



A Visual Assessment of Bunbury's Built and Natural Environs

# LANDSCAPE CHARACTER STUDY

**Landscape Character Study: A Visual Assessment of Bunbury's Built and Natural Environs**

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**Edition Details**

**Title:** Landscape Character Study: A Visual Assessment of Bunbury's Built and Natural Environs

**Production Date:** July 2010

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# Part 1: Preliminaries

## Chapters

### **1.0 Preliminaries**

- 1.1 How to Use this document
- 1.2 Scope
- 1.3 Objectives
- 1.4 Application
- 1.5 Glossary of Terms
- 1.6 Study Area

### **2.0 Description of the Landscape Character of Bunbury**

- 2.1 Regional Landform and Soils
- 2.2 Regional Vegetation Complexes
- 2.3 Aboriginal Heritage Sites
- 2.4 Landscape Character Units
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- 3.1 State Planning Policy Framework
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# Landscape Character Study

## 1.1 How to Use this Document

“Visual Landscape Planning in Western Australia: A manual for evaluation, assessment, siting and design’ (VLPWA) written by the Department for Planning and Infrastructure for the WAPC in 2007, sets out a model for evaluating visual landscapes. The VLPWA has been used to develop a Landscape Character Study (LCS) for Bunbury, which represents a comprehensive survey of the City’s landscape character values and the amenity of its neighbourhoods. The LCS is more than just an assessment of building age and condition, it provides an holistic picture of city-wide features and assets (the macro level issues) right down to the street and front garden (the micro level issues).

The criteria in the VLPWA manual has been modified to suit the needs of the City specifically, concentrating on defining the city’s landscape as a whole; how it is viewed, experienced and valued, and evaluating the existing character.

Finally, the LCS recommends strategic directions for the protection of character and amenity in each of the local areas and summarises the components that are identified as providing a positive contribution to the character of that area, and any policy documents that may need to be written in order to do so.



## 1.2 Methodology

Figure 1.2.1 Visual Landscape Planning in Western Australia

The document is set out in the following parts;

- Part 1: Preliminaries
- Part 2: Visual Diary
- Part 3: Strategic Direction
- Part 4: References and Appendices



The format for the document is broadly adapted from the WAPC’s *Visual Landscape Planning in Western Australia: A manual for evaluation, assessment, siting and design*, 2007 (refer to Figure 1.2.1). The document was endorsed in 2007 subsequent to the commencement of research for a landscape character study for the City of Bunbury based on the model of landscape character assessment derived from the Gold Coast City Council’s (GCCC) Landscape Strategy, 2000 - Part 1: Landscape Character: Guiding the Image of the City, prepared by John Mongard Landscape Architects. (refer to Figure 1.2.3).

The LCS has been prepared in 5 steps adapted from ‘*Visual Landscape Planning in Western Australia: A manual for evaluation, assessment, siting and design*’, 2007, however, the process has been adjusted to meet the needs of the City, as the scope was defined prior to the inclusion of the VLPWA as a manual in which to conduct the assessment process.

Figure 1.2.2 Stages of Developing the Landscape Character Study

**Part 1:** Preliminaries sets the scope and context of the LCS and looks at the landscape character of Bunbury citywide.

**Part 2:** Visual Landscape Diary is a process derived from the GCCC’s model for assessment, where the macro to micro model for assessment is also used per local area. The assessment is of landscape character elements that contribute to the unique identifying character of an area using logical recognised planning principles, and CPTED principles. The information is presented as observations of existing elements in the landscape that may or may not contribute to the desired future character of a local area.

**Part 3:** Strategic Direction presents the composite recommendations that have been identified for the preservation of the City’s character and contribution in the southwest, and for the preservation of valuable landscape character elements per local area. The policy recommendations are tools that have been identified as a means of implementing regulation that will ensure the valued character elements are not compromised through future planning decisions.

**Part 4:** References and Appendices is a list of contributing documents, and resources that have been utilised in the preparation of this document.

### Preliminaries

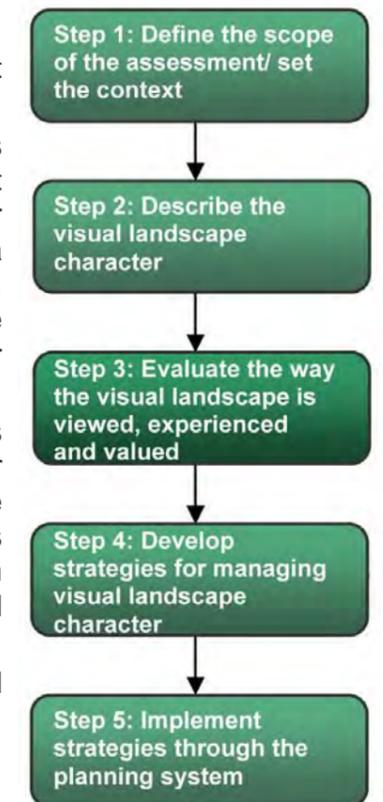
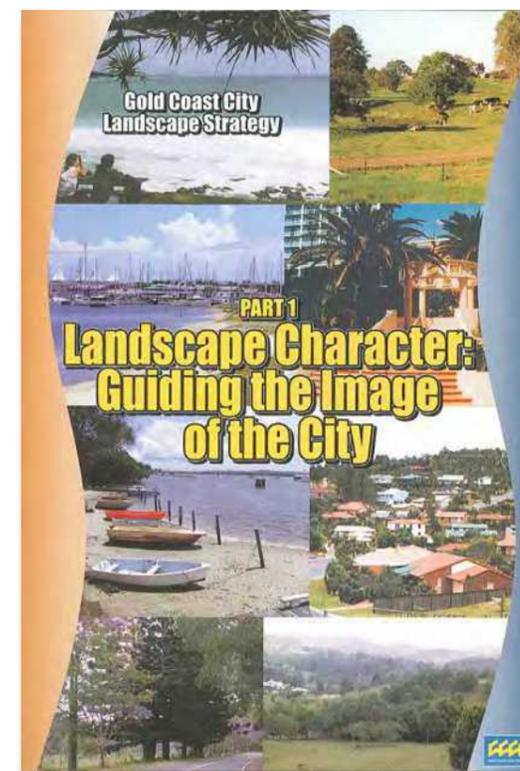


Figure 1.2.3 Gold Coast City Council’s Landscape Character: Guiding the Image of the City



## 1.3 Scope

The project is divided into ten local areas for the purpose of assessment. The project scope is to establish the following information to identify character and amenity, form observations and inform future strategic direction:

- Identify the landform and topographical elements of the Greater Bunbury area, and how they area experienced, including a view shed analysis and identifying valuable landmarks.
- Identify the entry points into Bunbury and analyse the experience from a vehicle perspective;
- Identify which historical, cultural and geographical information makes up each local area:
- Identify landmarks, activity centres and significant artworks or attractions.
- Provide photographic evidence of the current state of built form and amenity of local areas;
- Analyse the elements that contribute to the character of these areas; from a neighbourhood level to individual property contribution;
- Recommend future strategic direction for each local area, focusing on residential density, land use compatibility, streetscape and amenity.

## 1.4 Objectives

The objectives of the Landscape Character Study are:

- (a) To chronicle the valuable landscape features and assets, both cultural and natural, that contribute to the recognition of the City's identity.
- (b) To capture the entry points and strategic view sheds that contribute to City's image.
- (c) To provide a record of the contributing landscape elements of each local area within the City that define the unique identity of that place.
- (d) To provide a benchmark of the City's visual landscape character in shaping the future of Bunbury through the City Vision Strategy and City Vision Action Plan.
- (e) To provide a reference point for understanding and managing change through the Local Planning Policy Framework.

## 1.5 Application

This landscape character study may be applied as a point of reference on Council's position on existing character and amenity of residential and commercial character across the City.

The document is specifically intended to provide an understanding of the existing and desired character and amenity of Bunbury that will inform the development of the Local Planning Strategy (LPS). Similar to the way a Municipal Inventory works for the assessment of historical heritage character, Part 2: Visual Diary is an inventory of the current state of building stock and landscape character in Bunbury, as recorded 2007-2010 for this edition.

Whilst the LCS is not a statutory planning instrument, it nevertheless provides an important reference source for formulating and implementing the Local Planning Policy Framework (e.g. it informed the rationale for reviewing the residential density coding (R-Coding) of the City's established neighbourhoods in a manner that sought to preserve existing local character and amenity).

## 1.6 Glossary of Terms

The meaning of specific words and expressions relevant to this document are given below;

**"Amenity"** means all those factors which combine to form the character of an area and include the present and likely future amenity.

**"East Bunbury Heritage Area"** refers to the area adopted under Town Planning Scheme No 7 (TPS) as Local Planning Policy: Stirling Street Heritage Area, as adopted 2007.

**"Landscape Character Unit"** refers to areas of homogenous (similar) patterns of visual characteristics such as landform, vegetation, water form and land use as well as individual features.

**"Local Area Plan"** Through the City Visioning process it has been recognised that there are fundamental differences in the physical, social and economic environments across the City. That is, the neighbourhood areas of Pelican Point, East Bunbury, South Bunbury, Carey Park, Usher and College Grove are all very different.

The City Vision Strategy and accompanying Action Plan established the framework for a more neighbour-focused or 'place-based' approach to planning for our City's various communities that respects their local differences in landscape, built character and community identity, etc.

This approach will be achieved through the application of a locally refined Integrated Local Area Planning (ILAP) process, which is recommended by the Australian Local Government Association (A Guide to Integrated Local Area Planning, Australian Local Government Association [1993]).

There are 12 distinct local areas covering the City at the suburb scale, which provide an appropriate scale for sound local area planning. The boundaries of each Local Area Plan are not absolute but reflect natural and human made barriers in the landscape (e.g. rivers and main roads), historical development patterns, building and streetscape character, etc.

The local area planning approach attempts to coordinate and integrate development control with that of transport, land use, community facilities and environmental conservation in order to achieve ecological, social and economic objectives for more sustainable land use and infrastructure planning outcomes.

This approach requires an understanding of the nature of local areas and the complex interrelationships between its character, identity, land uses, resources and its community's aspirations or expectations. Therefore, the local area planning process is based upon broad community and stakeholder participation, and is dynamic and inclusive by nature. As such, Local Area Plans represent living documents that evolve and change over time as needed.

Over time it is expected that each local areas will have their own local area plan or LAP, which will eventually simplify and rationalise the many different and overlapping local planning policies, structure plans, detailed area plans and guidelines that address disparate ranges issues. In the meantime, city-wide strategic planning uses the LAP boundaries as framework that enables place-specific solutions to be applied.

**"Rhythm"** is any regular recurring motion, symmetry, or is a movement marked by the regulated succession of strong and weak elements, or of opposite or different conditions. This term is applied in the Landscape Character Study to describe the way that building elements (bulk, scale, setback, orientation, style and architecture) occur along the street. Rhythm may be described as harmonious, balanced, discordant or chaotic in terms of assessing the continuity of the streetscape.

**"Viewpoint"** means the point from which a view is observed.

**"Viewshed"** is a portion of the landscape that can be seen from one or more observer positions. The extent of area that can be viewed is normally limited by landform, vegetation and distance.

**"Views of Significance"** a portion of landscape seen by an observer that is highly valued.

**"Visual Impact Assessment"** is the analysis of changes in the appearance of the landscape as a result of development. Impacts may be either negative or positive.

**"Visual Landscape Character"** refers to the appearance of those landscape elements such as landform, vegetation, water bodies and human land use that makes an area identifiable or unique.

## 1.7 Study Area

This landscape character study has been prepared for the City of Bunbury and includes all land within the Local Planning Scheme Boundary.

Bunbury is located approximately 180km south of Perth City in the south-west region of Western Australia.

## 2.0 Description of the visual landscape character of Bunbury

### 2.1 Regional Landform and Soils

The City of Bunbury is in the Greater Bunbury Region in the South West. The Swan Coastal Plain Landform and Soil profiles show that Bunbury is divided into 3 categories: two types with marine deposits; Yoongarillup and Vasse, and one type with Aeolian deposits; Quindalup.

In summary the soil type of Bunbury is predominantly poorly drained with estuarine and marine deposits and shallow yellow and brown sands over marine limestone and coastal dunes. (See Appendix 1)

### 2.2 Regional Vegetation Complexes

The Swan Coastal Plain 'Regional Vegetation Complexes' Map shows that Bunbury is divided into three categories: One Aeolian complex; Quindalup, and two Marine Complexes; Yoongarillup and Vasse. The city is predominantly within the Vasse vegetation complex consisting of predominantly *Melaleuca* species with woodlands of *Eucalyptus rudis* – *Melaleuca spp.*, and open forest of *E. Gomphocephalla*, *E. calophylla*, and *E. marginata*. (See Appendix 2)

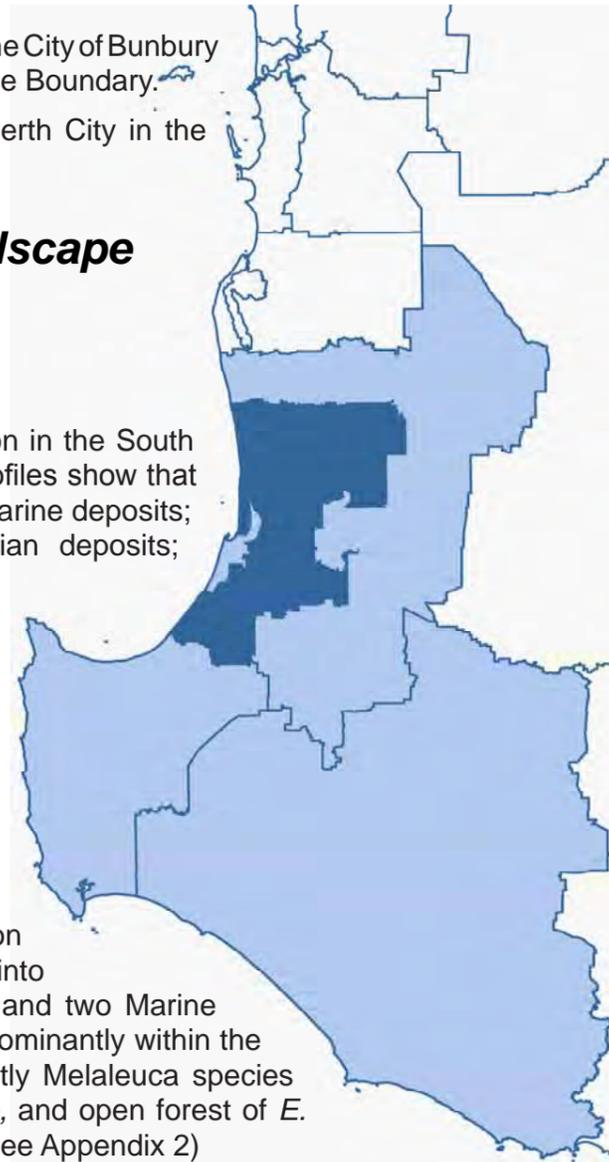


Figure 1.7: South-West Region, Greater Bunbury

### 2.3 Aboriginal Heritage Sites

There are many sites in Bunbury identified as having cultural and historical significance to the Indigenous Nyoongar people of the South West region.

Aboriginal sites are places of importance and significance to Aboriginal people and to the cultural heritage of Western Australia. Aboriginal sites are significant because they link Aboriginal cultural tradition to place, land and people over time (refer to Figure 2.3).

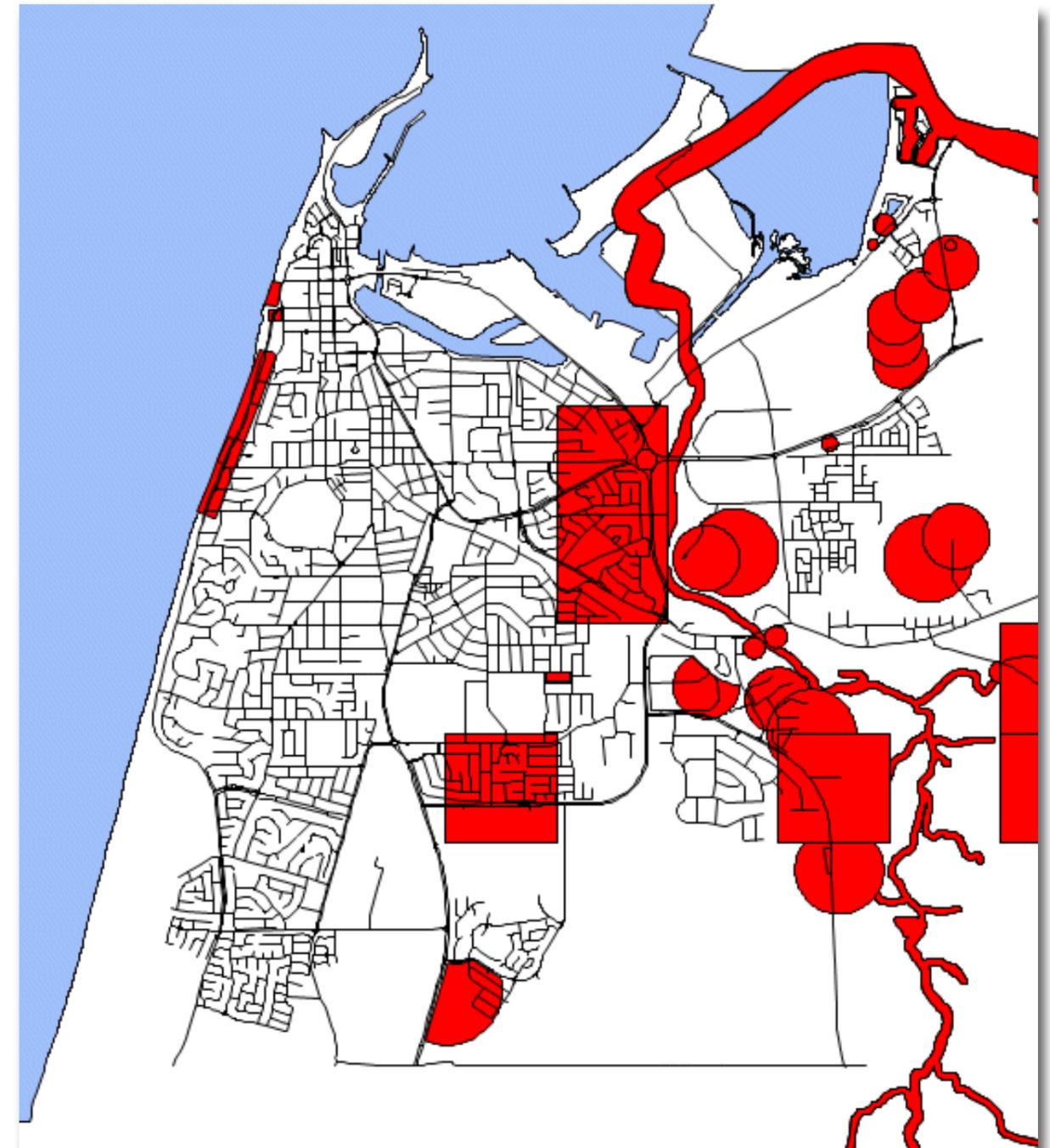
Aboriginal sites are as important today as they were many thousands of years ago because they continue to be an integral part of the lives of Aboriginal people and the heritage of Western Australia.

Sites can be a diverse range of places. They can be put into two basic but overlapping categories:

Archaeological sites – places where material remains associate with past Aboriginal land use.

Anthropological sites – places of spiritual importance and significance to Aboriginal people. (<http://www.dia.wa.gov.au/Heritage-Culture/Aboriginal-heritage/Aboriginal-sites/>: last accessed on 16.10.08)

Figure 2.3: Aboriginal Heritage Sites in Bunbury, City of Bunbury 2008



## 2.4 Landscape Character Units

Bunbury consists of expansive coastal dunes, sandy and rocky shorelines, low lying flood plains and woodlands. This expansive range of landscape characters creates valued scenic backdrops and viewsheds from both high and low landforms. (refer to Figure 2.6)

### 2.4.1 Natural Landscape Character Units

Visual elements that define natural landscape character are landform, vegetation, waterform, soils and rock formations. The Ocean Beach Local Area demonstrates how the built form is accommodated within a natural landscape. The natural form of the land absorbs the impact of the built form, and maintains an open coastal landscape (Refer to Figures 2.4.1 and 2.4.2).

Figure 2.4.1: Natural Landscape Character of Bunbury



### 2.4.2 Built Landscape Character Units

Built landscape elements may include: settlement patterns, land tenure and zoning, general road layout, streetscapes, buildings, pedestrian ways, trees, public open space, colour and style of built form, location and design of industry and commercial areas, height, historic landmarks and features. The CBD consists of a greater level of built form which is located on a narrow peninsula and oriented to take advantage of the proximity to water on three sides. The city was built between two higher grounds, and is therefore afforded expansive views from either end. Identifiable built features in the landscape are accentuated by a reasonably clear skyline, and maintain clear view corridors between larger forms thus far (Refer to Figures 2.4.2 & 2.6).

Figure 2.4.2: Built Landscape Character of Bunbury CBD



## 2.5 Key Natural & Built Features in the Landscape

The landscape and built form of the City is presently defined by a number of natural features and built structures as summarised in Table 2.5 below in descending order of height. The table corresponds with Figure 2.5.1: Natural Features and Built Structures within the CBD Area.

Table 2.5: Summary of Existing and Natural Built Forms.

