Retain treed area in the western part of the precinct</li> <li>• Maintain a rectangular street and lot layout</li> <li>• Ensure protection and conservation of native vegetation including street trees and roadside vegetation</li> <li>• Ensure all new developments include extensive street tree plantings at an early stage of development</li> <li>• Encourage the inclusion of native vegetation and garden space for private and commercial development</li> <li>• Maintain a high level of quality in the design and construction of new buildings as well as continuity with the character of the areas existing built form.</li> <li>• Ensure building height respects the existing character of the surrounding area.</li> <li>• Residential developments should not include gated street formats but should connect visually and physically to the surrounding areas.</li> <li>• Developments to integrate with the existing landform.</li> </ul>
Subdivision	<ul style="list-style-type: none"> <li>• Demonstrate how the new subdivision relates to the existing and intended use and development of adjoining land</li> <li>• Develop clear, legible road networks incorporating the existing grid layout which provide a high level of internal connectivity and external linkages for local vehicle, pedestrian and bicycle movements</li> <li>• Maintain generous street, footpath and easement widths in new developments. Provide a minimum width for internal streets of 7.3 metres to allow for parking on either side and access for emergency vehicles</li> <li>• Discourage cul-de-sacs and, if used, they should be connected through to another street by a wide reserve and path for safe pedestrian and bicycle access</li> </ul>

**Table 10: Precinct character guidelines (continued)**

Precinct 3	Low density residential area
	<b>Normal lots</b>
Lot characteristics	<ul style="list-style-type: none"> <li>• Minimum lot size of 4,000sqm</li> <li>• Minimum front setback of 10 metres</li> <li>• Minimum side boundary setback of 5 metres</li> </ul>
General	<ul style="list-style-type: none"> <li>• Encourage a diversity of development styles.</li> <li>• Construct buildings on the site in a compact and clustered layout to reduce earthworks (cut and fill), soil erosion and loss of vegetation, and to maximise access to existing and proposed infrastructure.</li> <li>• Retain existing vegetation on the boundary of the sites.</li> <li>• Orientate dwellings on the allotment to maximise the retention of existing vegetation, particularly indigenous vegetation.</li> <li>• Maintain the rural character of large allotments with:               <ol style="list-style-type: none"> <li>a) Building setbacks as described above</li> <li>b) No fencing or if fenced, only post and wire style fencing to maintain a continuous flow of vegetation across the landscape</li> </ol> </li> <li>• Ensure protection and conservation of native vegetation across the landscape.</li> <li>• Encourage the inclusion of native vegetation and garden space for private and commercial development.</li> <li>• Maintain a high level of quality in the design and construction of new buildings as well as continuity with the character of the areas existing built form</li> <li>• Ensure the building height respects the existing character of the surrounding area</li> </ul>
Subdivision	<ul style="list-style-type: none"> <li>• Maintain generous street, footpath and easement widths in new developments.</li> <li>• Demonstrate how the subdivision relates to the existing and intended use and development of adjoining land</li> </ul>

**Table 10: Precinct character guidelines (continued)**

Precinct 4	Special residential area
	<b>Normal lots</b>
Lot characteristics	<ul style="list-style-type: none"> <li>• 80% of lots to remain larger than 700sqm</li> <li>• Front setback <ul style="list-style-type: none"> <li>– Minimum front setback of 7m for lot sizes up to 1000sqm</li> <li>– Minimum front setback of 10m for lot sizes ranging from 1000m – 2000m</li> <li>– Minimum front setback of 10m for lots &gt; 2000sqm</li> </ul> </li> <li>• Side boundary setback <ul style="list-style-type: none"> <li>– 2.5m side boundary setback for lot sizes up to 1000sqm</li> <li>– 5m side boundary setback for lot sizes greater than 1000sqm</li> </ul> </li> <li>• Lot width <ul style="list-style-type: none"> <li>– Minimum lot width of 18m for lot sizes up to 1000sqm</li> <li>– Minimum lot width of 20m for lot sizes ranging from 1000–2000sqm</li> <li>– Minimum lot width of 30m for lot sizes &gt; 2000sqm</li> </ul> </li> </ul>
General	<ul style="list-style-type: none"> <li>• Encourage a diversity of development styles.</li> <li>• Construct buildings on the site in a compact and clustered layout to reduce earthworks (cut and fill), soil erosion and loss of vegetation, and to maximise access to existing and proposed infrastructure.</li> <li>• Retain existing vegetation on the boundary of the sites.</li> <li>• Orientate dwellings on the allotment to maximise the retention of existing vegetation, particularly indigenous vegetation.</li> <li>• Maintain the rural character of large allotments (&gt; 2000sqm) with: <ol style="list-style-type: none"> <li>a) Building setbacks as described above</li> <li>b) No fencing or if fenced, only post and wire style fencing to maintain a continuous flow of vegetation across the landscape</li> </ol> </li> <li>• Ensure protection and conservation of native vegetation across the landscape.</li> <li>• Encourage the inclusion of native vegetation and garden space for private and commercial development.</li> <li>• Maintain a high level of quality in the design and construction of new buildings as well as continuity with the character of the areas existing built form</li> <li>• Ensure developments and built forms integrate with and respect the topography of the area, maintaining the undulating landform and extensive views.</li> </ul>
Subdivision	<ul style="list-style-type: none"> <li>• Maintain generous street, footpath and easement widths in new developments.</li> <li>• Demonstrate how the subdivision relates to the existing and intended use and development of adjoining land</li> <li>• Require a subdivision proposal to specify the building envelope to ensure that it has regard to existing vegetation and topography</li> </ul>

## **4.9 Actions**

- Promote the integration of residential subdivision in accordance with the above mentioned character guidelines.
- Promote the integration of infill residential sites through the identification of key roads, pedestrian linkages and work in a collaborative manner with developers.
- Promote pedestrian permeability throughout the town by linking existing and proposed pedestrian pathways.
- All residential development within the Urban Growth Boundary, including low density development should be connected to reticulated sewerage.
- Prepare a Planning Scheme Amendment to rezone the land currently zoned Rural Living Zone – Schedule 2 (RLZ2) in the Bunyip township to Low Density Residential Zone.
- Protection of ridgelines through the preparation of siting and design guidelines for residential development in Cardinia.

## 5. ECONOMIC DEVELOPMENT

### 5.1 Overview

An analysis of the jobs held by the resident population in Bunyip in 2006 indicated that the three most prominent industry sectors were:

- Technicians and Trade Workers (182 persons or 19.1%)
- Managers (144 persons or 15.1%)
- Machinery Operators and Drivers (125 persons or 13.2%).

These three industry sectors employed a total of 451 people or 47.4 per cent of the employed resident population.

In comparison, the overall Cardinia Shire population comprised 18.7 per cent of Technicians and Trade Workers, 13.7 per cent of Managers and 9.2 per cent of Machinery Operators and Drivers.

The major differences between the jobs held by the population of Bunyip and Cardinia Shire were:

- a larger percentage of people employed as Machinery Operators and Drivers (13.2% compared to 9.2%)
- a smaller percentage of people employed as professionals (9.5% compared to 13.2%).

**Table 11: Occupation types in Bunyip**

Occupation (employed persons)	2006		
	Number	Percentage	Cardinia Shire (%)
Managers	144	15.1	13.7
Professionals	90	9.5	13.2
Technicians and Trade Workers	182	19.5	18.7
Community and Personal Service Workers	71	7.5	8.0
Clerical and Administrative Workers	124	13.0	13.9
Sales Workers	81	8.5	9.7
Machinery Operators and Drivers	125	13.2	9.2
Labourers	114	12.0	11.8
Inadequately described or Not stated	20	2.1	1.8
<b>Total</b>	<b>951</b>	<b>100.0</b>	<b>100.0</b>

*Source: Australian Bureau of Statistics, Census of Population and Housing, 1991, 1996, 2001 and 2006.*

The Municipal Strategic Statement recognises that there is considerable concern in the community about the loss of community and commercial facilities from larger townships as a result of public and private sector rationalisation (e.g. rail services, banks, hospital). This loss of facilities reduces the accessibility of the community to services and facilities, and often leads to the loss of local spending

which further undermines the viability of townships. The retention and development of commercial and community services should be encouraged in townships, and in particular, tourism provides distinct opportunities for development in townships.

## **Retail and commercial**

The Bunyip Township contains a number of retail and commercial activities which are focused in the town centre and principally provide day-to-day or local facilities. The recently constructed Bunyip supermarket has reduced the need for residents to travel to larger centres such as Pakenham for weekly shopping; however, comparison and specialty shopping is still attracted to regional centres such as Warragul, Fountain Gate and Chadstone.