Natural & Built Structures	Significant Feature
<b>1. Bunbury Tower</b> 61 Victoria Street	At eleven storeys, the Bunbury Tower is the tallest building in the City and forms a dominant feature on the skyline. It is desired by the Local Government that no additional buildings of this height be permitted. Built in the late 1980's, the highest point is 68.7 AHD.
<b>2. Marlston Lookout (formerly referred to as the Rotary Lookout)</b> Apex Drive	Formerly the site of Bunbury's first steel lighthouse, which was built in 1903, (Barnes, P 2001) the Lookout was built in 1988 to commemorate the Bicentenary of Australia. The top of the lookout is at 41.7 AHD and is the third highest point of view in Bunbury; it has a 360 degree view of the city and ocean.
<b>3. Entertainment Centre</b> Lot 3 Blair Street	Built in 1990, and located between Blair Street and Victoria Street, the most dominant views of this building are from across the Leschenault Inlet and from the north end of town. A vertical tower of 22.6 AHD above sea level is a recognisable in contrast to the red brick, curved roof two-storey red brick portion of the building.
<b>4. Lord Forrest Hotel</b> 20 Symmons Street	The Lord Forrest was built in 1985 to boost the tourism industry (Barnes, P 2001). It has total height of 27.7 AHD. The most dominant views of the Lord Forrest are along the north south axis of Wittenoom Street, and Victoria Streets and heading north along Ocean Drive.
<b>5. Residential Apartments</b> 11 Prinsep Street	Built in 2003, a dominant feature from the north of town along the coastal side fits neatly into the hillside backdrop. Six storeys in total.
<b>6. Call Centre Building</b> 7 Wellington Street	Built in 2002, the building is a bulky 2 storeys, viewed predominantly from the coast, it sits in a low point sloping down from Boulters Heights.

Figure 2.5.1: Natural Features and Built Structures within the CBD Area.

Natural & Built Structures	Significant Feature
<b>7. Victoria Place</b> 91 Victoria Street	Five storey commercial building, dominant views approaching the city from the south and across the Leschenault Inlet.
<b>8. Bunbury Senior High School</b> 10 Haig Crescent	This two-storey building, constructed on the land known as the Kings Table in 1922 is at one of Bunbury's most prominent locations. The roof of the building has a height of 52.5 AHD, making it the second highest building above sea level in Bunbury.
<b>9. Ommaney Building</b> 53 Victoria Street	A three storey commercial building on the corner of Victoria and Elliot Streets, built in 2006, the design has a dominant corner facade with arching openings across the frontages of the upper most storey, as seen from the northern end of town.
<b>10. Waterfront Silos</b> 1 Bonnefoi Boulevard	Originally built in 1937 for wheat store, the building was decommissioned in the late 1980's. (Barnes, P 2001) In 2006 the main structure was converted into a luxury apartment tower. The overall existing height of the structure is 27 metres in height or 30.8m AHD.
<b>11. Boulters Heights Reserve, Haig Court</b>	Views are down Stirling Street and straight across the Leschenault Inlet, and Inner Harbour. In 1966 a 26-metre waterfall was constructed to celebrate the Queen Mother's visit to Bunbury (Bunbury Heritage Trail Brochure). The waterfall no longer exists. Views are predominantly of the Outer Business District and south east of the CBD.
<b>12. The (former) St Patrick's Roman Catholic Cathedral</b> 16 Parkfield Street	The original Cathedral was built in 1920, the spire being completed in 1967 (Bunbury Heritage Trail Brochure). The Cathedral was demolished due to structural damage after a tornado hit in 2005. Reconstruction of the church is underway at present.
<b>13. Chequered Lighthouse</b> Lot 524 Carey Street	The chequered lighthouse replaced the light house on top of Marlston Hill in 1971, as the old light house was increasingly difficult to see from ships, the original copper top was reused on the new lighthouse (Barnes, 2001).
<b>14. St John of God Hospital Site</b> 9 Edward Street	The former St John of God Hospital still stands vacant on what is known as Bury Hill. To date the building has approval for redevelopment as a 5-6 storey apartment complex, but will most likely be demolished.

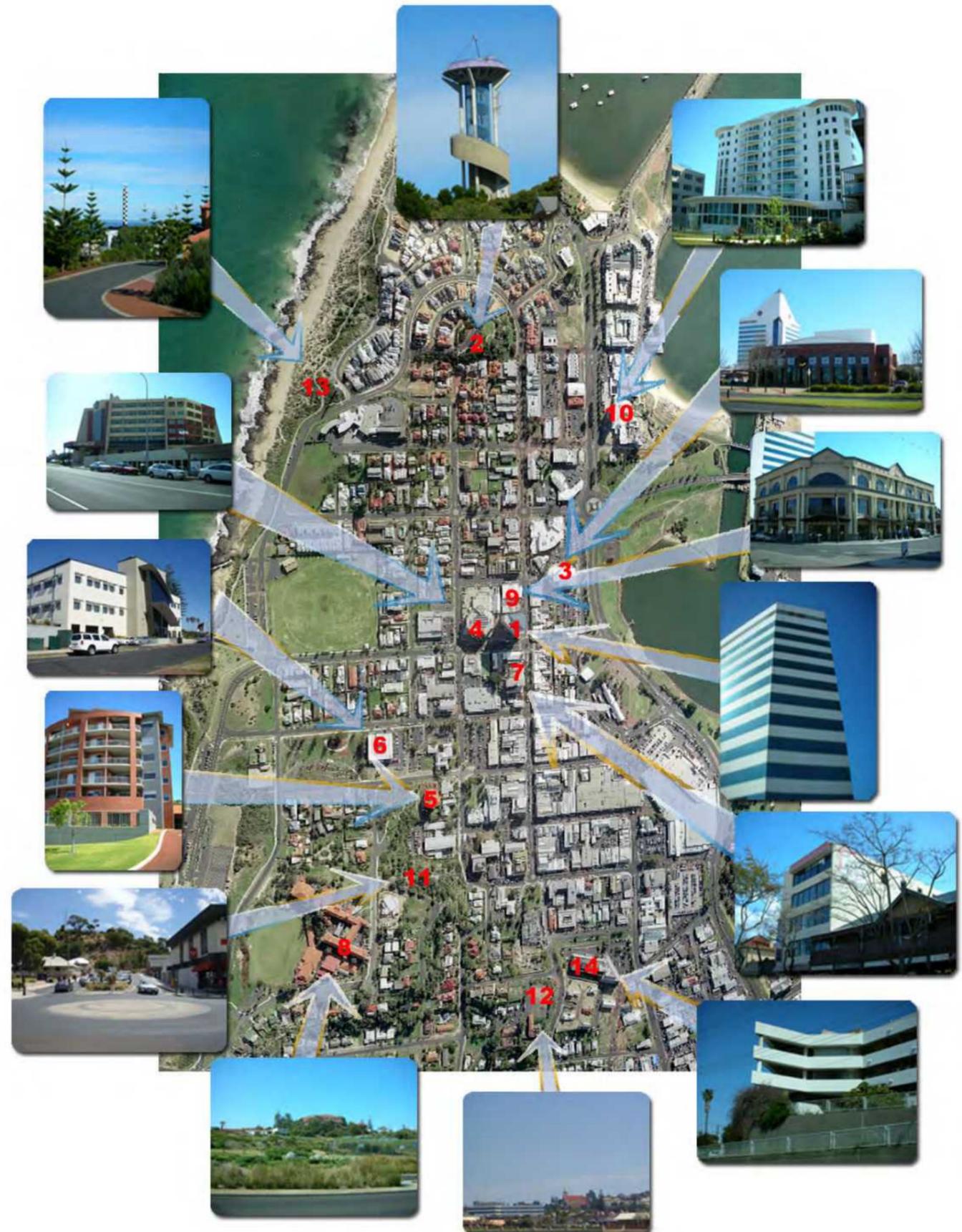
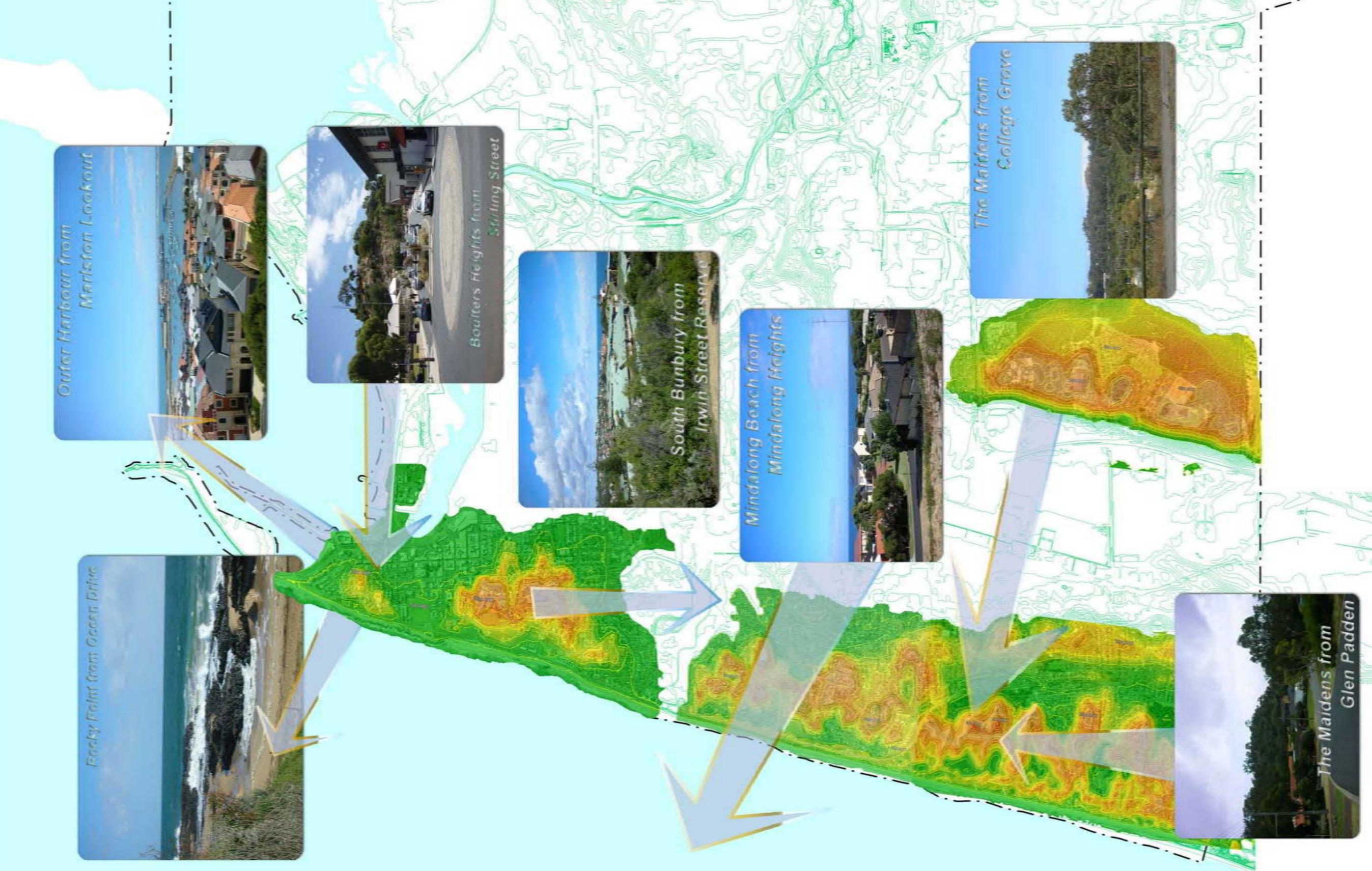


Figure 2.5.2: Citywide Landscape Character Units of Bunbury



## 3.0 How the landscape is viewed, experienced and valued

The importance of defining the way that landscape character is viewed, experienced and valued is reflected in our strategic planning instruments at both state and local government levels. Protecting valuable elements such as significant views and natural landmarks are effectively supported in both State and Local planning policy framework documents such as Strategies, Schemes and planning policies, and often feature highly in their objectives.

The Western Australian Planning Commission have provided the "Visual Landscape Planning in Western Australia: A manual for evaluation, assessment, siting and design" (DoP, 2007) to provide assistance to local governments in determining valuable State, Regional, and Local landscapes relevant within their region. The VLPWA has shaped the method of assessment undertaken for Bunbury, and has provided the Study with a format and assessment criteria that is recognised by the Commission statewide.

Other influential State planning policy framework documents in the formulation of this Study have been the State Planning Strategy, the Greater Bunbury Region Scheme (GBRS); the overarching statutory document for the Greater Bunbury Region and the Bunbury-Wellington Region Plan.

Local Planning Policy Framework documents that have been instrumental in understanding the landscape character of Bunbury are the City Vision Strategy, Bunbury Integrated Land Use & Transport Vision 2030, the LPS for Tourism, LPS for Heritage & Character and the LPS for Activity Centres & Neighbourhoods; all of which have been pertinent to the development of this Study.

### 3.1 State Planning Framework

#### The State Planning Strategy

The State Planning Strategy specifies regional objectives, which are relevant to Bunbury under *Part 8.1.3: The South-West Region*. The relevant strategic objectives and accompanying actions related to preservation of landscape character are headed under:

- Protect sensitive environmental areas and cultural heritage; and,
- Provide a sense of community.

It is from this framework that the State level planning instruments for the south-west have been developed, including the GBRS and Liveable Neighbourhoods, to enable the South-West Planning Committee of the Department of Planning (DoP) to exercise concise decision-making whilst implementing strategic decisions that are consistent with Statewide objectives when assessing development of regional significance.

#### The Greater Bunbury Region Scheme

The Greater Bunbury Region Scheme (WAPC, 2007) is the head of power for the State Planning Policy Framework for the south west region consisting of Beela, Benger, Binningup, Boyanup, Brunswick Junction, Bunbury, Burekup, Capel, Dardanup, Harvey, Myalup, Roelands, Waterloo and Yarloop. Greater Bunbury is south of the Peel Region approximately 2 hours south of the Metropolitan Perth area.

The aims of the Scheme that are relevant to the LCS are:

- (b) provide for regional transportation, community services and infrastructure in a way that is efficient, equitable and timely;
- (c) protect as regional open space the region's coastal foreshores, the foreshores of the Harvey, Brunswick, Collie, Preston and Capel Rivers, and the Leschenault Estuary and Inlet, as well as other areas of regional conservation significance and areas for regional recreational facilities;
- (d) protect surface water catchments and groundwater areas for future water supplies;
- (f) provide for future urban purposes and prevent development which could prejudice the future development of urban land; and,
- (h) protect strategic minerals and basic raw materials of State and regional importance and provide for the efficient and timely extraction of minerals and raw materials and subsequent rehabilitation of affected land.

### Bunbury-Wellington Region Plan

The Bunbury-Wellington Region Plan was published in 1995, and its principles focus on compatibility of land uses, natural resources, sustainability, residential, social and economic growth.

Retaining the identity of Bunbury as the 'capital' regional centre of the south-west is the foremost objective of the Plan and the landscape character of Bunbury plays a significant role in that identity.

Bunbury is the 'city of three waters', with a unique CBD coast line featuring the Leschenault Inlet, Koombana Bay and Indian Ocean foreshores.

The seven broad principles that provide the foundation of the regional plan and the land use strategy are:

- Separation of conflicting land uses;
- Economic development;
- Social development;
- Conservation of the natural environment;
- Regional identity;
- Recognition of land use rights; and
- Ecologically sustainable development.

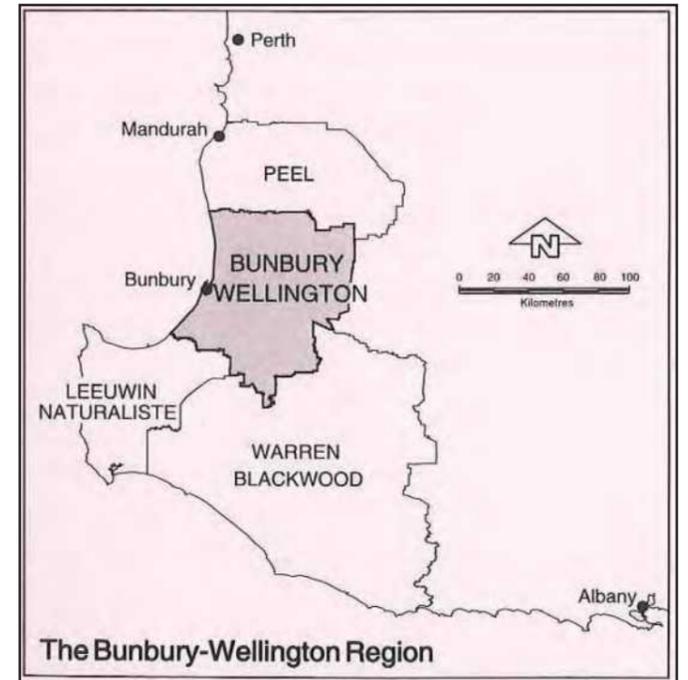


Figure 3.1.1: Bunbury Wellington Region

## Liveable Neighbourhoods

Liveable Neighbourhoods has been prepared to implement the objectives of the State Planning Strategy which aims to guide the sustainable development of Western Australia to 2029. Liveable Neighbourhoods operates as a development control policy, or code, to facilitate the development of sustainable communities. Liveable Neighbourhoods addresses both strategic and operational aspects of structure planning and subdivision development in a code framework.

The Principal aims of Liveable Neighbourhoods are:

1. To provide for an urban structure of walkable neighbourhoods clustering to form towns of compatible mixed uses in order to reduce car dependence for access to employment, retail and community facilities;
2. To ensure that walkable neighbourhoods and access to services and facilities are designed for all users, including those with disabilities;
3. To foster a sense of community and strong local identity and sense of place in neighbourhoods and towns;
4. To provide for access generally by way of an interconnected network of streets which facilitate safe, efficient and pleasant walking, cycling and driving.
5. To ensure active street-land use interfaces, with building frontages to streets to improve personal safety through increased surveillance and activity.
6. To facilitate new development which supports the efficiency of public transport systems where available, and provide safe, direct access to the system for residents.
7. To facilitate mixed-use urban development which provides for a wide range of living, employment and leisure opportunities, capable of adapting over time as the community changes and which reflects appropriate community standards of health, safety and amenity.

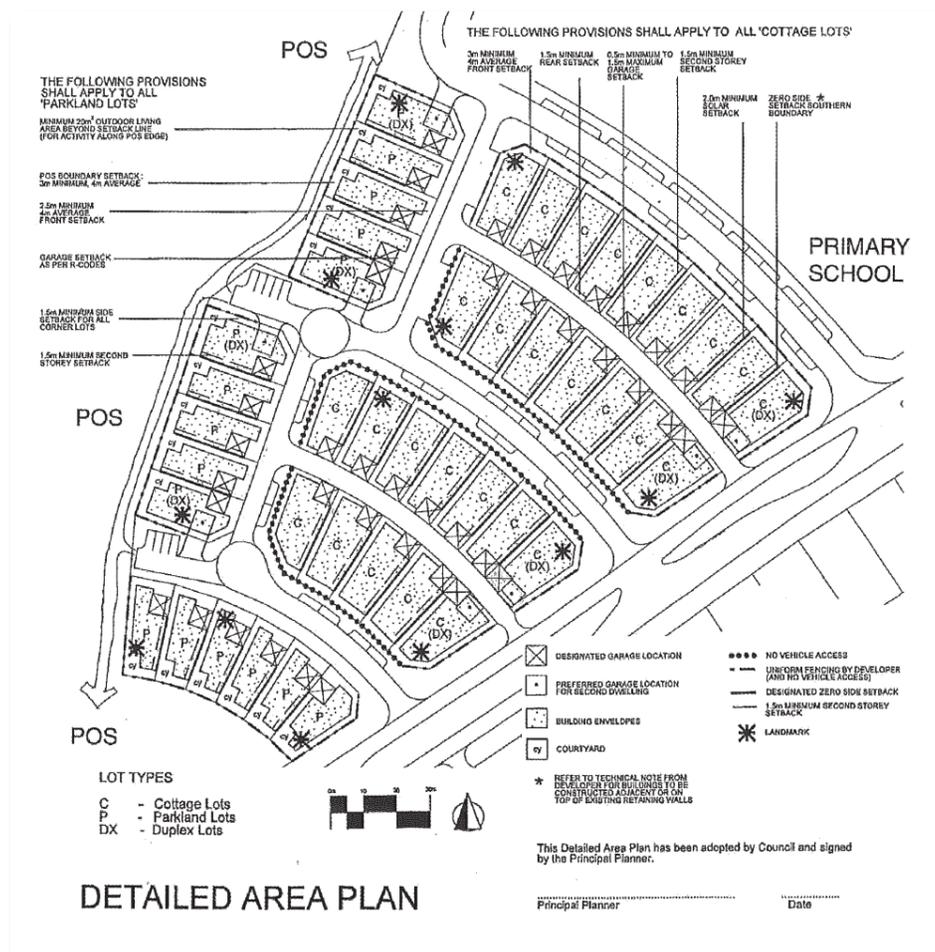


Figure 3.1.2: Example of Detailed Area Plan from Liveable Neighbourhoods

8. To provide a variety of lot sizes and housing types to cater for the diverse housing needs of the community at a density that can ultimately support the provision of local services.
9. To ensure the avoidance of key environmental areas and the incorporation of significant cultural and environmental features of a site into the design of an area.
10. To provide for a more integrated approach to the design of open space and urban water management.
11. To ensure cost-effective and resource-efficient development to promote affordable housing.
12. To maximise land efficiency wherever possible. (Liveable Neighbourhoods, Western Australian Planning Commission, 2007)

Liveable Neighbourhoods has been used extensively to make assessments of character and amenity throughout this document, particularly in the Visual Diary, and in conjunction with Designing Out Crime Planning Guidelines (Office of Crime Prevention and WAPC, 2006).

Contributing elements of landscape character have been assessed using a combination of the principles for sustainable urban design and community safety which have been adopted from a combination of these two guiding documents.