The following retail and commercial services are currently available within the Bunyip Township:

- a supermarket
- newsagency
- 2 hotels
- video hire
- gift shop
- Bendigo Bank
- 2 accountants
- land surveyor
- auto repairer
- smash repairer
- garden supplies.
- butcher
- chemist
- take away food shop
- 2 hairdressers
- medical centre
- post office
- 3 real estate agencies
- electrical repairs
- rural supplies
- steel fabrication
- baker
- red cross shop
- 2 pizza shops
- 2 beauty salons
- Commonwealth Bank
- naturopath
- solicitor
- veterinary clinic
- tyre service
- mower shop

The Bunyip town centre provides a basic range of day-to-day and convenience retail including a supermarket. The new supermarket means that Bunyip can meet most basic shopping needs and there is a reduced need for local residents to visit more distant centres for essential grocery needs. However, the supermarket is not a full-line store, and most shoppers would use the store for their top-up needs and undertake a visit to larger supermarkets at Drouin, Pakenham or Warragul for a larger and more comprehensive grocery shopping trip.

The centre also includes a broader range of speciality shops that is available at the other small towns, including fresh foods traders, cafes and hairdressers/beauty salons etc. Again, this is only provided at a relatively basic convenience retail level and there is still a requirement for most residents to regularly visit the larger nearby centres for anything more than basic items.

The tenancy mix is targeted primarily towards serving the needs of the resident population, with a lower share of traders seeking to service the tourist/visitor market than is apparent at the nearby Garfield town centre.

The Bunyip Township has a small industrial precinct focused on the intersection of the Nar Nar Goon Longwarry Road and Hope Street and along the Bunyip Modella Road to the west of the recreation reserve. Existing uses include automotive and panel repairs, metal fabrication and garden supplies. Further development of existing industrial land in the precinct should be encouraged to assist in meeting the needs of local residents and to provide for local employment.

In 2008, Cardinia Shire Council engaged Essential Economics to undertake a Retail and Commercial Assessment of Nar Nar Goon, Tynong, Garfield and Bunyip. The study investigated the existing retail and commercial services provided in these townships and aimed to identify gaps in provision of services and determine appropriate locations for additional retail and commercial zoned land if required. The key findings in relation to Bunyip Township are set out below.

## 5.2 Key issues

- As people often shop where they work, local employment is important to increase local spending and strengthen local businesses. Encouraging further agricultural activities and commercial and retail to the area will be a source of employment, in conjunction with the other sectors of employment presently in the area.
- By improving the range, choice and appearances of convenience and service shops along the shopping strip, local residents are more likely to spend money in the Bunyip town centre, rather than travel further a field for goods and services. Increasing local spending will in turn improve the viability of local businesses and the overall economy of the town.
- The Bunyip Township has a small industrial precinct focused on the intersection of the Nar Nar Goon Longwarry Road and Hope Street and along the Bunyip Modella Road to the west of the recreation reserve. Existing uses include automotive and panel repairs, metal fabrication and garden supplies. Further development of industrial in the precinct should be encouraged to assist in meeting the needs of local residents, and to provide for local employment.
- All industrial and commercial developments need to take into account the preferred character of the area as highlighted in Section 4 of this strategy.
- Tourist activity provides a significant opportunity for business development and local employment in the Bunyip Township. A strategic direction in Council's Municipal Strategic Statement is to 'encourage the establishment of tourism activities in the townships within Cardinia Shire through providing for the establishment of tourism activities (accommodation, restaurants, cafes, galleries, markets, etc), streetscapes improvements and upgrading public amenities'.
- The provision of improved directional signage to the town centre from Princes Freeway.

## 5.3 Objectives

- Strengthen the role of the current town centre.
- Provide opportunities and encourage the establishment of local employment.
- Encourage a mix of businesses in Bunyip that provides access to services for residents.
- Promote tourism opportunities in Bunyip.
- Consolidate development within the existing zoned commercial area which includes both vacant and under-utilised land which should be developed in preference to the further expansion and potential fragmentation of the commercial area.

## 5.4 Policy

- Improve the streetscape of the Main Street of Bunyip by:
  - ensuring active commercial and retail uses are located along the Main Street and the southern end of High Street
  - ensure further development of sites along Main Street allow provision of the proposed car park to be constructed at the rear of these lots
- Encourage home-based businesses where the activity undertaken does not adversely impact on the amenity or character of the area.

## 5.5 Actions

- Work with Bunyip traders to improve the viability and appearance of businesses in Bunyip through streetscape improvement and upgrading of local facilities.
- Facilitate opportunities for local employment and business development in Bunyip.
- Continue to promote, support and encourage tourism activities in the township.
- Support industries that build on the existing strengths of Bunyip, e.g. agriculture, small service industries to the area.

## 6. COMMUNITY DEVELOPMENT

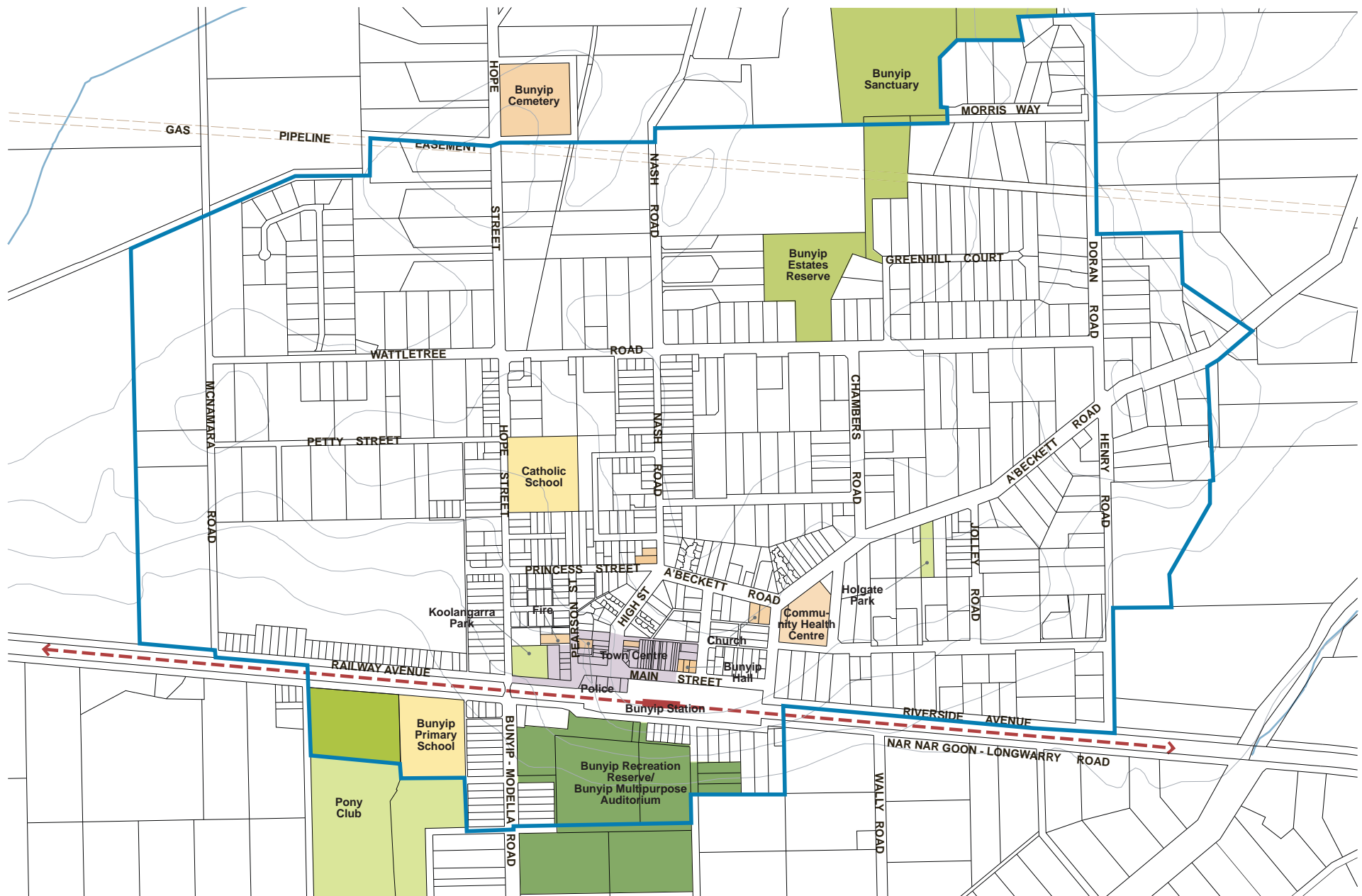
Council's Municipal Strategic Statement contains an objective which aims to:

Provide residents in the Cardinia Shire with a reasonable level of access to a range of community services and facilities and to ensure that these services and facilities are provided in response to community needs.

Bunyip is well serviced by community services and facilities, many of which are community based rather than provided by state agencies or the Cardinia Shire. This reflects a strong sense of community which is an important part of the character and fabric of both Bunyip and the rural townships generally.

The services and facilities available in Bunyip in 2007 include:

<b>Service type</b>	<b>Community services</b>
<b>Education</b>	Bunyip Kindergarten Bunyip Primary Columba Catholic Primary School
<b>Medical</b>	Child and Maternal Health Centre Bunyip Medical Centre
<b>Child and youth</b>	Bunyip Playgroup Bunyip Scout Group Youth Drop In Centre
<b>Aged</b>	Hillview Aged Care
<b>Sports</b>	Bunyip Showgrounds and Reserve Bunyip Football Club Bunyip Tennis Club Bunyip Netball Club Bunyip CFA Competition Track Bunyip & District Pony Club Bunyip Cricket Club
<b>Churches</b>	St Thomas' Anglican Church St Andrews' Uniting Church St Joseph's Catholic Church
<b>Community services</b>	Bunyip Fire Brigade Bunyip and District Community House Bunyip and District Newsletter Cardinia Mobile Library – Book Mobile Bunyip History Committee
<b>General</b>	Rotary Club of Bunyip-Garfield Bunyip Landcare Group Bunyip Masonic Lodge St Thomas' Anglican Garden Club Bunyip Slimming Club Country Women's Association (CWA) - Bunyip Branch Bunyip Sub Branch Returned Servicemen's League (RSL) Bunyip Innovations Group (BIG) Westenders Branch – Gippsland Historical Automobile Club



#### LEGEND

- |   |                              |
|---|------------------------------|
| Township Boundary/Urban Growth Boundary | Schools                      |
| Waterways                               | Community Facility           |
| Railway Line                            | District Sporting Reserves   |
| Rail Station                            | Local Sporting Reserves      |
|   | Local Environmental Reserves |

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**FIGURE 7: MAJOR FACILITIES**

## **Education**

The Bunyip Township contains two primary education facilities including Bunyip Primary School and Columba Catholic Primary School. While primary education facilities are considered adequate, there are no secondary education facilities located within the township.

There are nine high schools in the region, offering secondary education, four (4) of which are public schools and five private schools:

Public schools – Pakenham, Kooweerup, Drouin and Warragul

Private schools – Drouin Chairo, Pakenham Chairo, Hillcrest Nyora, Pakenham Beacon Hills and St Paul's Anglican.

The nearest secondary schools providing senior secondary education (years 11 and 12) are Drouin Secondary College (approximately 22 kilometres to the south-east of Bunyip and Pakenham Secondary College (approximately 25 kilometres to the north-west of Bunyip). The closest technical and further education (TAFE) is at Warragul, 30 kilometres south-east (30 minutes) of Bunyip, while the closest regional university to Bunyip is Monash University in Berwick, 40 kilometres north-west of Bunyip.

## **Health**

Health services available within Bunyip include a child and maternal health service located on Nash Road, the Hillview Aged Care Facility located on A'Beckett Road and the Bunyip and District Medical Centre also located on A'Beckett Road. Bunyip also has a pharmacy located on High Street.

## **Young people**

Young people aged over 11 years have access to a non-denominational youth drop-in centre operating in the St Thomas church hall at the corner of A'Beckett Rd and Anderson Street, Bunyip.

A BMX track is currently in planning stages to be located at the Wattletree Road entrance of Bunyip Sanctuary.

A multipurpose auditorium is also currently under construction in Bunyip Recreation Reserve that will be used for a range of sporting and social activities.

## **Aged**

The senior age group is catered for in terms of community services and facilities and aged care is provided by Hillview Aged Care which is staffed 24 hours a day, seven days a week. Hillview Aged Care is owned and operated by the local community through a board of management.

## **General**

Bunyip's Bendigo Bank opened in September 2007 after about 300 people took out \$625,000 in shares at \$1 each to pay for the project. The bank provides a full range of banking services to local residents and businesses with a percentage of profits being directed back into the community.

Bunyip is serviced by a reasonable level of public transport providing access to regional facilities and services. Public transport services are particularly important for residents with limited access to private transport, such as elderly residents who no longer drive, residents with a disability and young people. Bunyip also retains a limited pedestrian footpath network around the town centre and throughout parts of the residential areas of the township.

## **Volunteerism**

The residents of Bunyip display a strong sense of pride and commitment to their community as demonstrated by their involvement in community activities and organisations. Bunyip is home to a number of volunteer and community run organisations including:

- Bunyip Medical Centre
- Bunyip Innovations Group
- Rotary Club of Bunyip–Garfield
- Bunyip Landcare Group
- Bunyip Masonic Lodge
- St Thomas’ Anglican Garden Club
- Bunyip Slimming Club
- Country Women’s Association (Bunyip Branch)
- Bunyip-Longwarry Returned Servicemen’s League
- Westender’s Branch – Gippsland Historical Automobile Club.

The various community and volunteer groups within Bunyip act as advocates representing community interests and act as key connections between stakeholders and the community. It is important for Council to support and encourage the level of volunteerism and community involvement displayed in Bunyip.

## **Other**

Residents of the Bunyip and Garfield Townships had the opportunity to be involved in the State Government funded program ‘Bunyip and Garfield Community Building Initiative’. The purpose of the Community Building initiative was to strengthen small Victorian communities and explore new ways to address disadvantage, encourage community participation and create opportunities for the community. As part of the initiative a ‘Community Opportunity Workshop’ was held in early 2007 to better understand the Garfield and Bunyip communities’ needs and wants for the future of their towns.

The ideas mooted at the workshop outlined a number of potential projects which formed the basis of a community action plan. The projects address areas including youth services, walking trails and recreational facilities. Where practicable the projects relating to Bunyip have been included in the issues, objectives and actions throughout this strategy.

### **6.1 Issues**

- Due to the limited public transport options, people who don’t drive such as young people, disabled or elderly people are limited in their ability to access services and facilities both in and outside of Bunyip.
- Regular maintenance and effective management of community facilities.

### **6.2 Objectives**

- Maintain and enhance existing community and social services.
- Build relationships between existing organisations and the people in the community.
- Develop mechanisms for government and other agencies to partner with the Bunyip community.
- Investigate the provision of services for youth in Bunyip.

### **6.3 Policy**

- Facilitate the development of services for young people in Bunyip.
- Ensure community facilities are established in the most accessible location having regard to their service catchments.

### **6.4 Actions**

- Council to assist and support community building projects undertaken by the Bunyip community.
- Investigate the existing footpath network to make it more accessible by decreasing missing links between community facilities.
- Provide training, technical support and materials to assist volunteer committees and groups.
- Council to work in conjunction with the Bunyip Innovations Group in continuing to promote various community, sporting and social events, e.g. Bunyip Country Music Festival and Bunyip and District Agricultural Show.
- Council to support the establishment of a neighbourhood house.
- Council to support programs for local youth.

## **7. TRAFFIC AND TRANSPORT**

### **7.1 Road network**

#### **Princes Freeway**

The Princes Freeway is located to the north of the Bunyip Township, and is the primary transport corridor linking Melbourne to the Latrobe Valley and Gippsland. The Princes Freeway is also the primary means of road access to Bunyip. The Princes Freeway currently is a four-lane divided road with at grade intersections at Hope Street, Nash Road and A'Beckett Road. In the longer term, VicRoads plans to upgrade the Princes Freeway which will include a grade separated interchange at Hope Street intersection and the truncation of Nash Road, Doran Road, and A'Beckett Road to prevent access onto and off the freeway.

A'Beckett Road forms an important eastern access into the Bunyip Township and the proposal to truncate A'Beckett Road should be reviewed by VicRoads. Land has been reserved in the planning scheme for the Hope Street interchange, which has been acquired by VicRoads. The construction of a grade separated interchange will improve the safety of access to the Bunyip Township as the existing intersection has a high frequency of serious accidents due to the speed of traffic travelling along the Princess Freeway.

VicRoads has also proposed a local road linking Nash Road to Hope Street immediately south of the proposed interchange. Direct vehicular access to the Princess Freeway for new development is restricted, to maximise the efficiency and safety of the Princes Freeway as a key state transport route.