In particular, design elements such as street layout, pedestrian and vehicle movement networks, public open space, lot layout and solar orientation are critical elements found in Liveable Neighbourhoods, where as street lighting, landscaping design, fencing, security, passive surveillance and pedestrian safety are elements covered in Designing Out Crime.

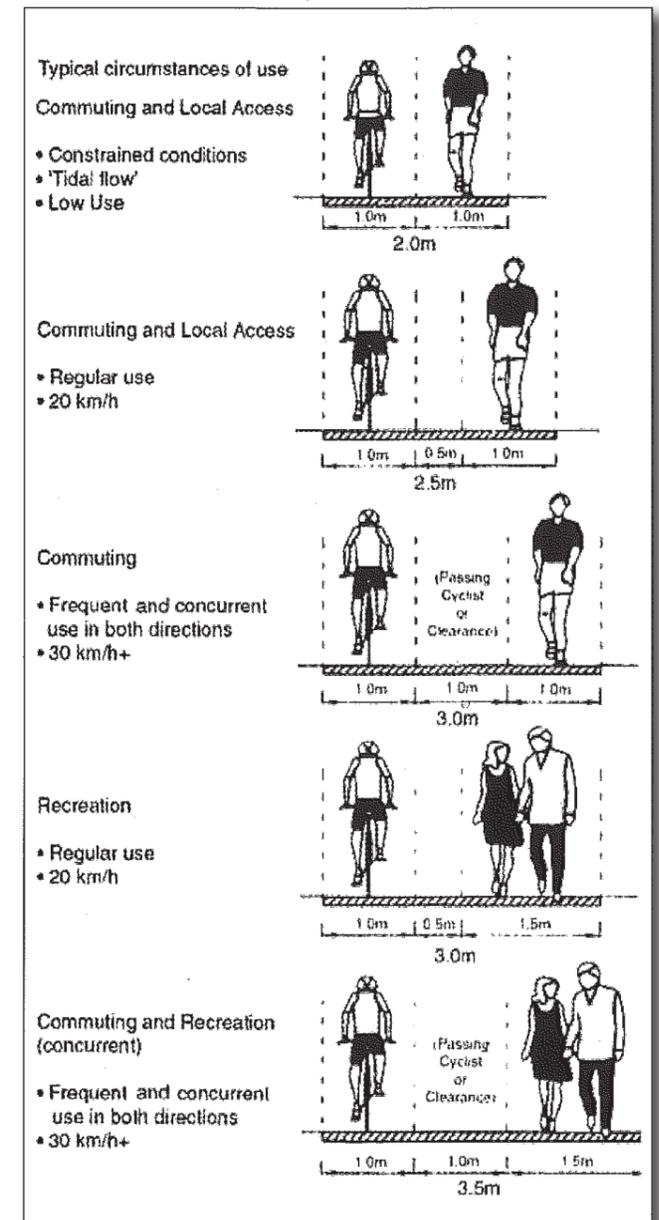


Figure 3.1.3: Indicative Shared Network Path example from Liveable Neighbourhoods

## 3.2 Local Planning Policy Framework

### City Vision

The City Vision Strategy and associated City Vision Action Plan is the principle strategic driver in seeking to achieve a more sustainable future for Bunbury over the next 25 years. The City Vision project was commenced in 2004 with the aim of addressing the key and emerging issues affecting Bunbury and its region according to the quadruple bottom line.

The Strategy and accompanying Action Plan represent the outcomes of a process conducted by the City with the participation of the broader community in conjunction with public and private sector stakeholders. In doing so the project drew upon extensive local knowledge and history to augment existing planning research and analysis in order to make specific recommendations. These recommendations are directly used by the City in its activities to strengthen the role of the City as the regional capital and toward adopting more comprehensive approaches to planning.

A composite list of these recommendations that cover key elements of environmental, social and economic goals are laid out in the following summary of relevant recommendations.

#### Central Business District (CBD)

The Council supports the preparation of a local area plan for the CBD consistent with the goals, objectives and strategies of City Vision, with particular reference to the application and interrelationship of the following key elements:

**CBD1:** Allocate sufficient resources for the planning and development of the Leschenault Inlet Regional Park so that the area is established as a major tourist and recreation attraction.

**CBD2:** Require the protection and tourism/recreational enhancement of the White Mangroves as part of any planning and development of the North Shore.

**CBD3:** Require planning policies and projects for development to incorporate consideration of key landmarks with a view to enhancing their role in orientation and defining character and amenity of the City.

**CBD5:** The management arrangements for the Leschenault Inlet Regional Park need to ensure that the viability of the estuarine environment is the highest priority.

**CBD6:** Plan for a change in priority between cars and pedestrians in favour of pedestrians and identify opportunities for street based activities.

**CBD7:** Ensure that planning policies and development control provisions adequately provide for the conservation and protection of heritage values.

**CBD8:** In accordance with the Bunbury Community Safety and Crime Prevention Plan the design of buildings, streetscapes and open spaces is to be influenced by encouraging the identification of risks/hazards through safety auditing of places and development proposals in order to inform public sector capital works/maintenance programmes and private sector development initiatives.

**CBD10:** Identify available sites for tourist development and

establish the criteria for the site mix of freehold subdivision and tourism, height and management.

**CBD16:** That the Strategic Regional Centre be assessed to establish the constraints and opportunities for commercial development.

**CBD17:** That a staged CBD streetscape strategy be programmed by Council.

**CBD18:** That Blair Street remains connected to Koombana Drive.

**CBD19:** That reducing Blair Street from four lane divided to two lane between Haley Street and Koombana Drive (both lanes removed from the Inlet side) with enhanced east/west pedestrian connections and traffic calming be developed for further consideration. The Clifton/Blair Street roundabout also needs to be redesigned to take account of the downgrading of Blair Street.

**CBD20:** That Symmons Street be developed as a key pedestrian and visual connection between the cappuccino strip north to Clifton Street and the Inlet.

**CBD22:** That the central bus station be retained.

**CBD23:** That the operation of the central bus station be reviewed to improve pedestrian linkages and reinforce the terminus as a tourist destination and major arrival point. Alternative locations for bus storage need to be identified.

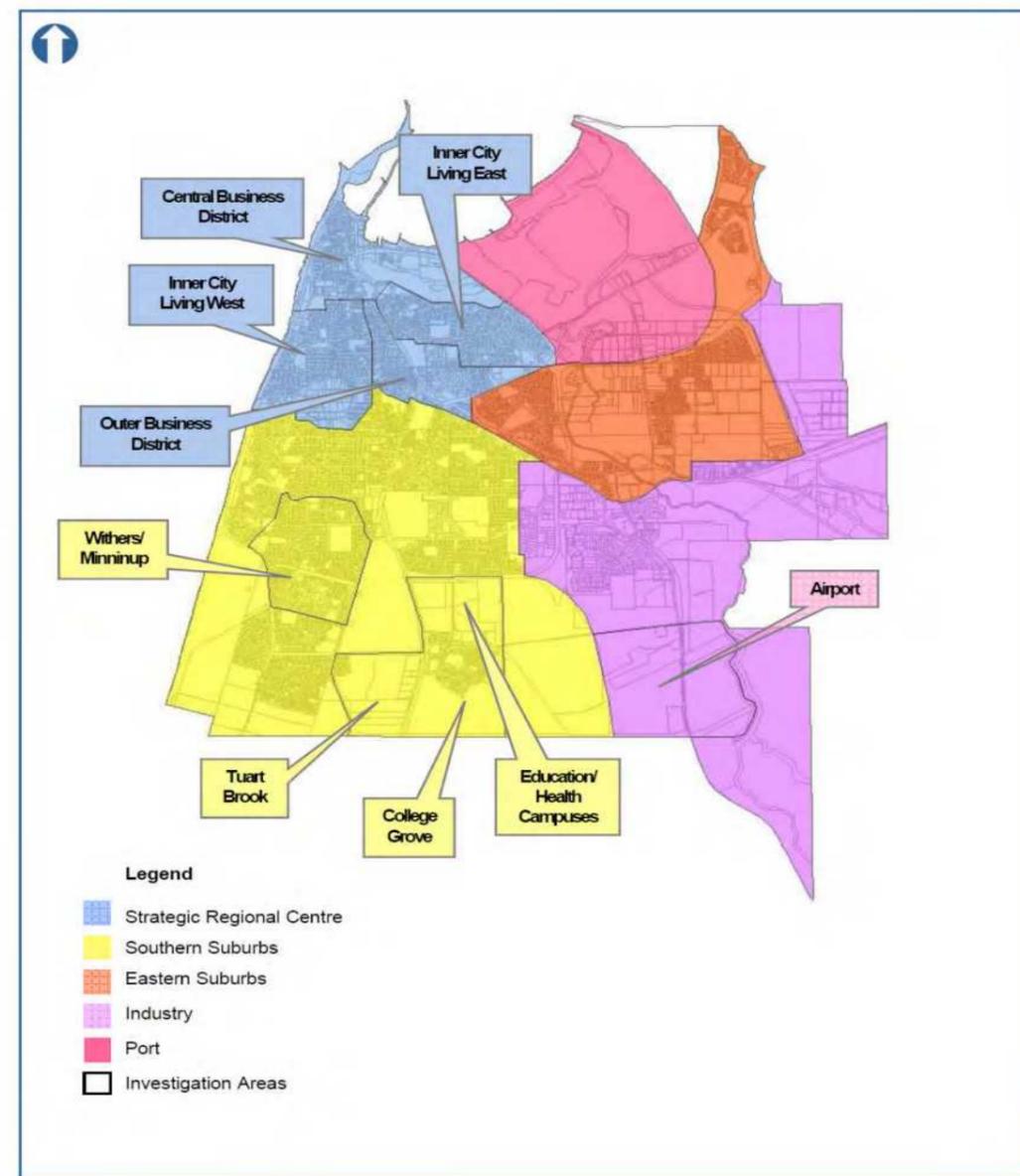
**CBD24:** Retain the option of an intermodal transport facility at the Eelup Roundabout and undertake a detailed cost/benefit analysis to establish that there will be improvement in economic, social and environmental outcomes.

**CBD25:** That decked parking sites be planned to service the northern, central and southern sectors of the CBD.

**CBD27:** That further research be undertaken to establish the appropriate location of a decked parking site to service the northern sector of the CBD.

**CBD28:** That the State Coastal Planning Policy Amendment 45 relating to height is supported where the maximum height for coastal areas (including the Bay and Inlet) should be five storeys or 21 metres and under certain conditions and subject to criteria including broad community support, consideration may be given to developments up to eight storeys or 32 metres. The Ocean Drive coastal strip between Fawly Towers and the Lighthouse Beach Resort and inland to approximately 300 metres is defined as a coastal tourism and recreation precinct containing key sites that have the potential to accommodate major tourism development that optimises views for all developments and includes up to a 25% component for residential development.

Figure 3.2.1: City Vision Strategy Investigation Areas



**CBD29:** That height in the commercial core of the CBD defined as both sides of Wittenoom, Stephen, Victoria and Carey Streets is determined on the basis of complementary development with the Bunbury Tower and the Old Silos redevelopment. Areas outside of the commercial core to be planned and designed within the two to five storey range and depending on topography, accessibility and community acceptance up to eight storeys.

**CBD31:** Subject to detailed site analysis, endorse the location of a museum, Noongar cultural centre and new visitor centre between the mangrove colony and Koombana Drive as part of a tourism node that includes the Dolphin Discovery Centre. Subject to further investigation, consideration be given to locating the Bunbury Regional Art Gallery at this location.

**CBD32:** That permanent residential not be supported (with the exception of nonstrategic tourism sites where 25% residential may be permitted) because of proximity to the port, the high value of the land for alternative uses and insufficient numbers to create a liveable neighbourhood unit.

**CBD33:** That the Koombana Bay Sailing Club location be further investigated for a marina development in conjunction with planning for the Outer Harbour that can accommodate all water based community groups and the general public.

**CBD34:** That development of the foreshore areas must be low impact with an emphasis on civic, cultural and tourist-orientated uses. Other development opportunities may be considered following the public release and community feedback on the Bunbury Waterfront Project prepared by Landcorp.

**CBD35:** Reaffirm the conclusion that the Outer Harbour offers a significant development opportunity that will complement the adjoining CBD and North Shore areas of the City.

**CBD36:** That the City in partnership with Landcorp undertake further planning and financial analysis to establish the mix of uses that meet objectives and strategies that seek to improve connectivity between the CBD and the Harbour, provide for a broad range of tourism and recreation experiences, protect and enhance heritage values and build on the existing facilities that currently service small craft to large ships.

## Outer Business District (OBD)

The Council supports the preparation of a local area plan for the Outer Business District consistent with the goals, objectives and strategies of City Vision, with particular reference to the following key elements listed below:

**OBD1:** Improve facilities for pedestrians and cyclists throughout the OBD local area.

**OBD2:** Prepare a housing strategy (including land availability) for Greater Bunbury that identifies opportunities for redevelopment in the OBD.

**OBD3:** Ensure public transport services provide convenient and

frequent access to services and shopping areas.

**OBD4:** Connections between Blair and Spencer Streets be enhanced or developed, including a major upgrade of Stuart Street.

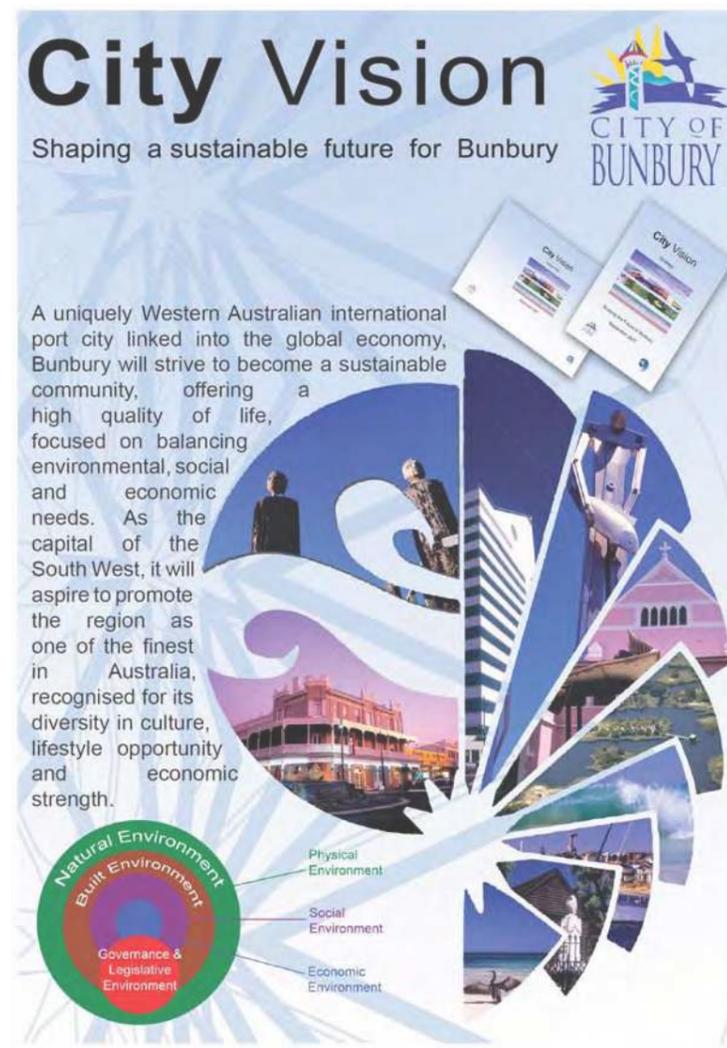
## Inner City Living West (ICLW)

**ICLW1:** The management arrangements for the Big Swamp Regional Park need to ensure that the viability of the wetland vegetation and fauna habitats are the highest priority.

**ICLW2:** Support improvements to the health and welfare of communities through programmes that upgrade pedestrian and cycle paths and provide facilities that encourage people to interact.

**ICLW3:** Prepare a housing strategy (including land availability) for Greater Bunbury that identifies opportunities for coastal short stay residential.

**ICLW4:** Include appropriate provisions in the City's Local Planning Scheme to guide decision-making associated with developments in the proposed Tree Street Heritage Area.



**ICLW5:** Ensure public transport services provide convenient and frequent services particularly to key activity centres south of the CBD.

**ICLW6:** Identify and promote sites for tourist development on the coastal strip and establish the criteria for site mix of freehold subdivision and tourism, height and management arrangements.

**ICLW7:** Allocate sufficient resources for the planning and development of the Big Swamp Regional Park so that the area is established as a major tourist and recreation attraction.

**ICLW9:** That the alternative tourist commercial uses be investigated for the Punchbowl Caravan Park site.

## Inner City Living East (ICLE)

**ICLE1:** Prepare a housing strategy for Greater Bunbury (including land availability) and include an analysis of the potential for higher residential densities in the ICLE area.

**ICLE2:** Ensure structure planning for port expansion and development meets environmental standards for cumulative impacts.

## Southern Suburbs (SS)

**SS1:** That the principles and objectives of urban water management as contained in Liveable Neighbourhoods be applied to all future subdivision in Usher, Tuart Brook and College Grove.

**SS2:** That the Five Mile Brook be progressively improved consistent with the Five Mile Brook Restoration Plan 70 adopted by Council.

**SS3:** That a management plan be prepared for the Ocean to Preston River Regional Park that protects and enhances natural values and features.

**SS4:** That planning policy for subdivision, development and redevelopment include requirements for lot and building orientation that maximises the impact of sun in winter and minimises the impact in summer. In addition, building design needs to encourage the use of materials and location/size of openings that reduce the need for artificial climate control.

**SS5:** That pedestrian and cycle facilities and public transport services be improved within and between neighbourhoods and activity centres.

**SS6:** That a housing strategy be prepared for Greater Bunbury that includes an analysis of whether the current housing mix in the Southern Suburbs will meet future needs and recommendations as to changes that may be required to meet those needs.

**SS7:** That current public bus services be progressively improved to provide a more efficient, convenient and safe transport option for regional residents.

**SS8:** That the suburbs of the City be surveyed to establish their key defining elements and a plan be developed to enhance and improve those elements.

**SS9:** That opportunities to reduce the impact of private motor vehicles in suburban streets be identified, prioritised and funded for improvements.

**SS10:** That the importance of schools, particularly primary schools, as an essential element in the structure and viability of neighbourhoods be reinforced with the Department of Education and Training.

**SS11:** That planning for sport and recreation facilities include a detailed analysis of trends in community needs for physical activity and the distribution of costs for the establishment, improvement and management of those facilities that service regional needs.

**SS12:** That a housing strategy for Greater Bunbury including an analysis of the potential to redevelop, improve or renovate housing stock in the Southern Suburbs for aged persons accommodation.

**SS14:** That as part of an assessment of sporting facilities and their capacity to host major events, particular emphasis be given to the replanning of the Bunbury racecourse and trotting track, a football ground that could host AFL and WAFL level matches and ancillary facilities to support the Olympic swimming pool.

**SS15:** That College Grove be planned in conjunction with the adjoining areas of Tuart Brook, Carey Park and the health and education campuses with particular reference to:

- the location and timing of the development of a new primary school;
- the location, scale and design of a local commercial centre;
- the development of improved pedestrian, cycle and vehicle connectivity between Tuart Brook and College Grove and Carey Park and the health and education campuses;
- a review of public transport services to the new residential estates and the health and education campuses;
- the potential to establish supported accommodation facilities for people with disabilities;
- subdivision design that is water sensitive and solar-orientated;
- the preparation of a management plan for the Ocean to Preston River Regional Park;
- the urban design for College Grove, Tuart Brook and planning for the health and education campuses needs to give a strong emphasis to pedestrianisation and cycleways and adequate parking provision, the connection of Sommerville Drive to Robertson Drive, and that proposals for development on the health and education campuses not compromise the expansion of Edith Cowan University, TAFE or the health campus.



## Eastern Suburbs Vision Focus Area (ES)

**ES1:** That the principles and objectives of urban water management as contained in Liveable Neighbourhoods be applied to all future subdivision in Glen Iris/Moorlands.

**ES2:** That the Preston River and Woodley Road wetland be assessed as part of a study aimed at restoring the natural values of these features.

**ES3:** That the redesign and construction of the Preston River improve the interface with Moorlands, in particular an improvement in the visual amenity of the river levees, opportunities for walk and cycle paths and the development of viewing areas.

**ES4:** Public transport connection from Pelican Point, Moorlands and Glen Iris to key activity centres be reviewed to ensure that these areas are adequately serviced.

**ES6:** That structure planning for the Glen Iris/Moorlands area gives a high priority to a pedestrian and cycle network.

**ES8:** That structure planning for the Glen Iris/Moorlands area ensures that adequate provision is made for active and passive recreation facilities and that development of those facilities be aligned with the growth of the Eastern Suburbs.

**ES10:** That structure planning for the Glen Iris Moorlands area ensures limited, safe and efficient access to major arterial roads, uses that can buffer the impact of the major roads from residences and community purposes and adequate provision for public transport and pedestrian and cycle networks.

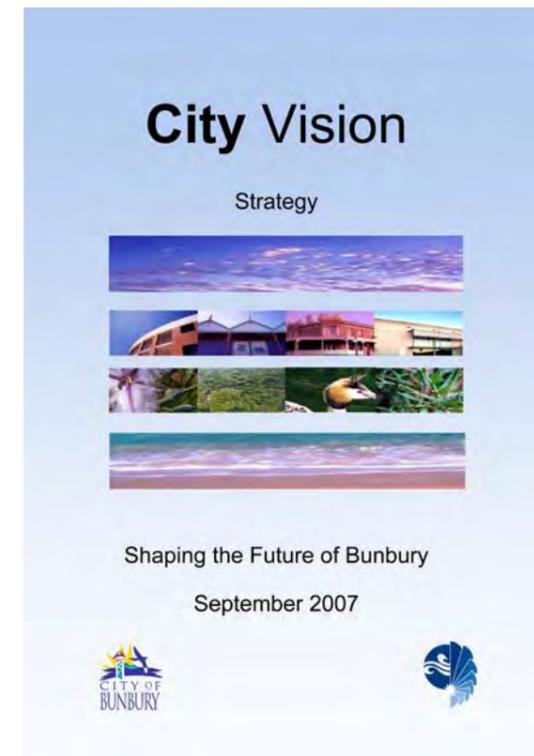
**ES11:** That a Neighbourhood Centre be planned to service the developing residential areas of Glen Iris/Moorlands.

## Withers / Minnipup Area

**SS16:** That the Withers/Minnipup area be planned and redeveloped to facilitate a greater sense of community through improvements in urban design, housing choice, commercial and community purpose facilities and pedestrian, cycle, public transport and vehicle facilities and systems.

**SS17:** That proposals for the expansion of the Minnipup Forum Shopping Centre be consistent with the commercial centres strategy endorsed by Council and the WA Planning Commission.

**SS18:** That the proposal for the extension of Hudson Road through Hay Park to Robertson Drive is not supported taking into account recent road planning and development improvements in the area and the impact of a major district distributor road on safety, amenity and the effective use of the Hay Park facilities.



The inaugural Bunbury Housing Strategy was prepared by Hocking Planning and Architecture (November 1993), which provided a baseline analysis of established housing stock in relation to character and condition according to 20 discrete precinct areas.

The 1993 Housing Strategy took into account a range of issues such as demographics, housing demand and the need for conveniently located centres, but its main focus and contribution was in documenting the residential character and amenity within the defined precincts.

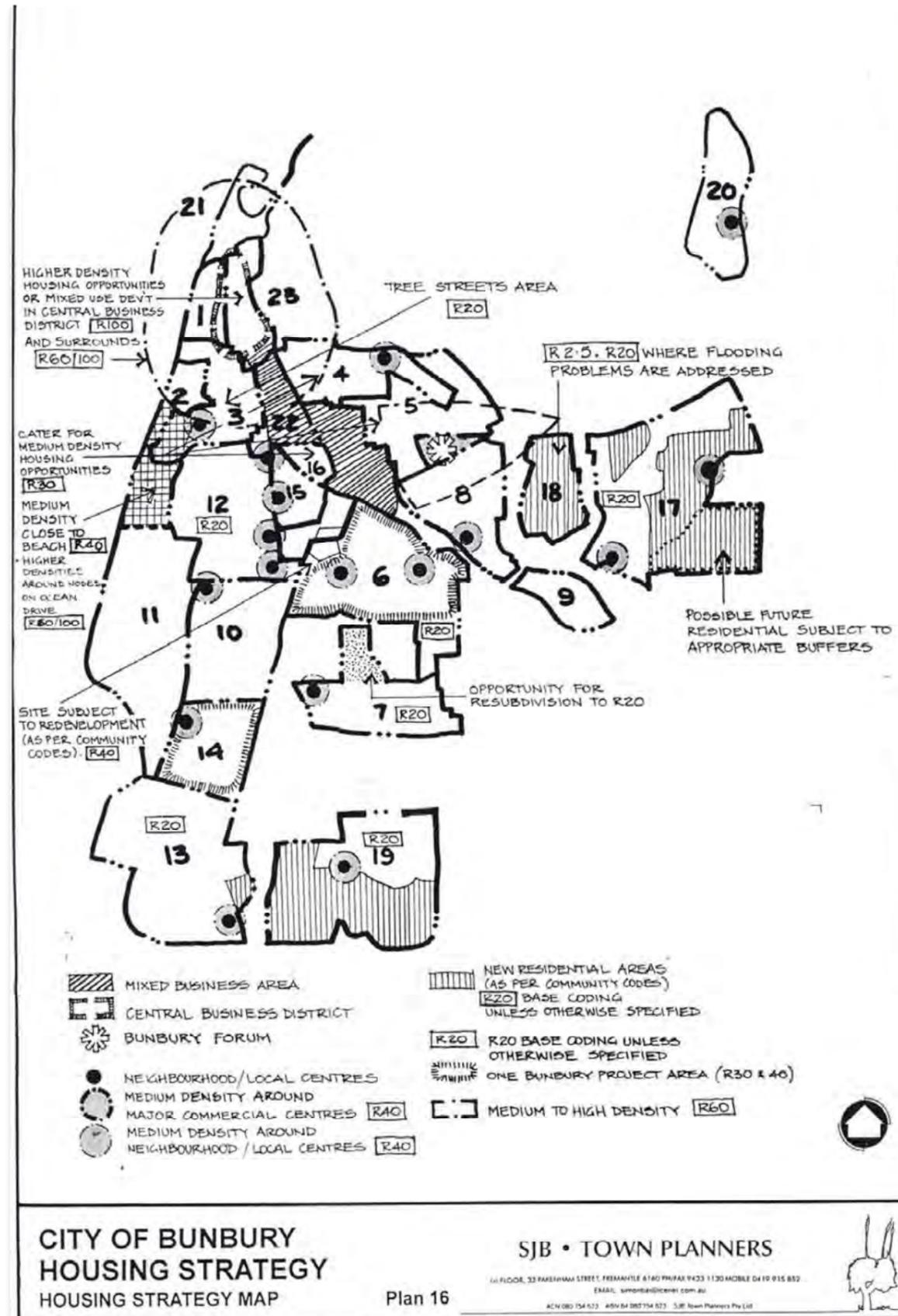
The current City of Bunbury Housing Strategy was prepared by SJB Planning and Urban Design in association with GHD Pty Ltd (July 2001), which carried on with the precinct-based approach of the previous 1993 Housing Strategy as a starting point. However, the 2001 Housing Strategy modified the boundaries to reflect criteria such as lot sizes, zoning, density coding, service availability, housing age and condition, development potential, heritage values and current development pressures.

The 2001 Housing Strategy placed a greater emphasis on defining precincts as neighbourhood cells - seeking to encourage infill residential development to be focused around local and district centres.

The 2001 Housing Strategy concluded from analysis of population and housing trends that:

- young families would tend to gravitate to new residential subdivisions on the fringe of and outside the City as the supply of new residential land within the city boundaries is limited in the long term;
- the demand for a variety of medium density housing would expect to increase, particularly close to the coast and the CBD, in response to the needs of an ageing population; and
- infill development would be the key to meeting this demand but was subject to various constraints including existing lot size and shape, prevailing density coding, the availability of deep sewerage, the presence of flood-prone areas, character and heritage considerations.

Figure 3.2.2 Housing Strategy Map 2001



While the 2001 Housing Strategy identified opportunities and constraints for residential development within precinct areas - it nevertheless outlined the need for further work in formulating a general policy for each precinct and specific policies for regulating development in heritage areas, medium density infill development, aged persons housing and interfaces with conflicting commercial uses. However, many of the 2001 Housing Strategy recommendations were not implemented due to the currency of data used and imitations in methodology.

The Landscape Character Study is not intended to function as a land use planning strategy or a local planning policy for influencing housing - but instead is intended to inform the development of revised strategies and policies. As such the Landscape Character Study represents an important methodological step in good urban planning practice by acting as a reference document in the preparation of the revised Local Planning Policy Framework (incorporating the Local Planning Strategy for Activity Centres & Neighbourhoods and Integrated Local Area Planning). In simple terms, the Landscape Character Study documents 'what is' in terms of our City's landscape character which fundamentally underpins both its identify and quality of life.

The Bunbury Integrated Land Use & Transport Vision 2030 (GHD, 2006) provides a direction for transport in the City and actions to improve transport for the next 30 years.

### Vision Statement

**“To provide an improved quality of life to the people of the City of Bunbury through a balanced transport system built on sustainable transport and land use options.”**

The City of Bunbury is the focus for many activities in the South West of Western Australia. Therefore regional transport from the hinterland also focuses on the City. The City serves local residents plus those in the immediate surrounding urban areas of Australind, Eaton, Dalyellup and more, together with commerce and industry. As a result, the transport system serves a variety of purposes both regional and local.

The most relevant elements of the document are the objectives for public transport and land use integration. Before implementing policies that will improve the public transport system in Bunbury and surrounding Shires, the nature of growth in Bunbury, both residential and commercial, must first be understood.

The objectives are as follows:

### Public Transport

- More direct bus routes
- More attractive bus stops and shelters
- Remove single CBD bus stop and replace with on-street bus stops
- Implement Park and Ride facilities including a Free Transit Zone (FTZ)
- More frequent bus services
- Better bus scheduling and hours of operation
- Public sector/ Land developer partnerships to coordinate the set up of services
- Develop an integrated multi-modal Bunbury accessibility scheme.

### Land Use and Integration

- Ensure that land use supports public transport through development around public transport routes
- Ensure that land use supports walking and cycling through mixed use development, safe routes and attractive precincts for activities
- Ensure new developments include facilities for cycling and for people with disabilities
- Encourage local employment business and leisure activities in the City
- Facilitate integration of land use and transport planning.

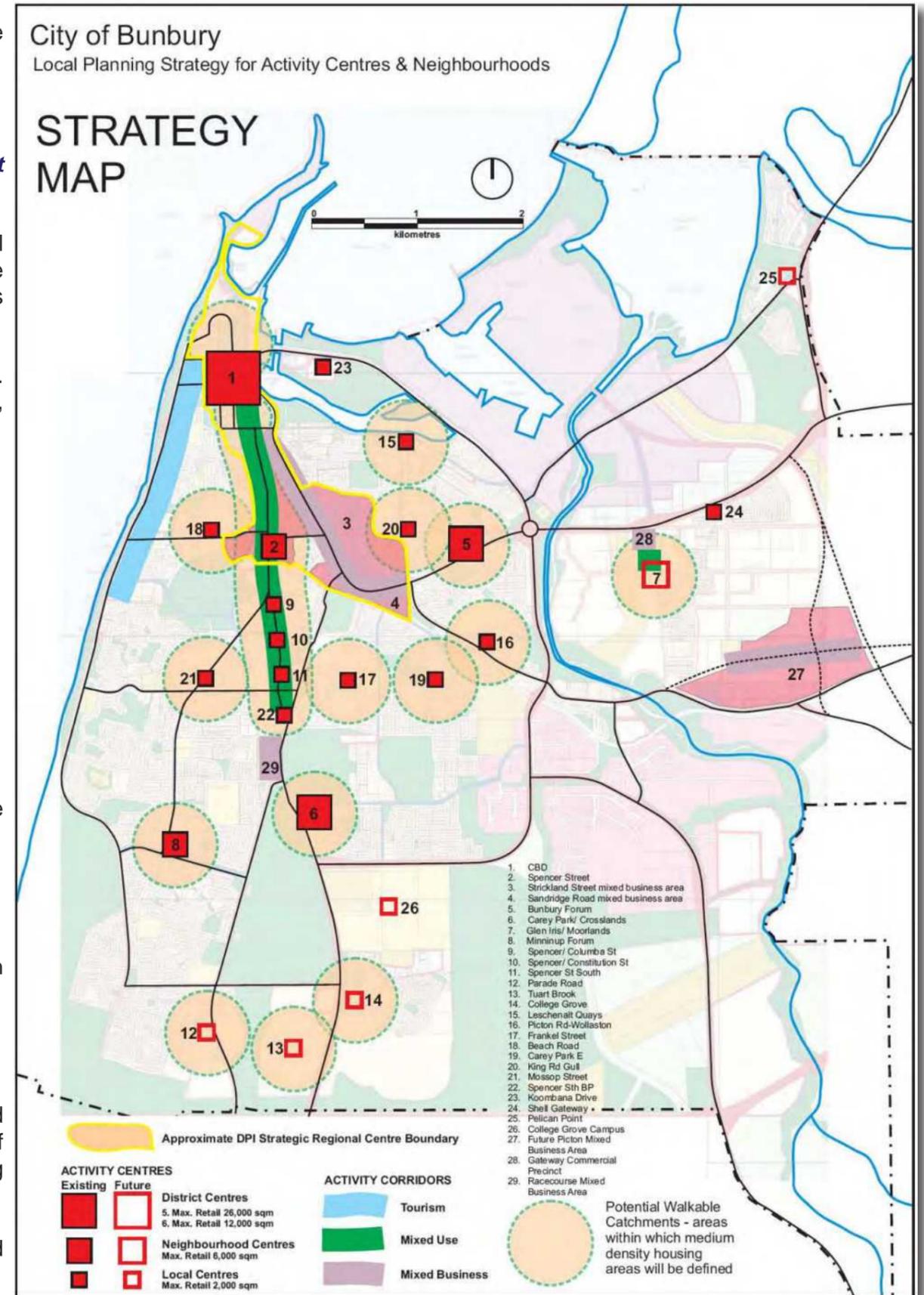
The Vision document was published in 2006 and was developed for the City of Bunbury in conjunction with technical consultants, and involvement from the public and other government agencies.

### Local Planning Strategy: Activity Centres & Neighbourhoods (DRAFT)

The Local Planning Strategy for Activity Centres and Neighbourhoods (LPSACN) is currently in draft form, and has been developed simultaneous to the LCS to ensure consistency in the designation of future R-coding of activity centres and neighbourhoods with the desired future character and amenity (Figure 3.5: Local Planning Strategy for Activity Centres & Neighbourhoods Map).

The principle aim of the LPSACN is to facilitate a network of mutually supportive residential neighbourhoods and activity centres that contribute to the economic, social and environmental sustainability of the City of Bunbury.

Figure 3.2.3: Local Planning Strategy for Activity Centres & Neighbourhoods Map



Rather than attempting to define a specific, idealised future outcome for the City, the LPSACN identifies the fundamental characteristics of a sustainable city and deliberately leaves open as many options as possible for achieving these characteristics. It is in effect a principles-based general strategy to guide town planning scheme zoning, policy development and decision making in relation to residential, commercial and mixed use development.

The LPSACN seeks to address four key planning issues distilled from analysis of all the relevant background information, as summarised in the preceding sections. These issues are:

- how the regional centre can best be planned and managed to accommodate future commercial demand;
- how the viability and attractiveness of the City's other activity centres, particularly the smaller ones, can best be supported and improved;
- how the integrity and positive qualities of existing residential neighbourhoods can be maintained and enhanced;
- how best to accommodate the increases in residential density necessary to satisfy the future demand for townhouses and apartments.

### 3.3 City Entry Points

There is no single entry point into Bunbury; however, there are a number of key entry corridors that lead into the city from Perth and from surrounding towns inland and further south. The main point of entry is Australind Bypass. With the completion of the New Bunbury to Perth Highway, which opened September 2009, the journey from Bunbury to Perth has been significantly reduced as the continuous stretch of freeway bypasses Mandurah and skirts further inland, reducing the trip by approximately 20 kilometres and up to half an hour of trip time. Refer to Figure 3.3.1: Forrest Highway and Figure 3.3.2: Regional Road Networks and City Entry Points.

### 3.4 Settlement Pattern

Captain James Stirling first explored the future town-site of Bunbury in 1830. Bunbury, lying on the neck of land leading to Casuarina Point, was named in honour of Lieutenant Henry William Bunbury in 1836 and was officially declared a town in 1841. A port was established at the site and became an outlet for resources from the vicinity, such as horses bred in the area. By 1870, timber being cut and milled in the surrounding South West Division was being shipped from Bunbury port.

The rapid development which took place in the area was representative of the dramatic expansion of Bunbury that coincided with the Western Australian gold boom and the resultant growth in the timber export trade in the region. With the completion of the railway connection with Perth in 1893, and significant development of the harbour, Bunbury became an important administrative centre for the south-west region. (CoB *East Bunbury Heritage Area Study*, Heritage and Conservation Professionals, 2009) Refer to Appendix 3: Bunbury Settlement Pattern Map. The settlement pattern map shows that inner city suburban areas developed between 1940-1960 whilst the outer suburban areas were developed between 1980-2000.

### 3.5 Views of Significance

The Study focuses on local and site-specific viewing experiences with a stronger emphasis on the CBD and views of the three waters of Koombana Bay, Leschenault Inlet and the Indian Ocean from Ocean Drive and coastal surrounds.

Localised viewing experiences have been mapped including major road corridors, landmarks, lookouts, walking trails and significant buildings sites across the City to define the location of significant viewsheds and corridors (refer to Figure 3.5).

The VLPWA uses the following three scales to evaluate viewing experiences;

- Regional,
- Local, and
- Site Specific

(Refer to Appendix 4 for the VLPWA hierarchy table).

### 3.6 Point of View Analysis

The Point of View (POV) is the location in which key views are most visible and the viewshed is the arc of visibility which may vary from foreground to background views depending on topography and built form within its path.

The analysis consists of ten POV's across the City where significant views of landmark features and landscapes are visible. Significant corridors are generally along major roads or thoroughfares such as Ocean Drive, Blair Street, Koombana Drive and Symmons Street.

Figure 3.3.1: Forrest Highway



Image Source: Southern Gateway Alliance - [http://www.sgalliance.com.au/npbh/pdf/banner\\_map.pdf](http://www.sgalliance.com.au/npbh/pdf/banner_map.pdf): Last accessed on 27/11/09

# Landscape Character Study

**Figure 3.3.2: Regional Road Networks and City Entry Points**

## 1. Australind Bypass via Eellup Roundabout

The main entrance into Bunbury from Perth is via Australind Bypass which continues on from Old Coast Road. This entry is known as the Northern Entrance, and is marked with an abstract nautical art sculpture.



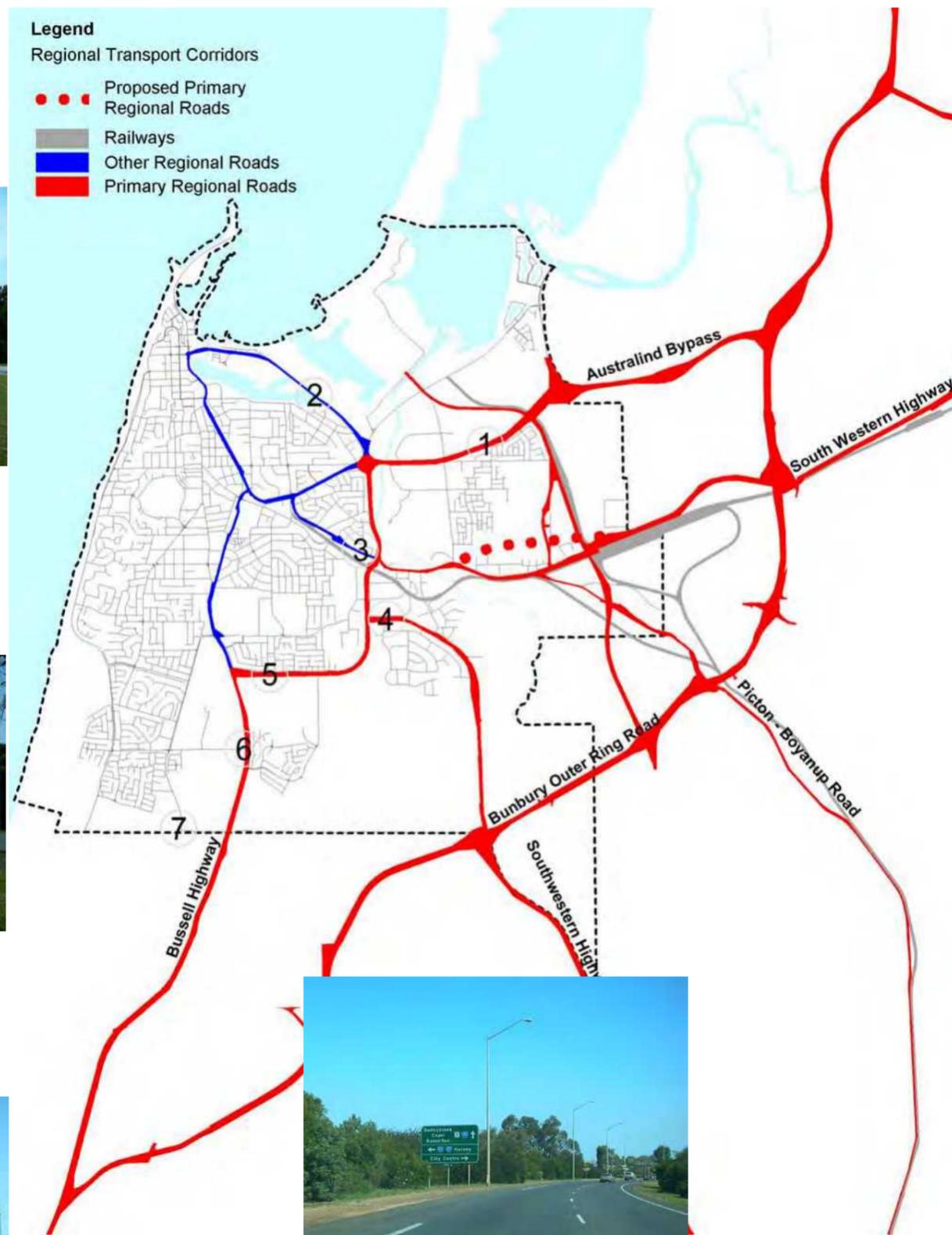
## 2. Koombana Drive

Koombana Drive is accessed off of the Eelup roundabout, and it gives the first distant glimpse of the City over the Leschenault Inlet.



## 3. Bunbury Bypass & Picton Road Intersection

The Bunbury Bypass is a short strip between the Eelup roundabout and South Western Highway. Picton Road is accessed predominantly for commercial and industrial uses, and also as an alternative route into the City from Picton and Halifax.



## 4. South Western Highway & Bunbury Bypass

The South Western Highway is used between Bunbury and Harvey, and Dardanup via Boyanup Picton Rd. The traffic is generated by commuters and commercial vehicles, more than by tourists.