#### **Nar Nar Goon–Longwarry Road**

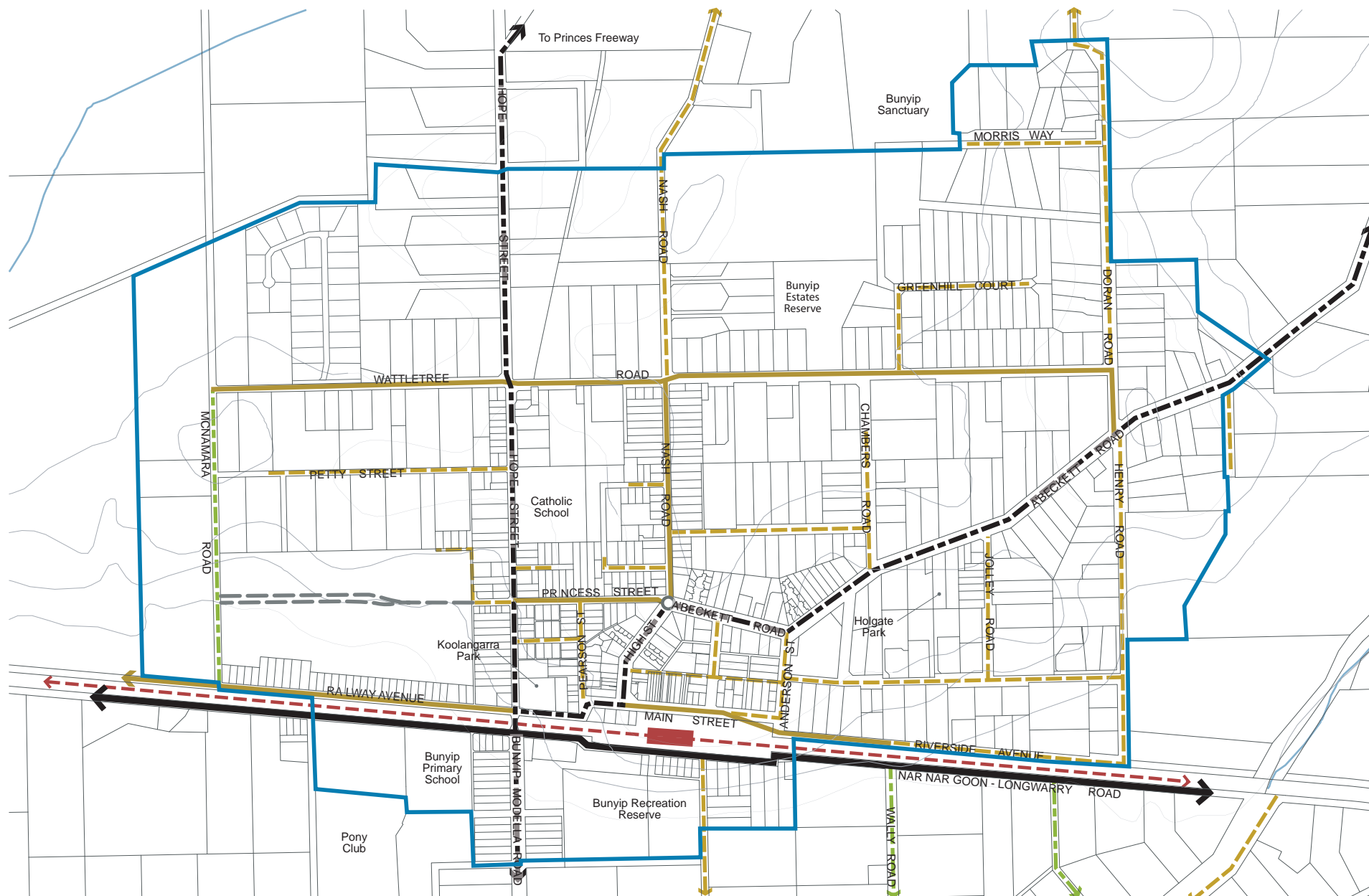
The Nar Nar Goon–Longwarry Road is a declared arterial road which runs parallel to the south side of the railway line. The Nar Nar Goon–Longwarry Road provides an alternative access to the Pakenham Township via Bald Hill Road and carries approximately 2,200 vehicles per day with around 12 per cent of traffic being trucks. The Nar Nar Goon–Longwarry Road is an important arterial road servicing townships such as Bunyip.

#### **Local roads**

The local road network in Bunyip comprises a three-level hierarchy of roads, namely local arterial, local collector streets and local access streets as designed on plan.

Only approximately 30 per cent of the local road network in Bunyip is either fully or partly constructed. The majority of streets have a gravel pavement with limited or no underground drainage. There is a need to construct and seal roads where traffic volumes generally exceed 300 vehicles per day due to safety issues and the impact of maintenance cost. In addition, as further subdivision and development takes place in the Bunyip Township, roads abutting or providing access to new lots should be constructed either by the developer or and in certain circumstances supplemented by Council.

There is an ongoing need to construct and seal the local road network to provide appropriate service standards via the implementation of special charge schemes in accordance with Council policy.



#### LEGEND

- Township Boundary/Urban Growth Boundary
- Contours (10m interval)
- Railway Line
- Train Station

#### ROAD NETWORK

- Arterial Road
- Local Arterial Road
- Local Collector Road
- Local Access Road
- Limited Access Road
- Proposed Road

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FIGURE 8: ROAD NETWORK

## Public transport

Public transport services available to Bunyip include a country rail and bus service operated by V-Line, as well as school bus services. Bunyip is fortunate that it is located along a transport corridor from Melbourne to Gippsland which allows such services to be provided in comparison to other townships in the municipality which are not serviced by public transport. Council should continue to liaise with the public transport service providers to ensure that a reasonable level of service is provided along the corridor to ensure the need of resident in towns such as Bunyip are met.

The railway corridor through Bunyip is a prominent feature of the township landscape, and the appearance of the railway corridor is part of the image of the town. There is a need to explore opportunities for improving the appearance of the corridor (i.e. increased maintenance levels) with Vic Track and the local community.

*Improvements underway at Bunyip railway station.*



## 7.2 Car parking

An opportunity exists for the development of a major car park at the rear of the existing Main Street shops, from High Street through to George Street. A small section of the car park has already been developed immediately east of High Street. This will require the acquisition of land at the rear of the existing shops prior to construction and is an option that should be further investigated. This parking will supplement the extensive angled spaces available in Main Street and parallel spaces available in High Street, and is considered adequate to accommodate the additional growth in the town centre.

Council has resolved to prepare a special charges scheme to seal the Mary Street laneway and part of George Street. Statutory processes are expected to commence in late 2009. Further work is yet to be undertaken to prepare a traffic management plan for this area.

## 7.3 Issues

- Need for improved public transport – improved public transport will enable those unable to drive, access to goods and services in Pakenham and beyond.
- Fragmented network of paths for pedestrians and cyclists.
- A need to explore opportunities for improving the appearance of the corridor.
- A need to progressively seal existing unsealed roads.

## 7.4 Objectives

- Improve pedestrian access and safety between the town centre and dwellings and businesses to the south of the railway line.
- Seal high-use pedestrians paths in Bunyip, particularly those connecting the township with areas of recreation open space.

- Improve public transport services to and from Bunyip.
- Promote recreational cycling and walking activities by formalising the internal pathway within the Bunyip Sanctuary and other areas of recreational open space.

## **7.5 Policy**

- Improve the safety of existing roads and intersections throughout the township.
- New subdivisions and developments must aim to improve the connectivity of pedestrian and vehicular networks within Bunyip.
- Discourage the inclusion of cul-de-sacs in new subdivisions.

## **7.6 Actions**

- Sealing high-use paths along the Nar Nar Goon–Longwarry Road which connect the town to the Bunyip Recreation Reserve.
- Constructing a new path along Henry and Doran Roads to provide an off-road route to access the Bunyip Sanctuary.
- Formalising the internal path system within the Bunyip Sanctuary to promote recreational cycling and walking and allow disabled access.
- Council should continue to liaise with the public transport service providers to ensure that a reasonable level of service is provided along the corridor to meet the needs of residents in towns such as Bunyip.
- Council to liaise with VicTrack to advocate improved maintenance along railway land.
- Investigate opportunities to develop a path for pedestrian, bicycle and equestrian use linking Garfield and Bunyip along Ti Tree Creek.
- Council to develop a traffic management plan to service the retail and commercial precinct bounded by Main Street, High Street and Mary Street.
- Investigate opportunities for the development of a major car park at the rear of the existing Main Street shops, from High Street through to George Street.
- Progressively upgrade local roads in Bunyip to a sealed standard.

## **8. INFRASTRUCTURE**

### **8.1 Overview**

Infrastructure services available in Bunyip include reticulated drainage, sewage, water supply, electricity, gas and telecommunications. Most infrastructure services can be extended to meet future development demands required in the urban growth boundary of Bunyip, whereas reticulated sewage needs to be addressed prior to further development.

### **8.2 Drainage**

There is insufficient existing underground drainage within the township area to cater for future development, and many of the potential development areas do not have any form of existing drainage system, other than minimal and inappropriate open drains. Works and/or contributions will be required at the time of development of land to improve the drainage system.

Melbourne Water has developed a draft drainage scheme to provide outfall drainage for existing and proposed development in the Bunyip Township. The drainage scheme will require both drainage works and the provision of contributions at the time of the development of drainage infrastructure for its implementation. A drainage scheme may be required to service existing developed areas whereby landowners who benefit would contribute to the works.

The draft Melbourne Water drainage scheme includes four catchments: one which drains to Ti Tree Creek, one which drains south east to the Bunyip River, and one which drains to the south west. The drainage system incorporates a pipe system in developed areas and channels to link the pipe system to watercourses. Three wetlands are planned to regulate the flow of stormwater through the drainage system and improve the water quality. These include a retarding basin located on Crown land to the south of the Bunyip Primary School, to the north of the properties on the north west corner of Railway Avenue and McNamara Road, and in the open space which forms part of the Bunyip Valley Estates Sanctuary. The drainage system will incorporate measures to prevent the discharge of sediment and pollution into watercourses.

### **8.3 Gas**

GasNet Australia's 750 millimetre Longford–Dandenong gas transmission pressure pipeline passes through the northern part of the Bunyip Township and is contained in a 24.38-metre wide easement.

The Bunyip Township is serviced by reticulated gas from the Longwarry gas main. The majority of lots within the township are connected to the existing network which has provision to supply additional lots within the township.

### **8.4 Sewerage**

Under the State Environment Policy (Waters of Victoria), new subdivisions are required to be provided with reticulated sewage at the time of subdivision unless it can be demonstrated that the allotments created by the subdivision are capable of adequately treating and retaining domestic waste water within the boundaries of each allotment.

In 1993–94 reticulated sewage was provided within the Bunyip Township to service the existing urban residential and commercial areas. The existing sewage system is serviced by three pump stations, including the main transfer pump which discharges effluent by a rising main to the Longwarry treatment plant. The system has been designed to be augmented to accommodate the majority future growth in both the urban and low density residential areas of the township, based on the small town study previously undertaken for the Bunyip Township.

All new urban residential and infill urban residential development will be required to connect to the existing reticulated sewage system. Due to the poor soil capability for on site waste water disposal in the Bunyip Township, low density residential development where feasible will be required to connect to the

reticulated sewage system. Where this is not feasible in the short term, on-site disposal may be allowed where domestic waste water can be adequately treated and retained within the boundaries of each allotment, provided arrangements are made for the longer term connection to reticulated sewage as the system is extended and connection becomes feasible.

## **8.5 Water**

The Bunyip Township is serviced by reticulated water distributed from a service tank located in George Street, Bunyip. South East Water is responsible for the provision of water supply in the township, and the system can be augmented to accommodate additional growth in the Bunyip Township.

The Tarago Westernport pipeline passes through the northern part of the township, and is contained within a 20-metre easement.

## **8.6 Other services**

The telecommunications network in Bunyip is managed by Telstra. There is also a local internet service provider (ISP) in the area, Sympac, located at Warragul. Electricity transmission is available through both overhead lines and underground cables, depending on the area. These facilities can be extended to cater for further development.

## **8.7 Issues**

- Desire for improved drainage infrastructure in specific areas of the township.
- Sediment run-off from steep, unsealed roads, affecting drainage.
- Efficient management of physical services.

## **8.8 Objectives**

- Provide or upgrade utility services to improve the health, amenity, access to facilities and environment of the township.
- Address local drainage issues once an established major drainage network is in place.

## **8.9 Policy**

- Connect new dwellings to reticulated sewerage.
- Support the connection of all occupied properties within a sewerage area to connect to reticulated sewer systems as soon as practicable.
- Progressively implement drainage measures along roads that controls stormwater, improves water quality and controls erosion/sediment.
- Provide drainage along local roads sealed as part of the Special Charges Scheme Priority Program.
- Ensure any development or works adjacent to a waterway or drainage path does not impede the passage of stormwater or floodwater to the detriment of other properties.

## **8.10 Actions**

- Provide drainage along priority roads sealed as part of the Special Charges Scheme.
- Advocate for Melbourne Water to implement the drainage scheme for Bunyip.

## 9. OPEN SPACE

### 9.1 Overview

Open space plays an important role in Bunyip in meeting the active and passive recreational needs of the community as well as protecting the environment. Recreational opportunities provide local residents with the opportunity to participate in a variety of different recreational, sporting and cultural activities and help to create social cohesion and overall wellbeing. From an urban design perspective, open space also contributes to creating an attractive urban environment with a clear sense of place and identity.

Present facilities available within Bunyip are shown in Table 11 (below).

**Table 12: Bunyip recreation reserves**

Reserves/land	Type	Facilities
Bunyip Recreation Reserve	Active recreation	Oval, tennis courts, soccer pitch, multipurpose auditorium and fire brigade competition track
Bunyip Sanctuary	Conservation and passive recreation	Extensive native indigenous vegetation, Ti Tree Creek, car park, walking paths and bridges
Koolangarra Park	Passive recreation	Playground, barbecue facilities and outdoor seating
Holgate Park	Conservation and passive recreation	Walking tracks
Anzac Park	Passive recreation	Seating, landscaping
Bunyip Pony Club Grounds/Pound Road Reserve	Conservation and active recreation	Riding ménage, cross country course



## LEGEND

- Township Boundary/Urban Growth Boundary
- Contours (10m interval)
- Railway Line
- Train Station

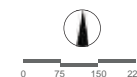
## MOVEMENT NETWORK

- Existing Footpaths
- - - Proposed Footpaths
- Existing Gravel Path
- - - Potential Gravel Path

- Existing Trail
- - - Proposed Trail

## OPEN SPACE NETWORK

- District Sporting Reserve
- Local Environmental Reserve
- Local Recreational Reserve
- Proposed Open Space



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**FIGURE 9: OPEN SPACE AND LINKAGES**

## 9.2 Pedestrian and bicycle network

There are only limited existing constructed footpaths provided within the Bunyip Township area. The concrete footpaths that exist are confined to the central developed areas and are only 1.5 metres in width. There is no connecting linear network between the existing footpaths. A gravel footway exists along A'Beckett Road between Anderson Street and Doran Road, and along Hope Street between Wattletree Road and the cemetery. More recently, Council has constructed 2-metre wide concrete shared foot and bike ways along Nar Nar Goon–Longwarry Road from the Bunyip Primary School to the rail crossing, and along the west side of Hope Street between Railway Avenue and Wattletree Road.

The existing Bunyip Township road reserve network (grid pattern) provides an excellent opportunity for a shared pathway network. There are also several existing reserves providing linking points to existing development and recreational areas. In keeping with Bunyip's promoted rural image it would be opportune to establish a functional shared network as development takes place. In areas where there will be abutting development a 2-metre wide path would be required along the routes as part of the subdivision construction. Where the need is identified for shared path way links in existing areas, or through existing reserves, the construction costs could be apportioned through development contributions.

A pathway should be provided along Nar Nar Goon–Longwarry Road to improve the safety of pedestrians accessing the recreation reserve, school and residential properties on the south side of the road given the arterial function of the road.

The *Pedestrian and Bicycle Strategy 2003* identifies that the Bunyip Township retains 4.9 kilometres of pedestrian paths at an average width of 1.7 metres. On-road bicycle routes of more than 2 kilometres have been identified generally linking back to the school. A series of new paths more than 4 kilometres long has been proposed along the routes used most commonly by the residents. Connection to the Bunyip Sanctuary and the highway is a priority.

The pedestrian and bicycle strategy recommends the continual development of town trails and paths, particularly the provision of trails for multipurpose uses connecting facilities and services and constructed to the adopted standard.

## 9.3 Issues

- Quality of existing active and passive recreation facilities.
- Provision of additional youth activities.
- Continuity of linear trails and linkages.

## 9.4 Objectives

- Provide a series of linking paths for pedestrians and cyclists that will connect recreational facilities with the main residential areas and provide a series of circuits within the community.
- Maintain and enhance existing parks and open space areas.
- Ensure local parks are designed to provide greater complexity and diversity of opportunities.
- Ensure the protection of waterways including Ti Tree Creek.
- Improve opportunities for passive recreation including by continuing to develop a network of trails.
- Ensure the protection and re-establishment of habitat for native flora and fauna.

## **9.5 Policy**

- Consider a range of uses when designing existing and new local parks.
- Require a minimum public open space contribution of 8 per cent of the total site value in urban areas as a condition of planning approval for subdivision applications.
- Require a minimum of 5 per cent of the total site value in low density residential areas as a condition of planning approval for subdivision applications.
- Encourage and support the involvement of the community in the management of open space reserves.
- Connection to the Bunyip Sanctuary and the Highway is a priority.

## **9.6 Actions**

- Provide paths and trails in accordance with the pedestrian and bicycle strategy as funds become available through Council's budgeting process or other sources, e.g. State Government or other agencies.
- Investigate the need to provide additional sealed pathways throughout the town centre and the need to seal existing unsealed paths receiving high pedestrian traffic.
- Carry out improvements to Koolangarra Park in accordance with the plan developed by Council and SMEC Urban.
- Investigate role and distribution of areas of open space in township area to determine whether additional areas of open space are required.
- Support the adequate provision of public open space for protection of areas of environmental significance.
- Investigate opportunities for trail linkages between Bunyip and Garfield.

## **10. ENVIRONMENT**

### **10.1 Topography/landscape**

The Bunyip Township is located in an attractive landscape setting due to the majority of the township being located north of the railway line on the undulating land, and to significant areas of native vegetation being retained in the township.

The town centre is located on a moderate slope which rises from the railway line to the south, and which provides excellent views south over the Koo Wee Rup Swamp to Westernport Bay and the Strzelecki Ranges. To the north of the town centre, a prominent ridgeline runs through the township following an appropriate alignment (from east to west) along A'Beckett Road, Nash Road and Wattletree Road. The ridgeline is 70–80 metres AHD compared with the land south of the railway which is 35 metres AHD. From the ridgeline and areas to the north, there are excellent views of the Great Dividing Range including Mt Baw Baw.