## 5. Robertson Drive & Bussell Highway

This route is a major access for traffic accessing Busselton and Margaret River and is also a thoroughfare for local traffic of Dalyellup. The hospital and tertiary campuses are located along this stretch.



## 6. Bussell Highway & Washington Avenue

The intersection of Washington Road and Bussell Highway signifies the entrance into Bunbury from the south, and will become a major interaction as urban areas are developed in College Grove and south of Washington Avenue.

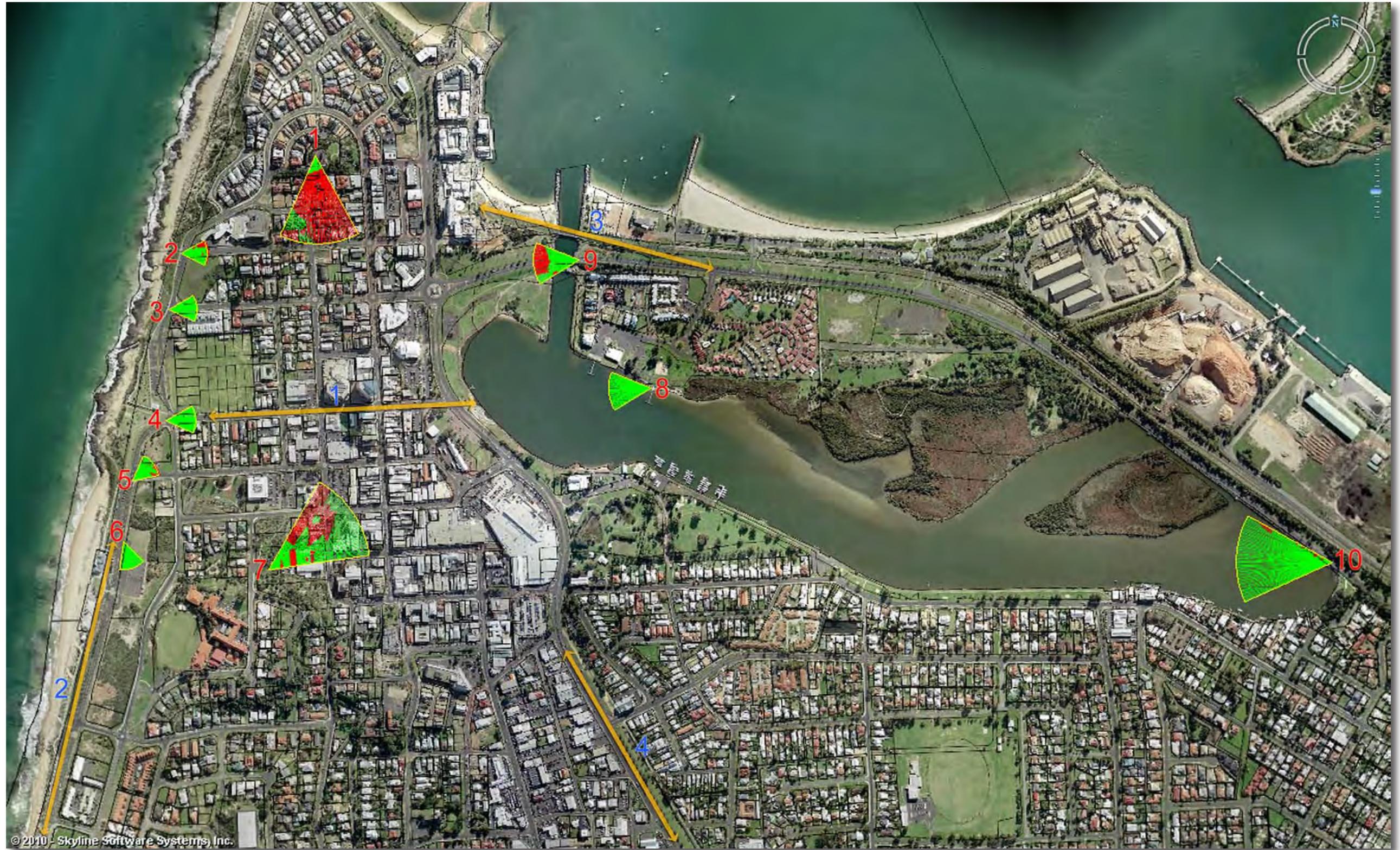


## 7. Parade Road & Centenary Road

This is the recently constructed road link to Dalyellup residential area in the Shire of Capel. This entrance is predominantly to divert residential traffic from the Bussell Highway in peak traffic hours.



Figure 3.5: Viewshed Analysis



### Legend



Point of View



View Corridor

## Viewshed Analysis

### View Types

Panoramic, Sequential, Canopied, Enclosed, Feature, Focal, Landmark, Corridor, Long Vista, Seasonal, Travelling.

#### 1. Marlston Hill

##### Lookout

Type: Panoramic Vista

Description: Whilst there are 360° views from the lookout, the significant view shed is approximately 120° spanning from east to west look south over the CBD.



#### 2. Rocky Point

Type: Panoramic

Description: Takes in Ocean Drive looking east towards the Lighthouse Hotel and pans around to the foreshore, Indian Ocean and basalt rock formation along the beach.



#### 3. Corner of Carey

##### Street & Ocean Drive

Type: Panoramic

Description: Views north towards the lighthouse, directly down Carey Street and glimpsing the Bunbury Runners Club.



#### 4. Corner of Symmons

##### Street & Ocean Drive

Type: Panoramic

Description: Views down Symmons Street towards the Bunbury Tower, and north east of the Bunbury Runners Club and foreshore area on the periphery.



#### 5. Corner of Wellington

##### Street & Ocean Drive

Type: Focal/ Panoramic

Description: Overlooking public reserves to the north, the Bunbury Runners Club



and direct view down Wellington Street; focus still on the Bunbury Tower.

#### 6. Foreshore car park behind the SLSC

Type: Focal

Description: Views are obscured by dunes at eye level, sight lines are toward the Senior High School at the top of the hill in the background, single dwellings in at mid level and play courts in the foreground to the north.



#### 7. Boulter's Heights Lookout

Type: Panoramic

Description: The lookout has views over the CBD, the Inner Harbour and Outer Business District. Major features include the residential tower in the foreground and the Bunbury Tower in the background and St John of God hospital site to the south.



#### 8. Bunbury Motor Boat Club Jetty, Leschenault Inlet

Type: Panoramic/ Long Vista

Description: Views of the CBD over the Inlet from the silos to the north to the rowing club to the south with the Bunbury Tower in the centre.



#### 9. The 'gateway' bridge over the Cut

Type: Travelling/ Landmark/ Panoramic

Description: Views of the CBD as approaching from Koombana Drive with the Silo to the immediate right, the Tower ahead and the Inlet foreshore to the left.



#### 10. Crossing the Inlet from Koombana Bay

Type: Travelling/

Seasonal/ Landmark

Description: The White Mangroves are in the foreground, and a border of housing curving around the left, including the Parade Hotel blending into the CBD in the background centred by the Bunbury Tower. This view changes with the tides, as the Mangroves are exposed and covered throughout the day.



# Landscape Character Study

## View Corridor Analysis

### 1. Symmons Street

Description: Symmons Street is an east west road in the CBD which is the only visible link from Ocean Drive to the Leschenault Inlet. Viewed from the east, is an expansive view with a long vista. The west is an enclosed view with the flag pole forming a focal point at the end. This link is an important pedestrian movement corridor.



### 2. Ocean Drive

Description: Ocean Drive is a long, open vista with expansive views of the Indian Ocean to the west and the diverse rolling topography to the east which is predominantly developed for residential and tourism uses at a low to medium scale. The views are equally significant in a north or south direction.



### 3. Koombana Drive

Description: Driving over the bridge on Koombana Drive reveals an open vista with a landmark feature in the midground and several other landmark features within the same view shed. Both left and right of the bridge contain landmark features, making this vista a significant one. It is expected that future development within the field of view here will alter this view corridor significantly, yet retain views to major landmarks.



### 4. Blair Street

Description: Driving down Blair Street from the CBD or Koombana Drive is an enclosed corridor experience that signifies the entrance of a mixed business / commercial district. Low & medium scale buildings in bright colours and excess advertising creates a character synonymous with commercial activity, car yards, bulky goods retail and light industry trades.



## 3.7 Valued Landscape Character and Contributing Features

The elements that contribute to landscape character may be split into categories to express the type of value that they represent. These landscapes may contribute to an overall landscape character or they may individually encompass a whole area; for example natural landscapes may be a larger expanse of area, with no other contributing features such as built form.

### Residential Landscapes

#### East Bunbury Heritage Area



The East Bunbury Heritage Area was developed in the 1880's and is located on the south side of the Leschenault Inlet. The neighbourhood is valued for its cultural and historical significance and the building stock is protected under the Local Planning Scheme to conserve the character and amenity that is valued.

### Natural Landscapes

#### White Mangroves



The White Mangroves are estimated to be around 25000 years old. The mangroves are a unique ecosystem that contains more than 60 species of waterbird (City of Bunbury Visitor Guide 2008-2009). There is a boardwalk in and around the mangroves for walking and cycling.

#### Big Swamp Reserve

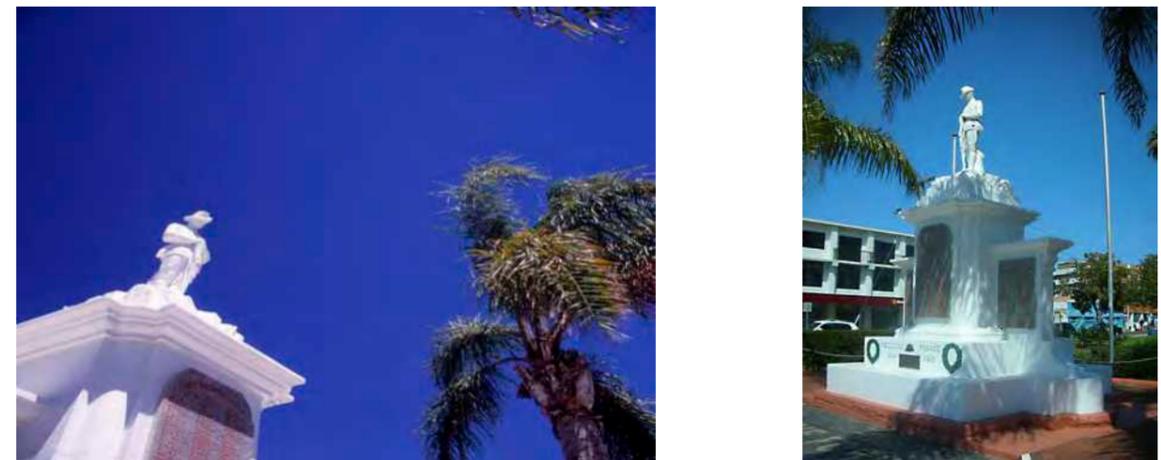


The Big Swamp Wildlife Park is a natural wetlands system that includes walking trails and observation decks. The Park has a wildlife enclosure that is home to many native birds and animals where students, community groups and the public can observe and pet the animals, in addition to the many waterbirds, turtles and snakes that live within the wetlands.

Located in the urban area of South Bunbury, Big Swamp holds significant cultural and ecological significance to its inhabitants and visitors and is a great place for recreational and social activities. The park has excellent playground facilities, public amenities and availability of car parking.

### Historical Landscapes

#### ANZAC Park War Memorial



The ANZAC Park War Memorial is located in the Memorial gardens at the end of Victoria and Stirling Streets in the CBD (in front of the City Library). The memorial statue is a tribute to World War I soldiers and is the location of memorial services such as Anzac Day and the Remembrance Day Services. The accompanying palm trees contribute to the historical heritage significance of the memorial and are also listed on the Municipal Inventory.

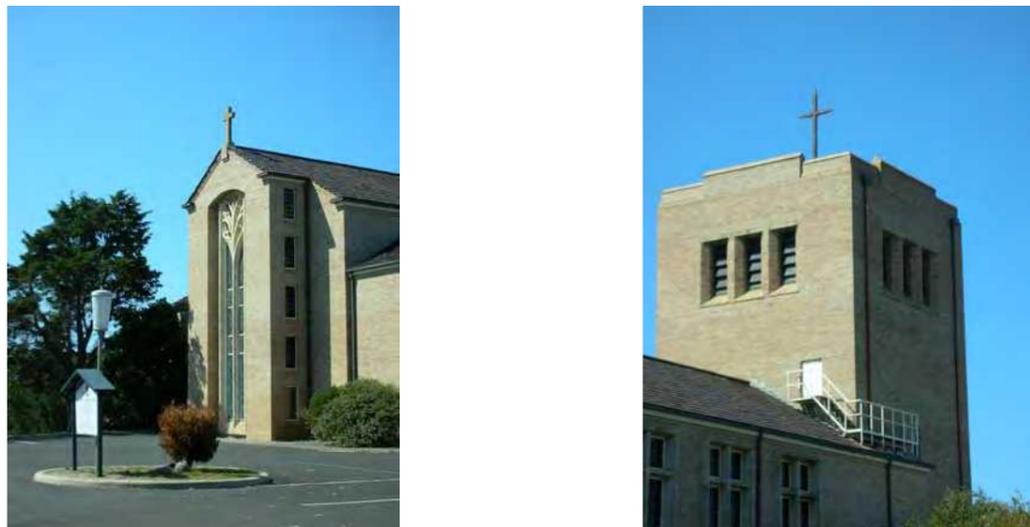
## Saint Mark's Anglican Church



St Mark's Anglican Church was completed in 1842, (located in Sandridge Park) and is the second oldest surviving church in Western Australia. The Church was reconstructed some years later, replacing the original post and lintel construction but largely maintaining the character of the original building. (Bunbury Heritage Planning Committee, Bunbury Heritage Trail, W.A. Heritage Committee, 1988).

The accompanying cemetery contains the headstones of founding Bunbury families, and early members of the church. The fragile state of building and landscape require regular maintenance and conservation works to maintain the current integrity of the site.

## Saint Boniface Cathedral



Saint Boniface Cathedral was built in 1960 by the Anglican Church, and is located to the south of the CBD. The height of the Cathedral is visible on approach, signalling the location of the building that would otherwise go unnoticed in a suburban setting.

The church replicates the Saint Boniface Cathedral of Bunbury in Cheshire, England and has historical and cultural significance in the Bunbury community.

## Cultural Landscapes

### Tree Streets Character Area



The Tree Streets Character Area is a residential neighbourhood south of the CBD that was developed in the 1900's and is a grid of streets all named after local trees. The area is renowned for its uniformly tree-lined streets. Notably, in particular the Cape Lilacs that characterise the area are as old as many of the houses.

Residents that identify with the area have an instilled sense of community pride in the elegantly aged homes and scenic streetscapes. Due to the poor health of some of the trees, the contentious issue of replacement is currently being discussed with the community to implement a long term plan and suitable species replacement to maintain the established character.

## 3.8 Integrated Open Space

Bunbury has a well connected network of public parks and reserves ranging from foreshores, to sporting fields to local neighbourhood parks. Some of this is crown land and some is vested to the local government or community groups.

The proposed Ocean to Preston River Regional Park (OPRRP) is predominantly located within the City limits as well, which consists of a series of interconnected parks across the City that form a Regional Park which provides a substantial education, recreation and conservation resource.

Bunbury has a range of park sizes which form a network of open space across the city which provides a continuous linkage of natural landscapes beneficial to wildlife and Bunbury citizens alike. (Refer to Figure:3.8.2)

### Regional Open Space

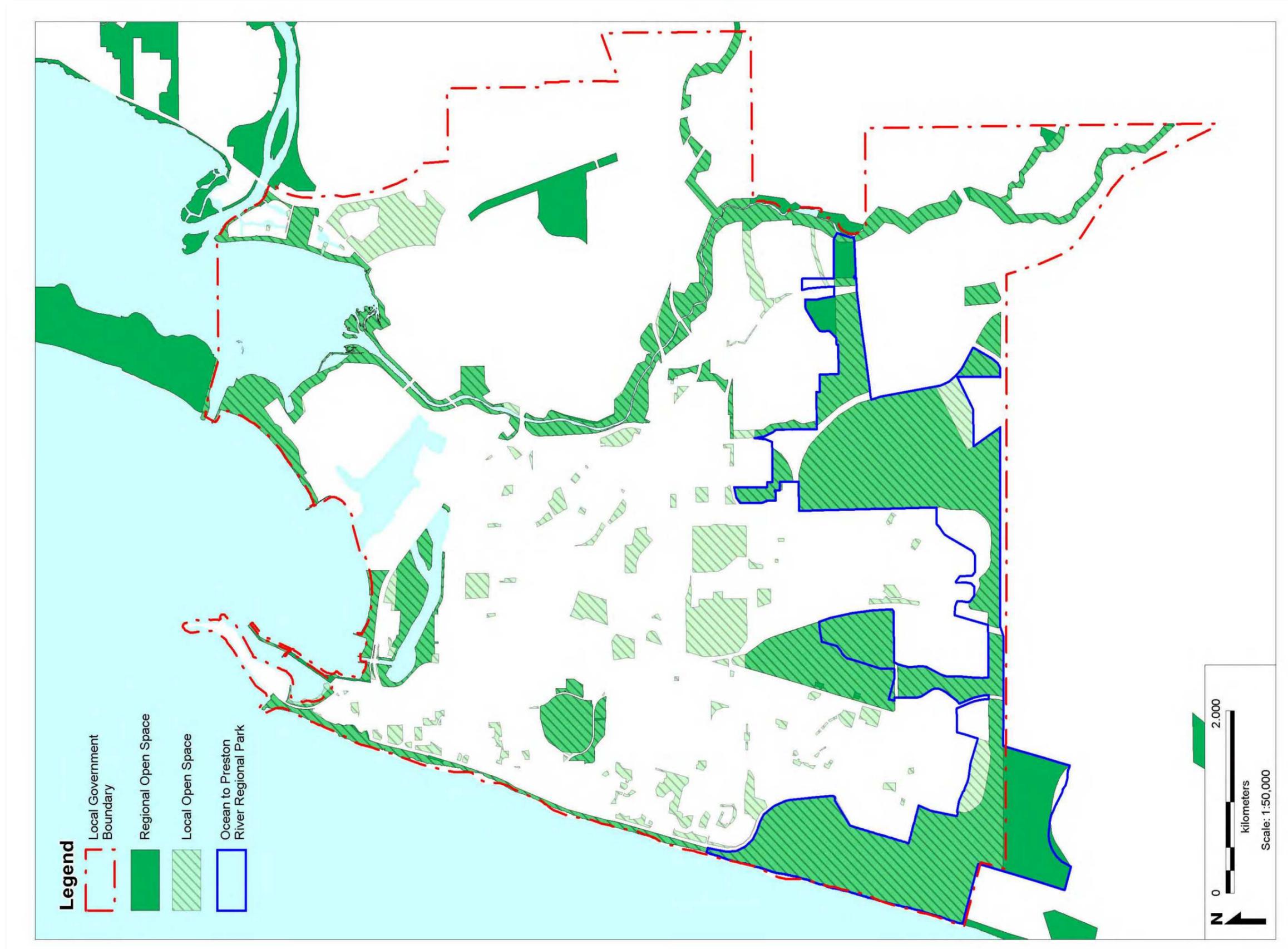
Land reserved for Regional Open Space under Clause 10 (a) of the Greater Bunbury Region Scheme (GBRS) is zoned for public purposes that will protect the natural environment, provide recreational opportunities, safeguard important landscapes and provide for public access. Land reserved under the GBRS is generally used for community purposes or reserved to protect significant vegetation and wetlands, such as Big Swamp Wildlife Reserve and the White Mangroves. These parks generally contribute positively to landscape character because they are natural attractions, and are being preserved for future generations to enjoy (refer to Figure 3.8.1).

## Public Open Space

Public open spaces are a valued community asset whether they are the scale of a local neighbourhood park, sports grounds or a coastal foreshore. Open space is usually used for passive recreation, sporting facilities, club rooms, and playgrounds. However, it is also used for community events and may be reserved for the protection of native vegetation or waterways. Many local parks are designated as part of a contribution to the development of a new suburb, which ensures that the majority of residents may enjoy a larger open space than the confines of their property for physical activity or passive recreation (refer to Figure 3.8.1).



Figure 3.8.2: Integrated Open Space



## Ocean to Preston River Regional Park

The State Government is currently planning for the establishment of the Ocean to Preston River Regional Park in order to provide a substantial education, recreation and conservation resource for the existing and future population of Greater Bunbury.

The proposed regional park is situated almost entirely within the City of Bunbury and Council is currently responsible for managing approximately 60% (~560 ha) of the park's total area of 913 hectares. A portion of the regional park is located in the Shire of Capel, which is currently vested in the State Housing Commission and the Water Corporation.