It is important that the scenic and environmental values of the landscape in Cardinia Shire and Bunyip be protected, including the rural outlook from key tourist routes such as the Princes Freeway which provides a strategic link to Gippsland. The rural landscape along the Princes Freeway should be maintained through:

- limiting the northern extent of development associated with the Bunyip Township to maintain a rural buffer along the freeway
- restricting commercial development which requires direct access from the Princes Freeway
- possible further acquisition of land adjacent to the Princes Freeway by Council for open space purposes
- protection and re-establishment of indigenous vegetation along the Princes Freeway by Council for open space purposes.

In addition, the underlying principle of the previous Small Towns Study which was to consolidate development to create visual and physical links to existing development while avoiding the scattering of township development into the nearby landscape, is still relevant. This consolidation approach is critical if the scenic quality of the towns and surrounding landscape is to be maintained.

### **10.2 Soils**

A land capability study for the Cardinia Shire was completed in February 1997 which provides information in relation to landform and soil types in the municipality. The soils in the Bunyip area are either of quaternary alluvial or devonian granite origin. The soils of quaternary alluvial occur south of the railway line and along the floodplains associated with the Bunyip River and Ti Tree Creek. The soils of devonian granitic origin occur on the steeper undulating land to the north of the railway line where the majority of development has occurred in the Bunyip Township. These soils have limitations in terms of the capacity for on-site disposal of waste water. In addition, soils of devonian granitic origin are subject to erosion on moderate to steep slopes, and therefore careful site management is required to minimise the potential for erosion.

### **10.3 Flora and fauna**

An objective in Council's Municipal Strategic Statement is 'to protect areas of existing vegetation within the Cardinia Shire recognising it's environmental and landscape value'. Native vegetation is a valuable environmental attribute of the Cardinia Shire. Original plants still in existence, also known as remnant vegetation, can be found throughout the Shire on private property, roadsides, reserves, parks and gardens. However, only a small amount, approximately 11 per cent remains. It is important to revegetate areas using indigenous plants (that are originally from that particular area) as they have adapted to the local conditions and will therefore have a higher success rate of growth. The use of indigenous plants contributes to genetic conservation, provides shelter and food provisions for native

fauna, holds soils together to prevent wind and water erosion, keeps the water table at a low level to prevent salinity, and improves water quality.

The amount of habitat available to native fauna in Victoria has become limited because of changes in the natural environment such as land clearing for urban development and agriculture. The areas containing natural vegetation that are left are generally isolated from one another by man-made environments, such as open paddocks and housing development, which can act as barriers to wildlife movement. The Bunyip Sanctuary is located among housing development and main roads, such as the Princes Freeway that provide valuable wildlife habitat to a diverse range of species of marsupials, mammals, birds, lizards, snakes, insects and frogs. Cardinia Shire Council recognises the importance of existing native fauna species and aims to conserve and increase diversity of species by continuing to regenerate areas to provide habitat and food provisions.

In 2008, Cardinia Shire Council with Melbourne Water and the City of Casey initiated the development of a comprehensive conservation strategy for the nationally endangered southern brown bandicoot. This species occurs in scattered sub-populations across the former Koo Wee Rup Swamp region, but principally in Cardinia Shire.

Cardinia Shire Council resolved to adopt the Southern Brown Bandicoot Strategic Management Plan for the Koo Wee Rup Swamp Area on 18 May 2009. The strategy included a number of objectives to ensure the protection and enhancement of areas of habitat within the municipality.

### ***Ecological vegetation classes***

The Bunyip Township is located in an attractive landscape to the north of the railway on undulating land overlooking the Koo Wee Rup Swamp, Westernport and the Strezlecki Ranges and where a significant amount of native vegetation still remains within the township. The soils types are either quaternary alluvial or devonian granite.

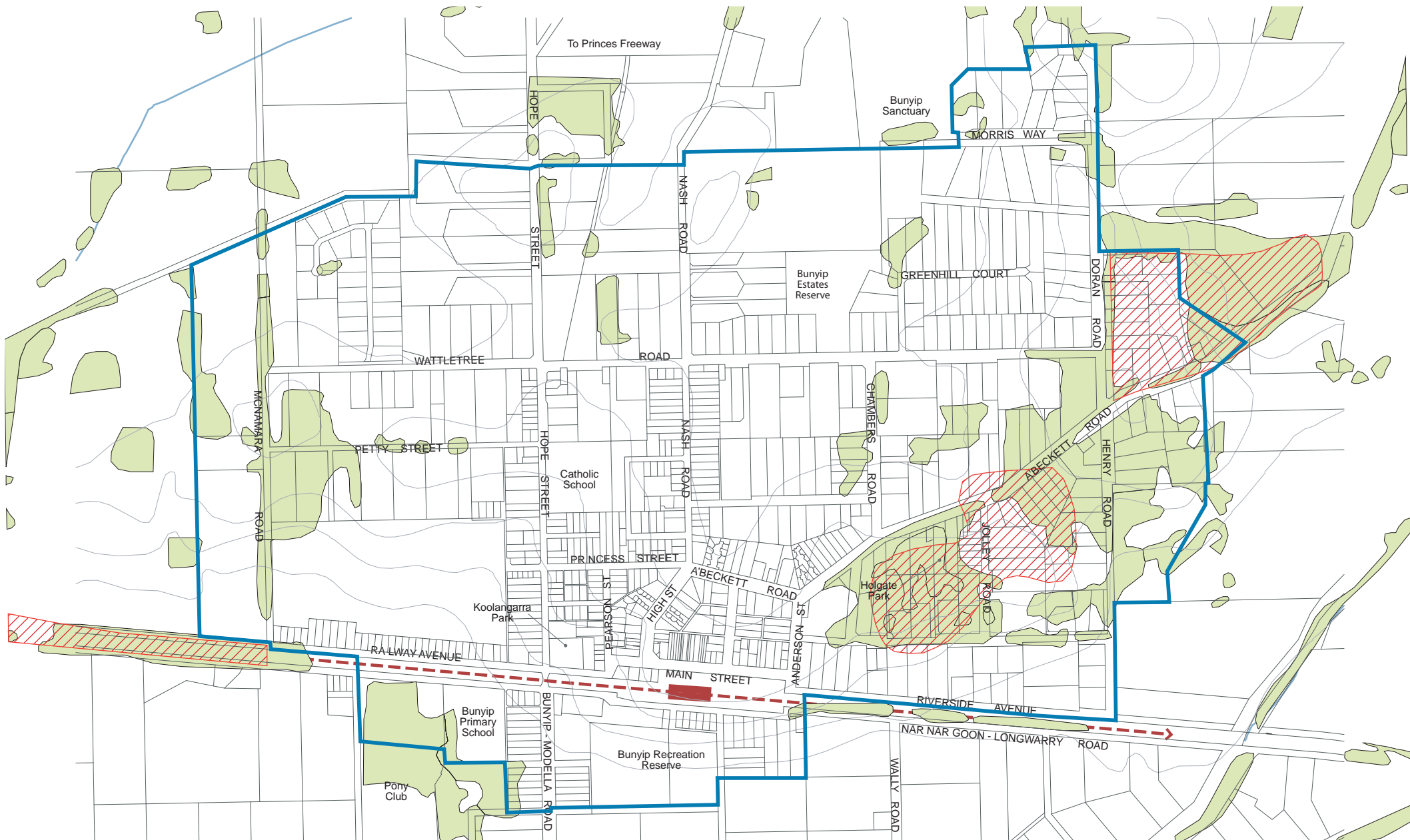
The original ecological vegetation classes (EVC) that would have been present pre-1750 include:

- riparian woodland (EVC 641)
- swampy riparian complex (EVC 126)
- damp heathy woodland (EVC 793).

An EVC consists of one or a number of vegetation communities found in an area that is most suitable for the propagation of the plant species. These species will be particularly adaptive to the ecological processes of the landscape. EVCs can be described by their floristic characteristics, life-form profiles, reproduction processes and through a dependence on a particular environment.

The EVCs that are currently within the Bunyip Township include:

- lowland forest (EVC 16)
- swampy woodland (EVC 973)
- damp heathy woodland (EVC 793)
- swampy riparian woodland (EVC 83)
- swamp scrub (EVC 53)
- grassy forest (EVC 128).



# LEGEND

- Township Boundary/Urban Growth Boundary
- Significant Vegetation
- Contours (10m interval)
- Areas of Botanical Significance
- Railway Line
- Train Station

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FIGURE 10 - ENVIRONMENTAL FEATURES

Two areas along A'Beckett Road to the east of the town centre are recognised as being sites of local botanical significance being examples of the dry sclerophyll forest that once existed in the Bunyip township area. The areas of botanical significance contain two significant species being arthropodium milledflorum and eucalyptus globoides.

#### **10.4 Watercourses**

There are two watercourses within close proximity of the Bunyip Township: the Bunyip River to the east and Ti Tree Creek to the north. The floodplain of the Bunyip River has a significant impact on land to the south of the Gippsland railway line, and south-east A'Beckett Road, Henry Road and Mary Street. Any further development in this flood-prone area should be limited.

As indicated, the soils north of the railway line are of devonian granitic origin which is subject to erosion on moderate to steep slopes. The retention of vegetation, including groundcover, has mitigated against significant erosion; however, the removal of vegetation will accelerate the rate of erosion and rainfall runoff. It is important that where earthworks are proposed, consideration is given to the potential for erosion and to measures to minimise erosion and prevent the entry of sediment into watercourses. The role of riparian (streamside) vegetation is particularly important in helping to filter and clean overland flows before they reach the waterway. Streamside vegetation buffers should be protected or established wherever possible.

In terms of water quality, consideration needs to be given to the disposal and treatment of effluent generated by households and other land uses, and the quality of stormwater generated in urban areas. As further development proceeds, the stormwater drainage system should be designed to improve the quality of water entering local watercourses through the use of measures such as wetlands and pollution traps.

#### **10.5 Weeds**

At present, Cardinia Shire Council's prime focus on weed management has been guided by the existing *Weed Management Strategy 2007*. Council will commence a rolling program with annual reviews over a three-year period that addresses weed control and management priorities across Cardinia Shire.

#### **10.6 Issues**

- Vegetation removal and loss of biodiversity.
- Pest plant and animal invasion.
- Sediment runoff in waterways.
- Degradation of waterways, open drains and levee banks.

#### **10.7 Objectives**

- Enhance and improve the water quality of watercourses, creeks and open drains.
- Control the spread of pest plants and weeds.
- Ensure existing vegetation remains an intrinsic part of the character of the Bunyip Township.
- Minimise fire risk to ensure the preservation of private properties surrounding and adjoining the Bunyip Sanctuary.
- Limit any further development in flood-prone areas.

## **10.8 Policy**

- Maximise opportunities for habitat corridors and open space along creeks, waterways and reserves.
- Where appropriate, building envelopes should be approved as part of subdivision plans to minimise the removal of vegetation.
- Ensure the siting of buildings and works avoid or minimise the removal or fragmentation of native vegetation, particularly in the areas of botanical significance.
- Limit the northern extent of development associated with the Bunyip Township to maintain a rural buffer along the freeway.
- Require future developments to maintain urban stormwater velocity to pre-development levels.
- Balance the recreational, environmental and wildfire management objectives of open space reserves.

## **10.9 Actions**

- Council to initiate indigenous vegetation planting to revegetate areas in the Bunyip Sanctuary.
- Prepare and distribute information on the management of roadside vegetation.
- Develop management plans for state and nationally significant rare and threatened species including the southern brown bandicoot, growling grass frog, swamp skink, masked owl, helmeted honeyeater, Emerald star bush and indigenous grasslands.
- Provide advice and encouragement to residents and businesses about the installation of water tanks and availability in the Shire.
- Ensure appropriate buffers are maintained between Bunyip Sanctuary and adjoining properties to minimise fire risk to private property.
- Investigate the provision and protection of links between habitat areas within the township.

## **11. HERITAGE**

### **11.1 Heritage**

The protection of sites of heritage and cultural significance helps to provide character and identity to townships and landscapes, and, where it is appropriately managed, contributes to the tourism potential of the municipality. Heritage consists of archaeological sites such as Aboriginal sacred sites, scarred trees, and artefact sites and historic sites such as buildings, gardens and trees, and streetscapes. A comprehensive heritage study in the Cardinia Shire has identified sites of heritage significance, and those sites within the Bunyip Township are set out in Table 13 (below). Actions should be undertaken to protect, maintain and restore heritage sites and their context (e.g. adjoining buildings and places) as an important part of the character of the Bunyip Township.

#### **Bunyip Commercial and Civic Precinct**

The Bunyip Commercial and Civil Precinct is identified as being of regional significance to the Cardinia Shire because of its associations with the development of the Bunyip Township following the opening of the Bunyip railway station in the late 1870s. Bunyip became a major regional town and by the turn of the century was the largest township in the then Shire of Berwick. Although the nineteenth-century buildings have gone, destroyed by fire and rebuilt, the present commercial and civic precinct retains many structures dating from the post-war period when Bunyip was a major town. The significant buildings in the Bunyip Commercial and Civic Precinct include:

- 13 Main Street – Railway Hotel which opened as ‘Stacy’s Hotel’ in 1924 is of regional heritage significance to Cardinia Shire. The two-storey red brick bungalow form hotel has a two-level timber framed veranda, shingled and strutted gables, double pane multi-paned windows and cement ornamentation which includes the name of the hotel in raised cement letters ‘Stacey’s Hotel’. The hotel is a major contributing element in the locally and regionally important Bunyip commercial streetscape. It is significant also as an example of the work of Joseph Berry, the local bricklayer who built a number of district hotels as well as the St Joseph’s Catholic School at Iona.
- 18 Main Street – shop is of regional heritage significance to the Cardinia Shire as a c1926 building.

#### **Heritage Overlay**

The purpose of the Heritage Overlay is to:

- implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies
- conserve and enhance heritage places of natural or cultural significance
- conserve and enhance those elements which contribute to the significance of heritage places
- ensure that development does not adversely affect the significance of heritage places
- conserve specifically identified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.

A number of buildings and precincts associated with Bunyip have been recognised via the application of Heritage Overlays that are incorporated into the Cardinia Planning Scheme. These sites and their associated references under the schedule to the Heritage Overlay are listed in Table 13 (below).

**Table 13: Heritage places under Heritage Overlay**

PS map ref	Heritage place
HO5	St Thomas Church of England, 14–20 A'Beckett Road, Bunyip
HO6	Ballantrae, 190 A'Beckett Road, Bunyip
HO11	Russell 'Big Mill' (Number 1), Ash Landing Road, Bunyip State Park
HO12	Russell 'Little Mill' (Number 2), Ash Landing Road, Bunyip State Park
HO28	Bunyip General Cemetery, Part CA30, Bunyip–Tonimbuk Road, Bunyip
HO33	Bunyip River Bridge, Eleven Mile Road, Cora Lynn
HO35	St Joseph of the Sacred Heart Convent, Catholic Church and Precinct, 1215 Bunyip River Road, Iona
HO41	Charcoal Burning Kiln, Gembrook–Tonimbuk Road, Bunyip State Park
HO46	Bunyip Commercial and Civic Precinct, High Street and Main Street, Bunyip
HO56	Bunyip Hall, Part CA10 and Lot 4, LP 14920, Main Street, Bunyip
HO57	Railway Hotel, 13 Main Street, Bunyip
HO58	Bunyip Newsagency, 18 Main Street, Bunyip
HO59	Bakehouse, 19 Main Street, Bunyip
HO60	Nathan's Shop Row, 20–22 Main Street, Bunyip
HO84	Bunyip State School, 1290 Nar Nar Goon–Longwarry Road, Bunyip
HO99	Bunyip Fire Station, 13 Pearson Street, Bunyip
HO122	Woodlands (later Fern Hill), 50 Topp Road, Bunyip North
HO129	Weatherhead (Horatio) Timber Mill, Weatherhead Hill Track, Bunyip State Park
HO136	Bunyip River Bridge, Fourteen Mile Road, Iona
HO138	Murray Road Bridge, Murray Road, Bunyip
HO139	Main Drain Bridge, Southbank Road, Bunyip
HO142	Bunyip Railway Sub Station, Nar Nar Goon–Longwarry Road, Bunyip

A *Cardinia Local Heritage Study Review 2007* has been undertaken by Council to identify, assess and document places of post-contact cultural significance for the entire municipality. Some of these places have been identified and assessed by previous heritage studies and incorporated into the Cardinia Planning Scheme. However, approximately 250 places were identified by previous heritage studies which have not yet been considered for inclusion in the Heritage Overlay.

The *Cardinia Local Heritage Study Review* identified a number of sites listed in Table 14 which have been identified as having high significance and are expected to be recognised via the introduction of a Heritage Overlay.

The *Cardinia Local Heritage Study Review* also identified a number of sites that ranged from medium to high priority which had been identified by community input. These sites require further investigation to determine their status and level of significance.

**Table 14: Proposed Heritage Overlay sites within 2007 Local Heritage Study Review**

Place name	Street	Locality
House	4 Hope Street	Bunyip
House	5 Princess Street	Bunyip
Precinct	3–9 (odds) George St	Bunyip
Precinct – Bunyip Commercial and Civic (extension)	Cottage at 23 High St and shops and residences at 27–29 Main St	Bunyip

### Aboriginal heritage

Aboriginal cultural heritage appreciation and protection is a priority for Council as reflected in its active role in the Inter-Council Aboriginal Consultative Committee and appointment of an Aboriginal Policy Advisor.

Cardinia Shire is located near a boundary between two dialect groups of the Kulin clans at the time of European settlement; however, evidence suggests Indigenous people have occupied land within the Cardinia Shire for more than 35,000 years. Clans to the north were of the Woiworung language, who occupied the Yarra River and surrounding catchment. The Cardinia Shire however, was located within a country associated with the Dreamtime ancestor named Lohan who created much of the lands. This country was known to the Kulin clans as the ‘marr ne bek’ (‘excellent country’) which is a promontory, extending inland eastward to present-day Neerim, to the LaTrobe River, and westward to the Yarra River.