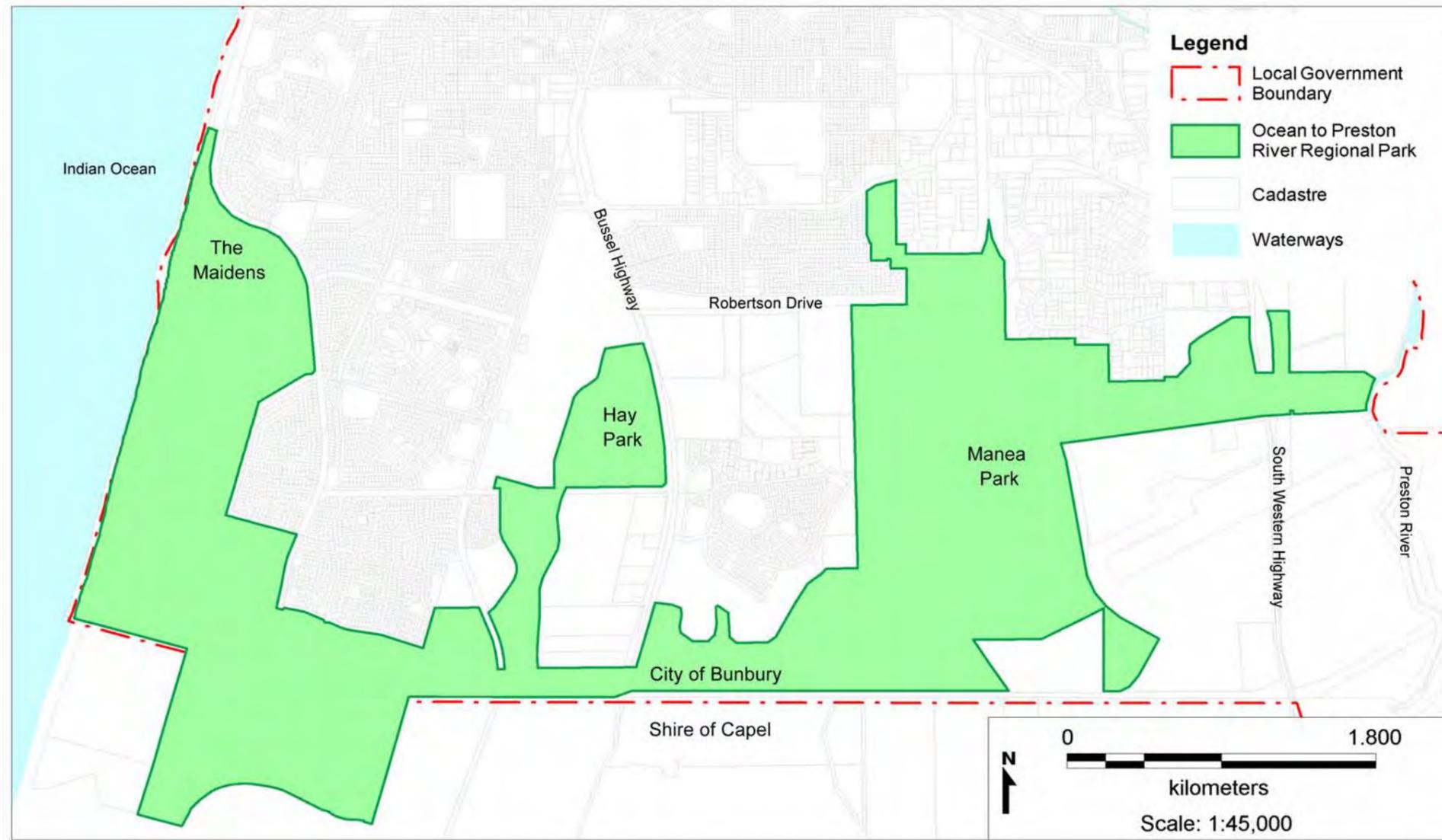
The Western Australian Planning Commission released the Draft Ocean to Preston River Regional Park Establishment Plan in April 2008 in order to guide the establishment of the regional park. Within the document it is proposed that the City of Bunbury relinquishes the majority of its current land holdings to the State Government for management by the Department of Environment

and Conservation, excluding the Maidens playground area which is to remain under Council's control.

In May 2008, the Western Australian Planning Commission contacted the City of Bunbury in order to seek confirmation of the land holdings that Council is willing to relinquish to the State Government.

The regional park proposal presents many issues for Council to consider and there is still much uncertainty regarding the likely final outcome. It is understood that much of this uncertainty will not be resolved until the Department of Environment and Conservation prepares the Conservation Management Plan for the regional park in the future (refer to Figure 3.8.3).

**Figure 3.8.3: Ocean to Preston River Regional Park**



## 3.9 Telecommunications Infrastructure

### Principles of Siting and Design

Telecommunications facilities should be designed and sited to minimise any potential adverse visual impact on the character and amenity of the local environment, in particular, impacts on prominent landscape features, general views in the locality and recognised significant views. The following principles are a guide to achieving these objectives.

- Telecommunications facilities should be designed and sited to minimise adverse impacts on areas of natural conservation value and places of heritage significance or where declared rare flora are located.
- Telecommunications facilities should be designed and sited to minimise adverse impacts on the visual character and amenity of residential areas.
- Telecommunications cables should be placed underground, unless it is impractical to do so and there would be no significant effect on visual amenity or, in the case of regional areas, it can be demonstrated that there are long-term benefits to the community that outweigh the visual impact.
- Unless it is impractical to do so, telecommunications towers should be located within commercial, business, industrial and rural areas outside identified conservation areas.

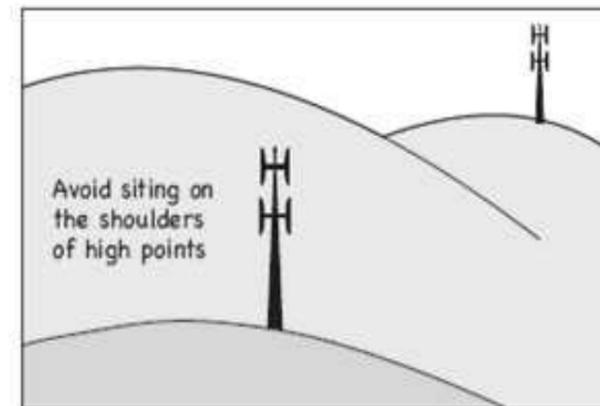
The siting and design of telecommunications infrastructure is well documented and should be in accordance with existing State Planning Policies and publications such as:

- CALM Policy Statement No. 49 – Radio Communications Facilities Policy (1993);
- WAPC 2004 - Statement of Planning Policy No 5.2: Telecommunications Infrastructure;
- WAPC 2008 - Visual Landscape Planning In Western Australia: A manual for evaluation, assessment, siting and design;
- WAPC 2004 – Guidelines for the Location, Siting and Design of Telecommunications Infrastructure;
- WAPC 1997 – Telecommunications Infrastructure Planning Bulletin 22;
- WAPC 2000 – Applications for Telecommunications Infrastructure Planning Bulletin 46; and,
- Mobile Carriers Forum Local Government Association Taskforce – Guidelines for Local Government ACIF Code: Deployment of Mobile Phone Network Infrastructure (2006).

as well as local planning scheme provisions and local planning policies.

(adapted from Guiding Principles for the Location, Siting and Design, Statement of Planning Policy No 5.2: Telecommunications Infrastructure: 2004)

Figure 3.9.1: VLPM, Diagram of Appropriate Siting and Design



CBD example, Bunbury



### Appropriate Commercial & Industrial Locations

Industrial Area, Picton



Industrial Area, Picton



Port Inner Harbour, Bunbury



Outer Business District, Bunbury



## Visual Elements of a Telecommunications Tower

The components of telecommunications towers that are likely to affect the surrounding landscape and visual character comprise:

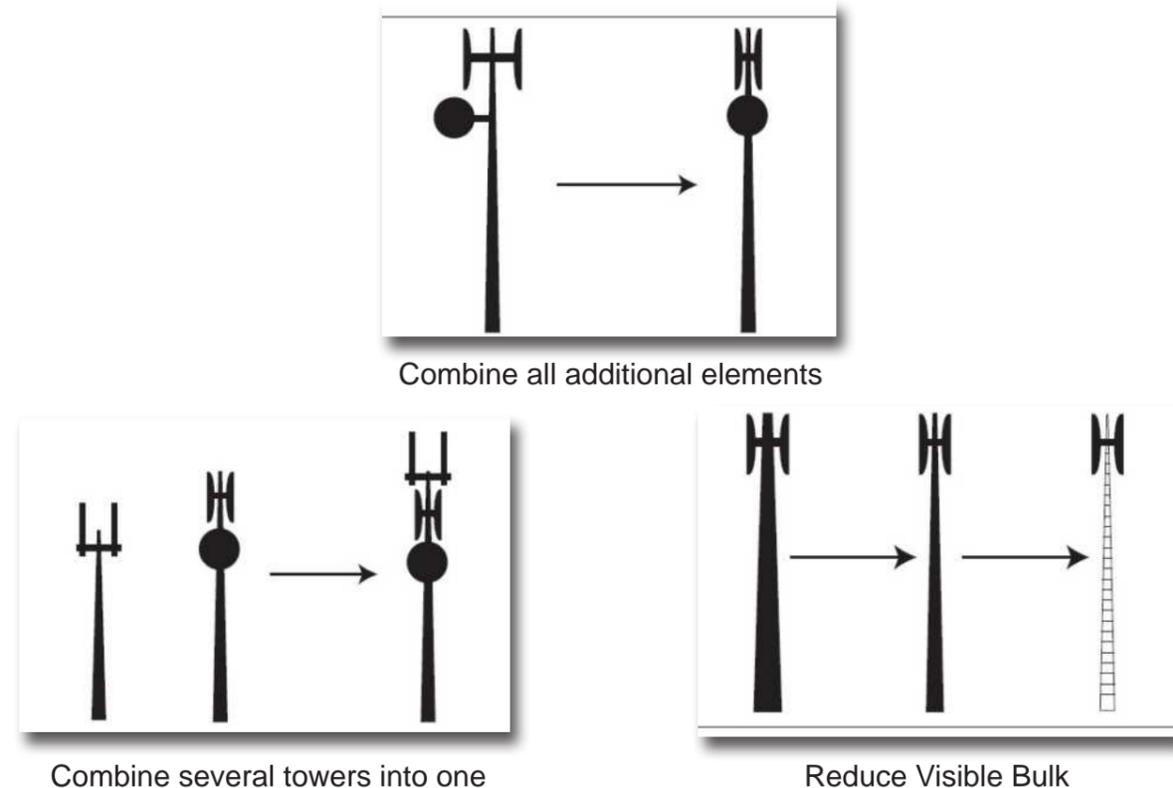
- location of the tower;
- height of the tower;
- additional structures on the tower;
- visible bulk of the structure; and,
- colour of the tower (VLPWA: p136, 2007).

Measures such as surface mounting, concealment, colour co-ordination, camouflage and landscaping to screen at least the base of towers and ancillary structures, and to draw attention away from the tower, should be used, where appropriate, to minimise the visual impact of telecommunications facilities.

(Guiding Principles for the Location, Siting and Design from the Statement of Planning Policy No 5.2: Telecommunications Infrastructure: 2004)

### Visual Impacts

Figure 3.9.2: Elements of Telecommunications Tower Design



Objectives of Minimising Visual Impacts:

- Avoid clutter on individual towers. Combine all additional elements in the most streamlined way possible.
- Combine several towers that are in the same location. This avoids duplication and consolidating the facilities on to one tower reduces the overall visual impact on multiple towers in one location.
- Reduce the visible bulk of the entire structure. Lattice web towers are usually less intrusive than solid towers. This applies with wide to slim design towers. (Fig 3.30-3.32 VLPWA)

Telstra Tower, Bunbury CBD



### Residential Antennae & Satellite Dishes

Stockley Road, Bunbury



Rose Street, Bunbury



Council planning consent is required for overhead cabling, radio communication dishes (greater than 1.2 metres in diameter) and mobile telecommunication towers. As Bunbury is not in a metropolitan area, the television reception is received through regional stations. Metropolitan and international television and radio coverage can be achieved with an aerial mast on the property, some of which stand 10-15 metres high.

The visual intrusion of these masts on the skyline of a residential area is more common in regional areas, however it can be avoided by the location of a community antennae in a neutral position in the suburb that everyone is given the opportunity to connect to.

## 3.10 Public Art Works

Public art is a valuable means of contributing to a sense of place and cultural identity, improving the amenity of the public domain, fostering community values and encouraging interaction, stimulating economic growth and assisting in the interpretation of history and heritage.

Bunbury is deficient in the provision of interpretive material and signage within the built environment. Areas of Indigenous, historical, heritage and environmental significance require interpretation to contribute to the sense of place, as does public art. Including artworks or aesthetic themes in both public and private developments to improve the overall appearance of the city and contribute to the sense of place is strongly encouraged. The sense of place of a city is informed by the general attractiveness, look and feel of the place. The development of a strong sense of place delivers benefits to the local resident as well as to the visitor market and, as such, should be a priority when considering development of public spaces for human activity, recreational activity, performance, festivals and events, and retail activity.

The development of a strong sense of place should be a celebration of the unique character of Bunbury. This can be expressed thematically with relevant interpretative works in the public domain working together to create linkages between key sites such as the three waters and the CBD.

Whilst the appreciation of art is subjective, there are elements of siting and planning that contribute to the successful execution of an art installation that will enable it to form an integral part of the landscape. The following considerations should be assessed in the process of commissioning and implementing the artwork:

### Public Art Work Design Criteria

#### Themes

The character of Bunbury should be conveyed via the strengthening of the city's sense of place. This should not be confined to a singular theme, but should instead be an amalgamation of the characteristics that are the bedrock of Bunbury's cultural identity such as historical, aboriginal and cultural heritage, maritime and port works, the Tuart Forest, the dolphins, the lighthouse, ship wrecks and European settlement and the three waters.

#### Site Selection

Selecting the site for the art work requires consideration of the following; What vantage point the art is going to be viewed and experienced from? Will it gain enough exposure? Will it be accessible to construct and maintain? Is the site culturally significant to the interpretation of the art? Will the artwork visually obstruct any sight lines for vehicles or pedestrians, or block a significant view?

#### Life Cycle

It is important to design the artwork to endure a set time frame (e.g. 5 years, 10 years, 20 years) by using appropriate materials and implementing reasonable maintenance. Installations that have outlived their life span may contribute to the degradation of a landscape and appear untidy or neglected. Setting a realistic life expectancy will allow for planning ahead to replace or maintain the art, to continue benefitting the community.

#### Maintenance

Maintenance of artwork contributes to the hundreds of thousands of dollars spent by the Council annually on removing graffiti and damage from vandals in addition to standard requirements of care. The importance of material selection and design to prevent early deterioration, damage or vandalism is essential.

#### Accessibility

**Coastal:** Artwork along the foreshore is accessible and engages with the public as the coastal areas are highly traversed for each of the Bunbury fore shores. Interpretive art and accompanying information plaques are successful here because people are able to walk right up to the art and read it.

**Roundabouts:** The use of roundabouts as a base for artwork is common in Bunbury, as the road network does feature a lot of roundabouts in and around the CBD and coastal area. Whilst the work gets reasonable exposure from these vantage points, the height and bulk of the art can become a problem for maintaining sight lines across the intersection. Public safety is a primary concern in working with roundabouts, and the art should not be inviting for people to engage with or be encouraged to approach.

**Parks and Reserves:** Like coastal fore shores, parks & reserves are a perfect location to encourage interaction and high visibility. Materials should be designed with exposure to irrigation systems in mind, and consideration for public safety. Visual exposure to nearby shops and residences will reduce the chance of vandalism of the artwork as well.

#### Sight Lines

Where public art is located in a public reserve or roadside, the placement of the piece should not be positioned to block sight lines for pedestrians and vehicles across intersections, in front of signage or turn-offs etc. It should also not visually distract drivers within 100m of a major intersection with moving, flashing or animated elements.

#### View points & Vistas

A well-placed piece of public art may create a significant point of view along a corridor or within a vista that is a point of recognition. Alternatively, the art work may be located at the point of view to encourage tourists and visitors to approach a strategically placed art piece that draws attention to a view or vista or tourist destination.

#### Anti-Vandalism

Consideration should be given to finishes and textures that do not encourage graffiti, such as graffiti resistant materials to enable quick and easy maintenance when necessary.

#### Base Treatment

The treatment of the artwork at ground level (or connection point) affects the way in which people interact with it. The finish/es of the base material should be user friendly, not contain any sharp edges or protruding pieces that may compromise public safety. It should create either a natural progression between the art and the landscape or an intentionally stark contrast in colours and finishes that are compatible with the piece and chosen as an integral part of the art.

## Lighting

Lighting is integral to any project in the public realm. In the instance of public art, there are two considerations; safety and aesthetics. Lighting should be provided to the Australian Standard where it is located for accessibility at night. Particularly where the location is not within a visual catchment of night time activity. If the artwork is not intended to be viewed at night, then lighting is not necessary.

Lighting that forms part of the artwork is open to creative license as long as it does not pose a public safety risk, e.g. Protruding from the pavement or directed at eye level of pedestrians or motorists.

## Wall Murals

Painted wall murals usually represent a community or school group that have been commissioned to express a theme or message that is relevant to their organisation or the local area.

The life cycle of a mural tends to be shorter than most art works due to the rapid deterioration of paint, and frequency of vandalism (graffiti). Murals often reflect a changing or growing theme and can be regularly updated or repainted to reflect this, particularly if it's a student based program. Murals should always appear fresh and relevant, and remain engaging to the community.

## Interaction/Engagement

Successful public art is engaging and interactive with its audience. Sculptures are the most common form of art that can be climbed, sat on, walked through or moved, and can provide informative, educational or historical interest writing to interpret the theme of the work.

Water features are another form of highly interactive artwork that can provide entertainment for all age groups or more specifically as a 'water playground'. The location on the artwork is imperative to the success of the interaction that it receives. High exposure and presence in a public reserve is crucial to the success of an interactive piece.

**Table 3.10: Inventory of Current Public Art Work in Bunbury**

Art Work	Artist	Location
Forest Trees	Howard Taylor	Stephen Street, CBD
Saddle Grove	Ian Dowling	Council Office Foyer, CBD
Floating Stone	Richard Williamson	Council Office Gardens, CBD
Bust of John Forrest	Mark LeBuse	Stephen Street, CBD
Unnamed	Marie Norris Mohn & Julie Parsons	Police Complex Wittenoorn St, CBD
Echo	Tony Jones	BRAG, Wittenoorn St, CBD
Fold	Don Walters	West end of Stirling St, Heights, CBD
Brother and Sister	Russell Sheridan	Cnr of Victoria St & Wellington St, CBD

Art Work	Artist	Location
Gateway	Mary Knott	Cnr of Victoria St & Symmons St, CBD
Bust of Patric Usher	Gerard Darwin	Pat Usher Foreshore, Leschenault Inlet
Bridging the Gap	Alex & Nicole Mickle	Foreshore of Inlet at Rowing Club
The Navigators	John Tarry	Roundabout - Casuarina Drv & Koombana Drv, CBD
Young Smithy	Russell Sheridan	Roundabout - Scott St & Upper Esplanade
Dividers/ sextant	Tony Jones	Bonnefoi Blvd, Marlston Waterfront
Enigmatic Forms	Douglas Chambers	Bonnefoi Blvd, Marlston Waterfront
Peter Gelencser	Bust of Capt Nicholas Baudin	Bonnefoi Blvd, Marlston Waterfront
Fish / Ship	Tony Jones	Bonnefoi Blvd, Marlston Waterfront
Marine Statement	Bernard Kaiser	Dolphin Discovery Centre, Koombana Bay
Various art works	Various artists	Jetty Baths Playground, Marlston Waterfront
Mrs Scott's Washing Line	Kath Weatley	Roundabout - Ocean Drv & Hayward St, South Bunbury
Yoo Walkool Doy Inj-Coming Together	Andrea Bach & NMSH Students	Big Swamp Reserve - South West Corner, South Bunbury
Surveying the Team	Tony Jones & Judith Forrest	Roundabout - Ecclestone St & Wisbey St, Carey Park
Binoculars	Tony Jones & Judith Forrest	Cnr Frankel St & Mitchell Cres, Carey Park
Horse & Rider	Jon Tarry	Cnr Blair St & Frankel St, Carey Park
Live	Alex & Nicole Mickle	Roundabout - Brittain Rd, Carey Park
Now	Alex & Nicole Mickle	Roundabout - Brittain Rd, Carey Park
Fish Markers	Shaun Chambers	Roundabout - Parade Rd & Hudson Rd, Withers
Unnamed	Andrew Hickman	South West Sports Centre, Withers
Maidens	Russel Sheridan	Cnr Ocean Drv & Westwood St, Withers
Interplay	Lorena Grant	Roundabout - Woodley Rd & Orchid Drv, Glen Iris
Pilot	Louise Morrisson & Matt Dickman	Australind Bypass, Vittoria

## 3.11 Suburban Entry Statements

Entry statements are a common feature at the entrance to a housing estate or larger suburban development that are intended to evoke a “coming home” feeling upon entering and encourage a sense of belonging for an enclosed community. Generally the quality of an entry statement is synonymous with the character of the neighbourhood within.

Table 3.11: Suburban Entry Statement Principles

Element	Principles	Example
<b>Theme</b>	New suburban developments often adopt a marketing theme that is carried through the streetscape, signage and artwork that usually represents something significant to the historical, cultural or environmental aspect of the area. Many entry statements feature walling, water features, a logo and name signage that tie together with a theme (e.g. a type of forest tree, or river that is in the vicinity, or a name that introduces the type of community that you are entering).	 Pelican Point Lake Estate
<b>Maintenance</b>	As these entry statements are often accompanied by heavily landscaped formal garden beds, the irrigation needs are high, and the work account for water spray and constant moisture; particularly in a bore reticulated area where discoloration occurs on metals, timber and stone structures. The presence of graffiti, poor maintenance and deterioration are three negative impacting aspects of presentation that have a strong affect on the character of the suburb.	 Kinkella Park
<b>Anti-Vandalism</b>	Consideration should be given to finishes and textures such as graffiti resistant materials to enable quick and easy maintenance when necessary.  Graffiti that is left on the statement is unsightly and draws away from the positive contribution an entry statement should make to the neighbourhood.	 Glen Iris

Element	Principles	Example
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<b>Visibility / Sight Lines</b>	An entry statement serves a directional purpose and therefore it is important that the suburb name/ street name is visible at all times of day; lighting is essential and consideration should be given to plant selection in front of and around the statement so that information is not concealed by plant growth.	
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The Grand Canals, Pelican Point

<b>Lighting</b>	For the purpose of lighting entry statements, there are two considerations; public safety and aesthetics. Lighting should be provided to the Australian Standard where it is located for accessibility at night.  Lighting of the entry statement is open to creative license as long as it does not pose a public safety risk, e.g. Protruding up from the pavement or directed at eye level of pedestrians or motorists.	
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College Grove

# Part 2: Visual Diary

## 2.0 Visual Diary

2.1 Visual Diary of Landscape Character by Local Areas

2.2 Design Elements that contribute to Landscape Character in Local Areas and Neighbourhoods

2.3 Describing the Visual Landscape Character

2.4 Central Business District

2.5 Outer Business District

2.6 Ocean Beach

2.7 East Bunbury

2.8 South Bunbury - Mangles

2.9 Parks

2.10 Minninup - Usher

2.11 Glen Iris - Moorlands

2.12 Pelican Point

2.13 College Grove - Tuart Brook

## 2.1 Visual Diary of Landscape Character by Local Areas

The purpose of the Visual Diary exercise is to establish the current condition of local character and to identify where desirable and undesirable character elements exist within areas that are already recognised for having a particular character or stigma. The City has been assessed as neighbourhoods within a network of Local Area Plans. (See Figure 4.2 Local Area Plans) Observations have been recorded in each Local Area by a process of creating photographic records of the streets and individual character units. The Local Areas of Picton and Davenport to the south east of the City, which are predominantly industrial, have not been included in this exercise.

There are 10 distinct local areas at the suburban scale, which provide an appropriate scale for sound local area planning. The boundaries of each Local Area Plan are not absolute but reflect natural and human made barriers in the landscape (e.g. rivers and main roads), historical development patterns, building and streetscape character, etc.

The local area planning approach attempts to coordinate and integrate development control with that of transport, land use, community facilities and environmental conservation in order to achieve ecological, social and economic objectives for more sustainable land use and infrastructure planning outcomes. This requires an understanding of the nature of local areas and the complex interrelationships between its character, identity, land use and resources. As such, Local Area Plans represent living documents that evolve and change over time as needed.

Over time it is expected that each local areas will have their own local area plan or LAP, which will eventually simplify and rationalise the many different and overlapping local planning policies, structure plans, detailed area plans and guidelines that address disparate ranges issues. In the mean time city-wide strategic planning use the LAP boundaries as framework that enables place specific solutions to be applied.

The Local Areas that have been assessed as part of this Study and their sub-precincts or neighbourhoods (if any) are as follows;

**Central Business District:**

- CBD Core
- Marlston Hill
- Marlston Waterfront
- Central Coast
- Koombana Bay

**Outer Business District:**

- Commercial Primacy
- Outer Business District - West
- Outer Business District - East
- Tuart Street Special Use zone

**Ocean Beach:**

- Ocean Beach General
- Tree Street Area
- Mindalong Heights

**East Bunbury:**

- East Bunbury Heritage Area
- Rathmines

**South Bunbury - Mangles**

**Parks:**

- Carey Park
- Sandridge Park

**Minninup - Usher:**

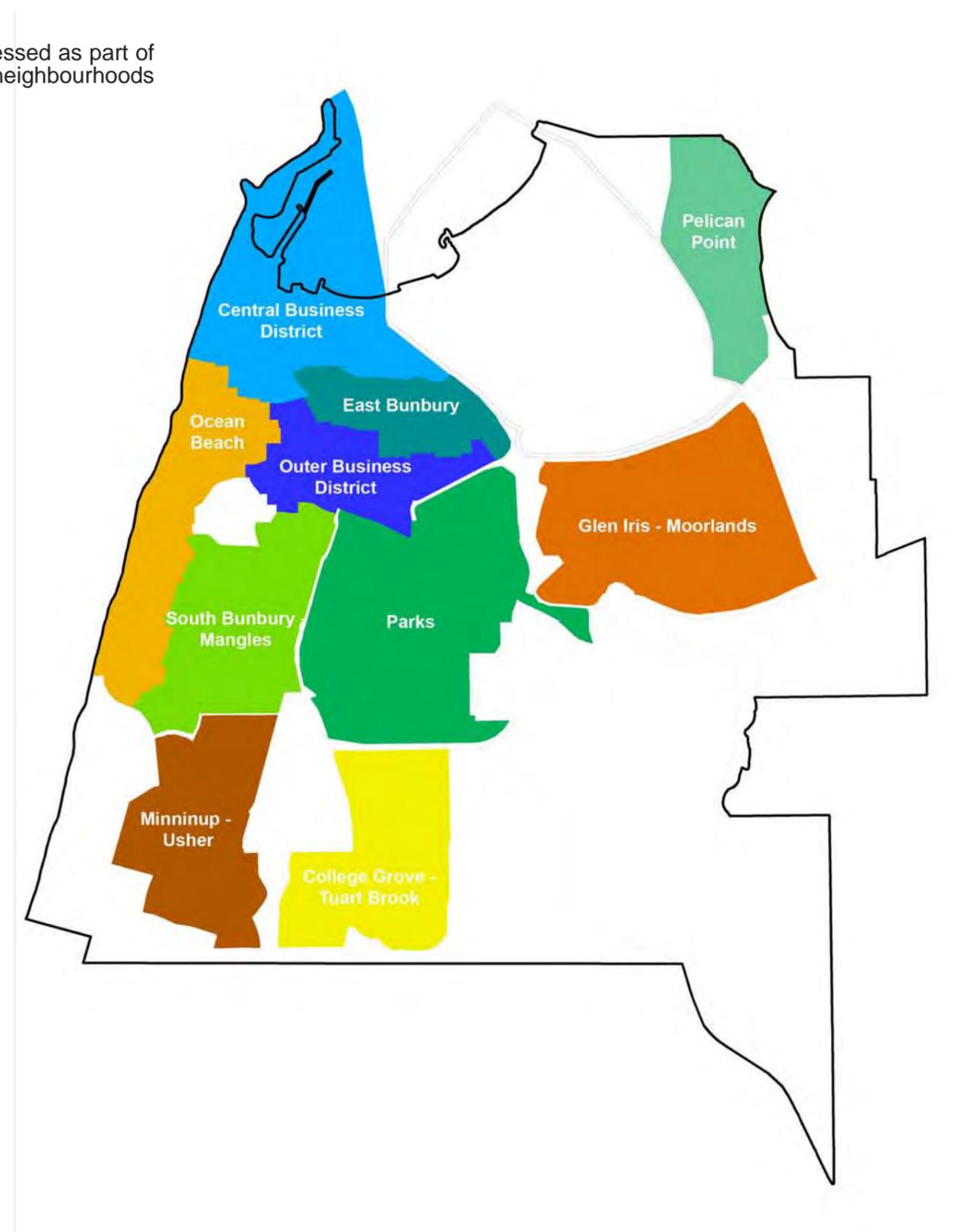
- Withers
- Usher
- Glen Padden

**Glen Iris - Moorlands**

**Pelican Point**

**College Grove - Tuart Brook**

Figure 2.1: City of Bunbury Local Area Plan Boundaries



## 2.2 Design Elements that contribute to Landscape Character in Local Areas and Neighbourhoods

The analysis of each area's landscape character was carried out as a visual assessment that took place over a period of two years. A photographic record was collated by exploring all of the City's local areas and neighbourhoods to determine the character and amenity that exists at present.

This exploration commenced through a process of structured observations; starting from a board vantage point taking in the whole of a place and then zooming in to look at its defining elements of landscape character. That are recognised as contributing to its sense of place.

### Topography

Topography can dictate land value, aesthetic quality and viewing experience to and from a locality. Typically the more varied the landform of a neighbourhood the greater the hierarchy of status in the neighbourhood; the highest lots in the street have the greatest views and therefore; the higher the land value.

### Views & Vistas

Views & vistas affect the quality of experience from a location. The distance and angle of those views contribute to how the place is experienced. A view that includes water or vegetation, or that is seen from a significant height or distance is considered to be of greater value. Immediate views can decrease the quality of the experience if the immediate vicinity does not offer any natural or built aesthetic quality.

### Designing Out Crime

Designing Out Crime or Crime Prevention Through Environmental Design (CPTED) is a community safety design process that includes the effective design and implementation of surveillance, access, security, maintenance and landscaping techniques for designing out crime.

### Road Layout

The road network is an integral part of the City. The WAPC's Liveable Neighbourhoods sets out the method for determining movement networks with an emphasis on connectivity, amenity and integration to achieve safe, efficient and attractive street networks. (Liveable Neighbourhoods) Each road in the hierarchy from primary distributors to local roads has an important role to play in the function and sustainability of the city.

### Street Trees & Landscaping

The occurrence of street trees varies greatly from suburb to suburb and species, age and condition depend on how old the streets are, and any form of redevelopment that has occurred since establishment. Infrastructure such as transmission lines, underground services, road widening and verge redevelopment are all factors that can interrupt the life cycle of retaining well established trees. Disease is also a major factor in the loss of character that is established in a locality by the presence of mature trees.

### Advertising & Signage

Whilst advertising is a necessary part of running a business, the appearance of signage can be an obtrusive element in the streetscape if it is exaggerated beyond necessary standards. Advertising hoards sometimes include flashing lights, animated displays, loud colours or large freestanding structures that use attention grabbing techniques to promote their business. Signage should only be used for the purpose of directional or informative displays and should be limited in areas that are not commercial or industrial, particular care should be given to minimise signage in residential neighbourhoods.

### Street Lighting

As well as being necessary roadside for vehicle and pedestrian vision, street lights are important in any instance where there is public use after dark. Land uses that involve car parking or outdoor uses at night time need to provide safe and ample lighting for the users to navigate safely to and from the building and in car parking areas. Choice of lighting is extensive and should be appropriate to the surroundings. For example, it should not be obstructed by trees or other structures, it may be freestanding or wall mounted, high or low, and be of differing intensities and colours depending on its function.

### Car parking

Car parking is critical to the success of any land use. Factors of design include layout, landscaping, surfacing, drainage, dimensions and angles, traffic flow and number of spaces. The older a development is, the less likely it is to have adequate parking, particularly in the instance of a change of use where the prior use is residential and the proposed use is commercial.

### Public Open Space

The city has a number of regional and local open space reserves. Public open space is allocated to every suburb, and provides a place to go for recreation, and passive activities, sometimes bbq areas and playgrounds or more formal community uses. A well designed public reserve can form the heart of a neighbourhood, and can be a draw card for living in that community.

### Street Furniture

Street furniture consists of; benches, bins, bollards, park tables, light posts, tree guards and other forms of shelters provided for bus stops etc. Consistently themed street furniture can identify a place, and be used to carry a theme throughout the streetscape.

### Pedestrian & Bicycle Pathways

Pedestrian and bicycle access can be provided as a dual access path or as two separate paths. Grade separation is sometimes necessary between different forms of traffic; pedestrian, cyclists and motor vehicle, depending on the traffic volumes expected and the purpose of the accessway. Typically along foreshores cyclists and pedestrians have dual access away from the road, and in some instances a dedicated bicycle lane is included in the road width depending on existing circumstances.

## Alleyways

Alleyways are synonymous with anti social behaviour, vandalism and crime. Alleyways are essential for some commercial uses where loading zones require rear access, or the lots are built out boundary to boundary as with many main street developments. Elements of CPTED can be applied to alleyways to make them as safe as possible for public use, however, access to rear laneways, and alleyways should be restricted when not in use.

## Street Activation

The way in which buildings interact with the street can create an open and inviting atmosphere or a segregation of private and public property. Active street frontages open onto the street in a transformation of interior to exterior that invites people in off of the street. Land uses such as cafes, restaurants, retail outlets etc draw people off of the street by allowing ample views inside, by spilling over into the public domain in the case of alfresco areas and providing awnings that shelter passers by. Closed frontages are uninviting and contain elements such as privacy screening, fencing, solid walls, no windows or openings and no public access.

## Access & Crossovers

The number of driveways present on a street can lower the number of on street car parking bays and lower the aesthetic value of the streetscape. Multiple driveways dominate the street particularly if they are double crossovers. Where possible shared access is a preferred method of minimising the effect of driveways on the street, and by having evenly spaced single crossovers, it is possible to maintain parking spaces on the roadside.

## Boundaries & Retaining Walls

Fencing is a dominant feature in the streetscape and requires some level of governance. Open frontages are the foremost effective method of maintaining passive street surveillance. Whilst some people are drawn towards enclosing themselves in for security with solid fencing, the overall effect is negative in the streetscape and also removes the passive surveillance element to and from the home by creating hiding spots. Most local governments apply design guidelines for the design of fencing in residential areas for two main reasons; to maintain harmony and regularity in the streetscape and to practice CPTED in the community.

## Setbacks & Orientation

In a residential setting the setbacks of dwellings is critical in establishing the character of the street. Irregular patterns of setbacks can make an in cohesive streetscape, and overtime it encourages the development of minor structures in the front setback where people extend their building forward to be in line with someone else's setback; gradually bringing the street overall setback closer to the lot boundary. Dwellings should be designed and orientated to maximise solar access to the north, and passive light and ventilation to habitable areas of the home, also orientating private open space so that sunlight and outlook are achievable.

## Style & Character

Whilst style is a subjective element of design in which everybody has a differing opinion, it is possible to categorise the style and character of areas generally and more specifically, by looking for design features that are synonymous with certain eras, character styles and phases of modern Australian architectural vernacular. Good character may be achieved by coordinating elements of design in a

single style that are suitable to the year that the building was built, the local surroundings, and the appropriate use of colour schemes and building lines that area used.

## Materials & Construction

Building materials and techniques differ around the country and locally. Many building companies source local materials for the construction of residential dwellings that can be manufactured and supplied in the region. Construction methods such as double brick are common in new dwellings in the region as are steel framed brick veneer homes, as opposed to timber framing, due to construction costs. Similarly local lime stone products are readily available for the use of retaining walls and fencing around the exterior of new homes and estate developments.

## 2.3 Describing the Visual Landscape Character

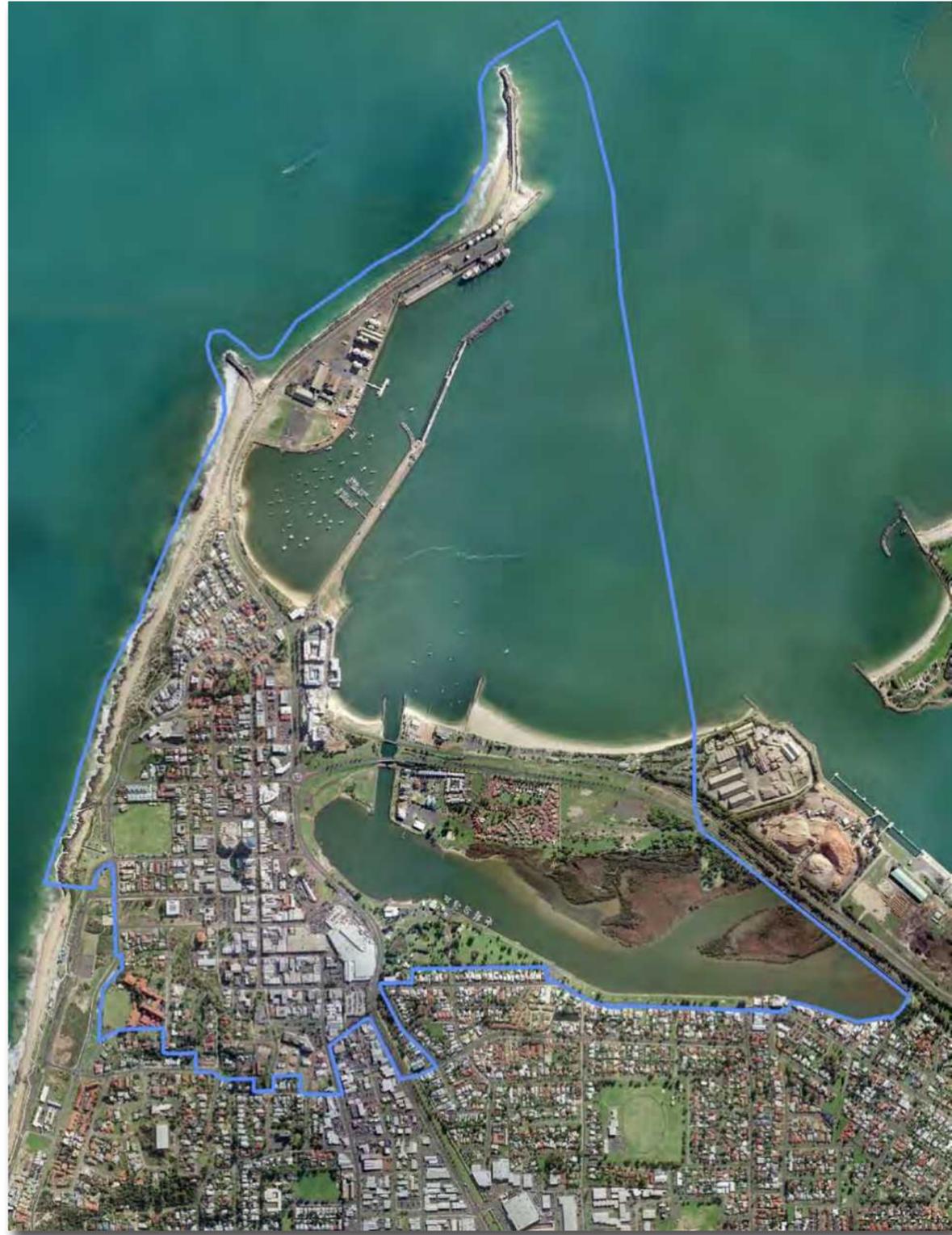
The Visual Character statement(s) should be broad written descriptions of the study area, detailed descriptions of the visual landscape character of each unit and graphics to illustrate the landscape character descriptions and units.

Table 2.3:Terminology for Describing Visual Aspects of Landscape Character.

<b>Scale</b>	Intimate	Small	Large	Vast
<b>Enclosure</b>	Tight	Enclosed	Open	Expansive
<b>Diversity</b>	Uniform	Simple	Diverse	Complex
<b>Texture</b>	Smooth	Textured	Rough	Very rough
<b>Form</b>	Vertical	Sloping	Rolling	Horizontal
<b>Line</b>	Straight	Angular	Curved	Sinuous
<b>Colour</b>	Monochrome	Muted	Colourful	Garish
<b>Balance</b>	Harmonious	Balanced	Discordant	Chaotic
<b>Movement</b>	Dead	Still	Calm	Busy
<b>Pattern</b>	Random	Organised	Regular	Formal

(Table adopted from 'Visual Landscape Planning in Western Australia: A manual for evaluation, assessment, siting and design', 2007.)

# 2.4 Central Business District



*CBD Core*



*Marlston Hill*



*Marlston Waterfront*



*Central Coast*



*Koombana Bay*



## Local Area Character

Victoria Street is the CBD's 'main street' and is characterised by a significant proportion of buildings that are considered to positively contribute to an established and attractive streetscape particularly with regard to buildings that have cultural heritage value. There is a comfortable human scale at street level created by the presence of first floor canopies that create a continuous covered walkway and gives the streetscape a sense of formality; the upper storeys are generally two-three storey at lot boundary. These buildings are considered to be in harmony, they address the street and one another and create a rhythmic streetscape.

Together with the street trees and street furniture that enclose the main street space, the built form creates a sense of place. The high level of human activity in the main street and the presence of a 'cappuccino strip', also contributes to a sense of vitality and interaction in the CBD.

The three waters surrounding the City together with significant built features characterise the City as a significant regional centre. This invokes an impressive sense that the City is an important and diverse geographic area and commercial centre, a City, which has been developed with major built infrastructure amongst vast and unique natural water settings with an attractive, bustling and interactive CBD.

## Aerial View



## Boundaries



Carey Street on the north side, Blair Street on the west, down to and including the south to Cornwall and Money Streets and up Molloy Street on the west.

## Activity Centres

Strategic Regional Centre

Left to right: Prinsep Street, Victoria Street southern end, Victoria Street north of Prinsep Street, arcade between Prinsep and Stephen Streets.



## Public Art Works

Left to right: Floating Stone by Richard Williamson, Brother and Sister by Russell Sheridan, Forest Trees by Howard Taylor, The Gateway by Mary Knott, & Fold by Don Walters.



## City Vision Strategy

Strategic Regional Centre Vision Focus Area; and  
Central Business District Investigation Area

### Objectives and Strategies relevant to the Strategic Regional Centre

**CBD1:** Allocate sufficient resources for the planning and development of the Leschenault Inlet Regional Park so that the area is established as a major tourist and recreation attraction.

**CBD2:** Require the protection and tourism/recreational enhancement of the White Mangroves as part of any planning and development of the North Shore.

**CBD3:** Require planning policies and projects for development to incorporate consideration of key landmarks with a view to enhancing their role in orientation and defining character and amenity of the City.

**CBD5:** The management arrangements for the Leschenault Inlet Regional Park need to ensure that the viability of the estuarine environment is the highest priority.

**CBD6:** Plan for a change in priority between cars and pedestrians in favour of pedestrians and identify opportunities for street based activities.

**CBD7:** Ensure that planning policies and development control provisions adequately provide for the conservation and protection of heritage values.

**CBD8:** In accordance with the Bunbury Community Safety and Crime Prevention Plan the design of buildings, streetscapes and open spaces is to be influenced by encouraging the identification of risks/hazards through safety auditing of places and development proposals in order to inform public sector capital works/maintenance programmes and private sector

development initiatives.

**CBD9:** Prepare a sport and recreation strategy for Greater Bunbury that addresses the needs of all age groups and identifies ways of supporting clubs and community groups.