The Bunurong language clans claimed descent from Lohan and as a result were recognised by the Kulin as custodians of the marr ne bek. However, the lands around the northern, eastern and western catchment of the Koo Wee Rup Swamp were the traditional lands of the Mayun Bulluk clan or extended family of the Bunurong people. They had spiritual obligations to maintain the country of Lohan, and conducted specific rituals required to protect any person who entered the land and who was not a traditional Bunurong custodian. The Bunyip catchment is considered an important place by the Bunurong clans as it was home to the bunyip or ‘bunyeep’. According to the Bunurong people, the Koo Wee Rup Swamp was created by snakes wriggling down from the hills to the swamp. The swamp became home to the spiritual being Bunyeep who lived beneath the mud and water and preyed on humans who ventured into the swamp after nightfall.

There are a number of places of importance throughout Cardinia Shire that connect with Dreamtime ancestors. It is recognised that this area has particularly high social and spiritual value to contemporary descendants of traditional Bunurong and Woiworung owners and custodians. As Bunyip is a place of significance for Indigenous peoples of the area, it is suggested that a cultural heritage study be undertaken in the future regarding the Aboriginal history of the site and surrounding areas to the east of Pakenham that will complement the study undertaken by Rhodes and Bell (2004) that only considered the urban growth corridor precinct to the west of Pakenham.

## 11.2 Issues

- Identification and protection of significant sites not listed under the existing Heritage Overlay.
- A need for investigations into Aboriginal Cultural Heritage in and around the Bunyip Township.
- Need to recognise significant sites of Aboriginal cultural heritage.

### **11.3 Objectives**

- Identify and conserve places of historical and cultural significance.
- Ensure the protection of places of heritage value.
- Recognise and protect places of Aboriginal cultural heritage

### **11.4 Policy**

- Ensure the siting and design of new buildings and works avoids or minimises the disruption and fragmentation of sites of Aboriginal cultural significance.
- Where appropriate to provide practical assistance and support for the adaptation and reuse of heritage sites where the use has become redundant.

### **11.5 Actions**

- Investigate opportunities to commission an Aboriginal cultural heritage study of Bunyip and surrounding region to the east of Pakenham to complement the study undertaken by Rhodes and Bell (2004).
- Protect newly identified sites of heritage significance through the application of a Heritage Overlay where appropriate.

## **12. URBAN DESIGN (LANDSCAPE AND TOWNSCAPE)**

### **12.1 Overview**

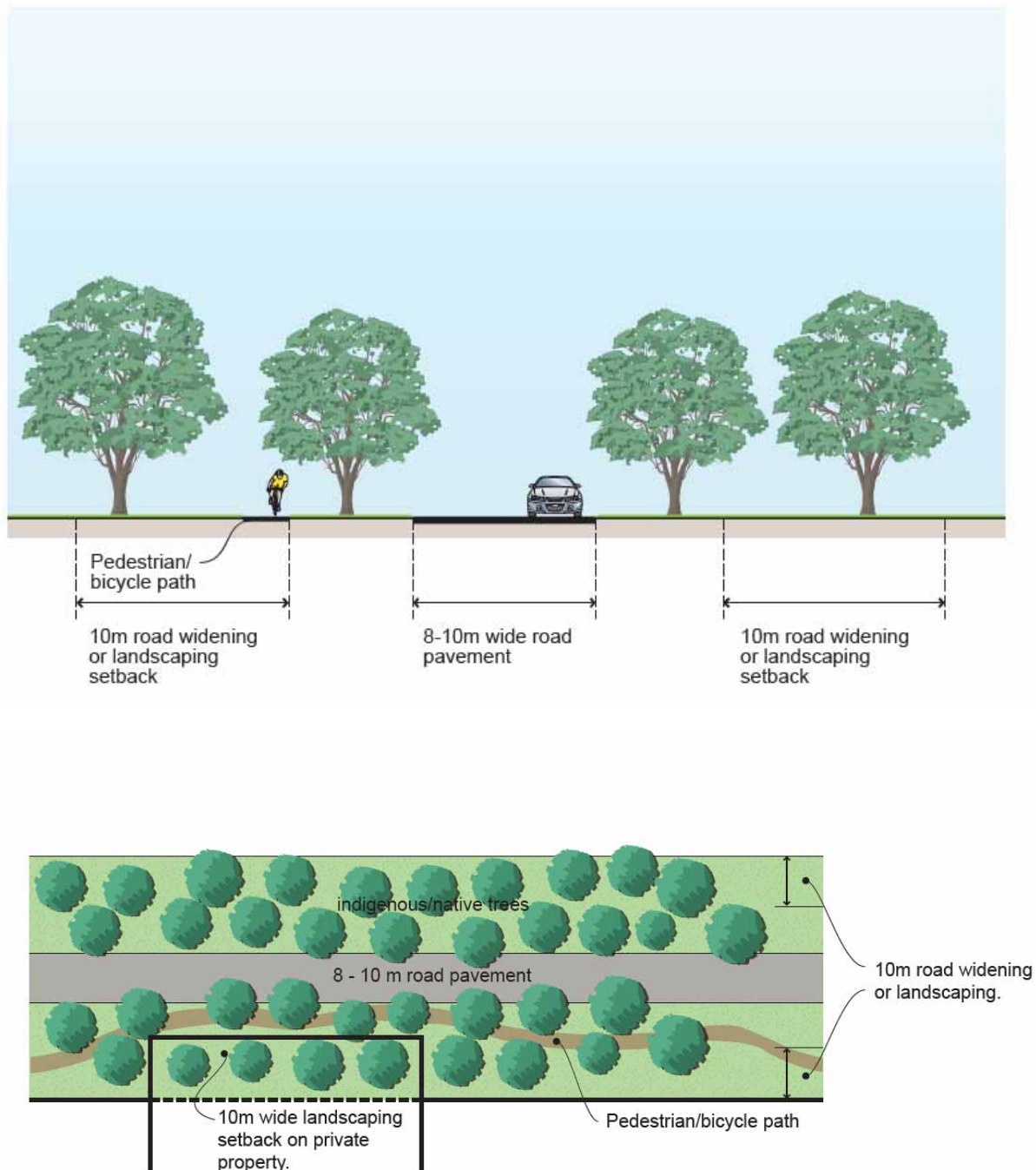
Bunyip has an interesting and attractive town centre with a strong sense of community pride. Anzac Park acts as a central spine in High Street. The town benefits from magnificent views to the south due to the raised nature of Main Street above the railway station.

There are nine precincts: five residential, the town centre, open space and community function area, light industrial and retail area, and the railway corridor.

There are numerous architectural types ranging from Edwardian to modern design with lot sizes from 500 square metres to 1.5 hectares.

A policy developed in the late 1970s by the Council of the Pakenham Shire, required that a 10-metre road widening be provided along the frontage of all land subdivided within the Bunyip Township area. It was envisaged that this would enhance the streetscape and retain the projected rural outlook of the town. The most notable of the roads where road widening has been obtained are those roads where recent subdivision has occurred, i.e. Wattletree Road, Flett Street, Doran Road and Hope Street, (north of Wattletree Road). On roads where the widening has been substantial, widening should be provided as part of the further subdivision of land in order to achieve the wider rural streetscape envisaged by the original policy. Where widening is not possible, a landscape setback within an allotment should be provided to achieve the appearance of a wider street as shown in Figure 12.

**Figure 11: Street layout**



## 12.2 Issues

- Community desire to retain a reasonable proportion of large lots.
- Community desire to retain the rural character of the town.
- Community desire for improved maintenance of the railway line.
- Maintenance and enhancement of town centre precinct

## **12.3 Objectives**

- Retain the view corridors along main roads and retention of indigenous vegetation along roadside verges.
- Retain the outer area of the township toward the Urban Growth Boundary, as larger low-density residential development.
- Retain the extensive views from the town centre to the south.
- Retain key vistas to the north.
- Maintain the compact retail core.
- Retain wide streets.
- Maintain and enhance the township edges and entry points.

## **12.4 Policy**

- Promote ‘infill’ development in the commercial area.
- Improve the streetscape of the Main Street by:
  - ensuring active uses such as retail are located along the Main Street
  - promoting use of parapet walls along the Main Street
  - encouraging new verandas and reinstatement of old verandas along the Main Street
- It is policy to assess planning permit applications for residential development and subdivision against the Township Character guidelines as outlined in this strategy.
- On roads where the widening has been substantial, widening should be provided as part of the further subdivision of land in order to achieve the wider rural streetscape envisaged by the original policy. Where widening is not possible, a landscape setback within an allotment should be provided to achieve the appearance of a wider street as shown in Figure 11.

## **12.5 Actions**

- Improve the appearance of the railway corridor, in particular the park-like setting below the main street linking the Railway Station.
- Maintain and enhance the existing character of the town centre precinct.
- Provide an entrance statement to the Bunyip Township.

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