**CBD10:** Identify available sites for tourist development and establish the criteria for the site mix of freehold subdivision and tourism, height and management.

**CBD16:** That the Strategic Regional Centre be assessed to establish the constraints and opportunities for commercial development.

**CBD17:** That a staged CBD streetscape strategy be programmed by Council.

**CBD18:** That Blair Street remains connected to Koombana Drive.

**CBD19:** That reducing Blair Street from four lane divided to two lane divided between Haley Street and Koombana Drive (both lanes removed from the Inlet side) with enhanced east/west pedestrian connections and traffic calming be developed for further consideration. The Clifton/Blair Street roundabout needs to be redesigned to take account of the downgrading of Blair Street.

**CBD20:** That Symmons Street be developed as a key pedestrian and visual connection between the cappuccino strip north to Clifton Street and the Inlet.

**CBD22:** That the central bus station be retained.

**CBD23:** That the operation of the central bus station be reviewed to improve pedestrian linkages and reinforce the terminus as a tourist destination and major arrival point. Alternative locations for bus storage need to be identified.

**CBD24:** Retain the option of an intermodal transport facility at the Eelup Roundabout and undertake a detailed cost/benefit analysis to establish that there will be an improvement in economic, social

and environmental outcomes.

**CBD25:** That decked parking sites be planned to service the northern, central and southern sectors of the CBD.

**CBD27:** That further research be undertaken to establish the appropriate location of a decked parking site to service the northern sector of the CBD.

**CBD28:** That the State Coastal Planning Policy Amendment 62 relating to height is supported where the maximum height for coastal areas (including the Bay and Inlet) should be five storeys or 21 metres and under certain conditions and subject to criteria including broad community support, consideration may be given to developments up to eight storeys or 32 metres.

**CBD29:** That height in the commercial core of the CBD defined as both sides of Wittenoom, Stephen, Victoria and Carey Streets is determined on the basis of complementary development with the Bunbury Tower and the Old Silos redevelopment. Areas outside of the commercial core to be planned and designed within the two to five storey range and depending on topography, accessibility and community acceptance up to eight storeys.

**CBD34:** That development of the foreshore areas must be low impact with an emphasis on civic, cultural and tourist orientated uses. Other development opportunities may be considered following the public release and community feedback on the Bunbury Waterfront Project prepared by Landcorp.

**CBD36:** That the City in partnership with Landcorp undertake further planning and financial analysis to establish the mix of uses that meet objectives and strategies that seek to improve connectivity between the CBD and the Harbour, provide for a broad range of tourism and recreation experiences, protect and enhance heritage values and build on the existing facilities that currently service small craft to large ships.

## Landmarks / Features

Left to right: The Art Gallery, The Bird Cage, The Rose Hotel, The Bunbury Tower, the City Library and the Council Chambers



*Topography , Views & Vistas*



The CBD has been developed against the backdrop of the coastal foredune that at major vantage points (Boulter's Heights) provides an open vista of the City bound by the Indian Ocean to the west, Leschenault Inlet to the east and Koombana Bay to the north; the CBD links these adjoining water areas, known as the 'three waters'.

There is a great level of built form located in the CBD considering the width of the peninsula, most of which is orientated to take advantage of the proximity to water on three sides. The city was built between two higher grounds, and is therefore afforded expansive views from either end, extending out to Australind and the Collie hills.

Identifiable built features in the landscape are accentuated on the skyline from lower grounds, particularly across the Inlet, and clear view corridors are afforded between larger forms thus far (e.g. The Bunbury Tower), such views should be considered as the level of development increases in the CBD.



*Designing Out Crime*



Closed Circuit Television (CCTV) cameras have been installed around the CBD at known hot spots for anti-social behavior particularly during the hours of night when the city night clubs are closing and masses of people are congregating in the streets whilst waiting to be picked up, at the taxi rank, or looking for something else to do. The use of CCTV has been integral to police and council investigations involving incidents of violence or vandalism in the CBD.

Buildings that have been abandoned for many years are the object of vandalism and other anti-social behaviors and may become inhabited by squatters. The condition of the former St John of God building is seriously compromised by these activities and the opportunity to restore the building decreases with the length of time that the building is vacant.

Whilst measures have recently been taken to increase security of the premises, demolition of the building may be the best result to improve the amenity for surrounding uses, and for public safety.



Road Layout



Stirling Street (west of Spencer Street) is a 24.4 metre road (Neighbourhood Connector) with a speed limit of 50 km, a central median, parallel parking, an unmarked cycle lane, single lane traffic in each direction with a signalled intersection at one end and a roundabout at the other end.

There is pedestrian access on both sides of the road with breaks in the median to cross to the opposite side of the street.

The section of Stirling Street that runs between Spencer Street and Blair Street is approximately 160 metres between intersections, and consists of a roundabout, a signalled pedestrian crossing, two car park entrances and a one way street entrance and both ends are signal controlled.

The level of activity that occurs in this strip is not well arranged and often banks up traffic. There are high levels of directional signage, traffic lights and general dissonance in connectivity.



Street Trees & Verge Treatments



The ANZAC Memorial Park has been designed to accentuate the monument. The palm trees that are arranged in symmetry either side of the monument are particularly significant from an aerial perspective and they frame the statue complimenting and drawing attention to its scale and significance.

All of the trees in the park are on the State Heritage Register as an integral part of the success of the monument.

The Callitris species planted on the corner of Stephen Street and Victoria Street drop quantities of pine needles onto the footpath and in the garden beds which then end up in the drains. This requires constant maintenance to ensure public safety and tidiness.

Whilst mature trees are appreciated for their contribution to the streetscape, it is good practice to select street tree species for their low maintenance qualities, particularly in areas where they are in proximity to high pedestrian activity.



Signage



The Grand Cinema Complex on Victoria Street has one simple statement across the front parapet of the shade structure that protrudes over the footpath. Further set back off the street where it is less dominant and more directed at pedestrians is the signage of individual tenancies. The result is tidier than multiple competing advertisements at street level.

Businesses advertising on sandwich boards out the front of their shops clutter the street and can be hazardous to pedestrians having to walk around them.

In winter when Victoria Street experiences high wind speeds, they often fall over and blow around which poses an even greater risk to people, furniture, buildings and parked cars.



Car Parking



The Shopper's Car Park located between Prinsep, Wittenoom and Wellington Streets is a good example of a centrally located car park with ample numbers of parking; both motor vehicle and motor bike, shade trees and over standard width parking bays. The wide bay width allows for easier maneuvering between parked cars which is a rare benefit in the CBD.

The car park caters for short term, shoppers and visitors, to allow a higher turn over for people who are visiting for appointments, shopping or dining, as opposed to city employees.

The car park at the Centrepoint Shopping Complex is difficult to navigate, and creates congestion and confusion when entering and exiting to Prinsep Street from the main entrance point. With car park volumes being high at peak hours during the business day in particular the lunchtime period and after work period, and on weekends, the accessibility issues are exacerbated. Consideration of the traffic flow and parking configuration would be beneficial, taking into consideration the addition of high pedestrian traffic movement across the car park.



Street Lighting



Victoria Street is a vital part of the CBD and lighting is an important element of safety, convenience and character for all user groups day and night.

The lighting layout and design varies along the street; at some points light posts are located in the central median, at others along the kerb side and sometimes in both. Full coverage of the street and walkways is crucial for pedestrian and motorist safety and the ample lighting assists the CCTV cameras in capturing clearer imaging. Light posts in the cappuccino strip become an integral part of the street furniture and provide a high quality 'port operations theme' as a design feature.

Several of the off-street car parking areas in the CBD do not have an adequate provision of lighting, and therefore the risk of crime is higher. Particularly for car burglaries and loitering of persons who are between venues or waiting for a ride home at the end of the night.

Public parking facilities are often used as thoroughfares and should only remain open at night if the lighting is adequate for personal safety. Particularly where CCTV is not present.



Public Open Space



Luciana Park, is the open space located on the CBD side of the Inlet which is joined by the Pat Usher Promenade and further around to the Queen's Gardens. The park is used for major town events; in particular food and wine festivals, boat shows, club demonstrations and Open Days, Australia Day and New Years Eve celebrations.

The park also serves as overflow outdoor seating for concerts held at the music bowl and Bicentennial square on the opposite side of Blair Street, and is integral to maintaining a link to the water from the CBD.

Boulter's Heights is the public park at the top of the southern hill of the CBD with an excellent view point to overlook the city. The park does not receive as much public attention as it could, due to lack of signage directing visitors to the lookout, and a lack of activity within the space.

There is a timber staircase that climbs the hill from the bottom of Stephen Street, and like the Marlston Lookout the staircase is used for athletic training and exercise more so than the park itself.



Street Furniture



These modern park benches are a part of the coordinated street furniture that is in keeping with the 'port operations' theme along the main street. The combined steel and timber individually shaped seats are held together on a single frame but appear to define a sense of personal space for the occupants, and each seat has an ergonomically designed back rest. The design is reminiscent of the cylindrical silo shape, evident in the shadow that falls across the pavement.

The taxi rank on the corner of Symmons Street is the only one in the CBD and experiences its highest volume of patrons in the late night period. The current shelter that overhangs the queuing area does not provide adequate protection from the high speed winds and rain that Symmons Street experiences.



Pedestrian & Bicycle Pathways



The office redevelopment at the corner of Clifton and Victoria Streets had to accommodate an existing raised floor level that required upgrading to current Australian Standards for disabled access incorporating a new access ramp. This included resurfacing of the pedestrian access from the pram ramp to the lot boundary of the property and tactile surface indicators at the base of the front steps and access ramp, to coordinate and guide the approach to the building for the visually impaired.

Footpath surfaces should be consistent along major pedestrian thoroughfares, in the public realm. The design and finish is important to achieve a continuous streetscape and higher level of attractiveness. When a developer contribution is required to upgrade paving, care should be taken to incorporate consistent materials, colour schemes and paving patterns. All surfaces should comply with Australian Standards for: grade, material, non-slip and tactile surfaces, level changes, wheel chair access and pram ramps at road crossings and building entrances.



Alleyways



Alleyways are predictable routes that enable attackers to easily identify where the user is going to go. In most instances alleyways are constructed for access to private properties or rights of way that are just not closed off from the public and become common thoroughfares. Factors to consider for increasing safety include:

- additional lighting
- avoiding locating a.t.m's, public phones, and public toilets in such locations,
- choice of vegetation and maintenance regimes and
- restricted access
- use of fencing
- locking off areas during times of low usage

(Designing Out Crime Planning Guidelines 2006:41)



*Street Activation*



The front façade of the Entertainment Centre addresses Blair Street in an open and well integrated manner for pedestrians and vehicles. The building is set back from the road with landscaping, a vehicle thoroughfare and delineated pedestrian entrance that continues over the road from the foreshore car park. The building façade has lots of window area, animated signage and a clearly defined entrance and the area is well lit.

The rear of the Entertainment Centre does not address Victoria Street in a receptive manner. The solid wall of an equivalent to three storeys is windowless and contains only the service entrances which back onto a small car parking area. The building forms a part of the Victoria Street frontage, and it should interact with the main street in a manner greater than just directing patrons around the side of the building, past the backs of tenancies and through the car park. There is a high level of vandalism to cars and incidences in the vicinity of the thoroughfare in general.



*Access & Crossovers*



The Centrelink car park on Prinsep Street is a good example of desired outcomes for access to and from an inner city lot. The open frontage has clear sight lines and low vegetation with a wide double crossover, that allows for ample space for vehicles to pass entering and exiting from either direction off the street.

The foreshore carpark off of Blair Street opposite the Entertainment Centre is essentially an over flow car park for the entertainment centre and theatre complex as well as being for inner city employees on a week day basis. The ingress/egress arrangement is a single access point close to the intersection of Koombana Drive which is left entry only. All traffic must enter off of the roundabout, making it difficult to enter for Blair and Clifton Street traffic when there is queuing traffic at the Koombana Drive entry.



*Boundaries & Retaining Walls*



The housing estate in the St John's special use area known as Bury Hill, has shared car parking area that is central to the upper level of development. The houses are separated from the communal area by a concrete rendered wall that has a wave-like formation and marine motifs incorporated on the public side of the wall. The wall features up lighting and relief sculptures attached to the wall. The wall varies in masonry finishes and features old timber jetty pylons in the entry statement. This fencing has formed an integral part of the development and provides an interpretive design theme throughout the estate.

Where the land has been subdivided for residential development at the top of Parkdale Street, the need to retain the land on the eastern slope has resulted in a high limestone retaining wall which is broken up by a terrace half way down that is landscaped and then continue to the lowest point. The expanse of limestone wall dominates the open views from Wexford Lane and the surrounding residential area. This may only be in the interim period until the development reaches completion, which may be a number of years away.



*Building Setback*



There is a strong consistency and sense of intimacy created along the 'cappuccino strip' of Victoria Street where all the buildings have a zero lot line setback.

This allows interaction with the streetscape and open fronted cafes provide activity and energy to the street.

The Lord Forrest Hotel is adjacent to the Bunbury Tower on Symmons Street and both structures are amongst the tallest buildings in Bunbury.

However the Lord Forrest has several less storeys than the tower, and evidently, there is glare bouncing off of the tower which is reflected into the rooms on the eastern side of the hotel.

The building was constructed in the late 1980's and reflects a building style of its time.



*Building Orientation*



The residential tower on Prinsep Street has been designed to orientate as much window area and private open space as possible to the north for direct solar access.

The balconies form a canopy which provides shade and undercover outdoor areas to the northern façade, and allowing ample natural lighting to habitable areas of the apartments and stair wells.

The Bunbury Tower is a dominating feature in the CBD as it stands alone, taller than any other building in the city. The expanse of tinted glass that is on every face of the building has an impact on surrounding buildings and for people walking by.

Due to the expansive of glass on the western side, the Lord Forrest is more afflicted because of its proximity, it would have been more beneficial if the tower were constructed out of materials with greater absorptive than reflective properties.



*Building Style*



The Ommanney Building is a post 2000 development in the CBD with three storeys of commercial mixed uses. The building design is reminiscent of some of the existing heritage buildings in its method of utilising the corner allotment as a design feature by wrapping the building around the corner so that it addresses both street frontages.

The ornate façade details compliment the simple form and give the appearance that the building is greater than its actual height.

The Reef Hotel was built in 1896 as 'Gordon's Hotel'. Since the early 1990's it has been painted in loud shades of orange, pink, black, red, grey, purple and green. The historical building once characterised for its uniquely angled eastern wall, has diminished in historical value and has since been approved for demolition.





### Building Character

The intersection on the corner of Victoria Street and Wellington Street consists of the Hands Building (76-78 Victoria Street), Lotteries West House (101 Victoria Street), Cronshaws (103 Victoria Street) and the Rose Hotel (27 Wellington Street). This intersection exemplifies the historical "main street" character of Bunbury. The building bulk and scale is consistent on all four corners, the colour schemes are neutral and each building addresses the intersection on both street frontages.

There is a lot of building stock along Victoria Street that has not been maintained for its heritage value and contribution to character, and these buildings are likely to be redeveloped in the future. Adaptation projects are already under way for existing buildings to be converted into mixed use developments such as retail / office floor space with residential floors above.



### Building Materials & Construction

The CoB Library, built in 2008, is at the south end of Victoria Street. The external façade is predominantly a durable compressed cement fibre material, that is used in different colours and finishes to provide variations in the design.

The building has good northerly orientation and is predominantly glass on both the northern and eastern facades. This aspect allows passive solar access to both the first and ground floor, to maximise energy efficiency.



The adjacent St John of God hospital site is an example of a material palette and style demonstrative of its era. The brown brick work and alternating white concrete panels (balconies/ verandahs) are a contrasting image to the adjacent library.

The condition of the building has deteriorated with age and it has not been occupied since 1999. There is opportunity, (currently being considered) to refurbish the existing building or demolish the shell and redevelop the site.



### Local Area Character

Marlston Hill is a predominantly residential area, with some apartment buildings containing a mixed use component with small businesses at ground level, adjoining the CBD boundary. Marlston Hill was developed post 2000; prior to that the land was a part of the Bunbury Port Outer Harbour.

The area is characterised by the steep topography of the hill, the lookout being at the top and the residential suburb descending to the base, where it flattens out towards the Outer Harbour. The main route is a u-shaped drive which starts at the top of Victoria Street and ends up on Ocean Drive, with streets and cul-de-sacs branching off from it.

The neighbourhood is recognisable for the Marlston Hill Lookout, a popular tourist destination, with 360-degree views of Bunbury and the checkered Lighthouse which sits on a hill to the west.

The Bunbury Port Authority still have operations to the north of Marlston Hill in the Outer Harbour, however the area is included in a proposed future rezoning to include an extension of the Marlston Waterfront and possible marina facilities. In recent tourist seasons, cruise ships have begun to include Bunbury on their itinerary as a destination, using the Outer Harbour berth to dock for the day.

### Aerial View



### Boundaries



Casuarina Point to the north, the CBD to the south

Casuarina Drive to the east and the Indian Ocean to the west; consistent with CoB Local Planning Policy - Marlston Hill Design Guidelines

### City Vision Strategy

**CBD3:** Require planning policies and projects for development to incorporate consideration of key landmarks with a view to enhancing their role in orientation and defining character and amenity of the City.

**CBD25:** That decked parking sites be planned to service the northern, central and southern sectors of the CBD.

**CBD27:** That further research be undertaken to establish the appropriate location of a decked parking site to service the northern sector of the CBD.

**CBD28:** That the State Coastal Planning Policy Amendment 62 relating to height is supported where the maximum height for coastal areas (including the Bay and Inlet) should be five storeys or 21 metres and under certain conditions and subject to criteria including broad community support, consideration may be given to developments up to eight storeys or 32 metres.

### Public Art Works

Right: A carved timber bust tribute to John Boyle O'Reilly, an Irish political convict who was brought to Bunbury in 1868, made famous for his Irish poetry and political news articles and later escaped aboard a whaling ship to Boston.



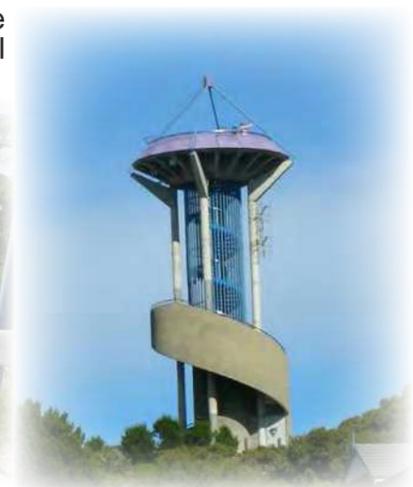
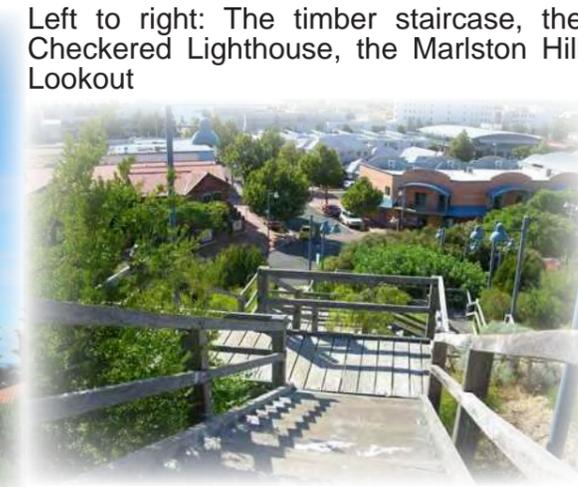
### Activity Centres

Strategic Regional Centre - Marlston Hill Commercial



### Landmarks / Features

Left to right: The timber staircase, the Checkered Lighthouse, the Marlston Hill Lookout



Topography, Views & Vistas



The topography is steep and varies by twenty metres in contour from highest to lowest point. The landform has not been altered too greatly from its original state during the time that the land was used for Port activity. Some cut and fill had to occur in order to achieve the road layout, in particular Marlston Drive. As a result the suburb required significant retaining walls along the main route.

The view from the top of the Marlston Lookout includes a 360° view of Bunbury, the Inner and Outer Harbours, the Indian Ocean and the Collie Hills - visible in the background.



Road Layout



The road layout is a curvilinear pattern. The main access street has a central median and on street parking, however; there is no separate cycle lane and there is no bus route through the suburb.

Most of the streets end in cul-de-sacs or provide local traffic thoroughfares for easier navigation to the outer streets where there is low numbers of general traffic.

This road forms a tight curve around the top of the hill, and is built up to the street with boundary retaining walls. The effect is an enclosed space with limited sight lines.

It is unclear as to whether the paved areas to the high side of the street are for parking or pedestrian access, however it is not a continuous strip, as the path is broken up by tree plantings in rubble beds, which is possibly to aide in the slowing down and soakage of surface run off. Land owners generally take ownership of the wide verge adjacent to their own properties.



Street Trees & Verge Treatments



The *Hibiscus tiliaceus* (Cotton Wood) has been used as an ornamental street tree in Marlston Hill, which is aesthetically pleasing for its structure, bright foliage and yellow and orange flowers.

The trees are fast growing and sturdy, making them perfect for use in new suburbs.

Landscaping that abuts a pedestrian footpath should not overhang the path, and should not be of a height that obscures visibility for the pedestrian, or create hiding places.

Knee height landscaping is more appropriate, or alternatively; tree species that have an overhead canopy and no under storey, teamed with a ground cover or mulched garden bed.

Species that drop plant matter create excessive maintenance requirements, and end up blocking drainage.



*Public Open Space*



The Marlston Hill Lookout sits atop the highest point on the hill and is surrounded by car parking. The hill itself consists of tiered parks down the eastern slope, which plateaus halfway and is accessible by the timber staircase from the bottom of Marlston Drive, features viewing platforms along the way. A large recreation area is located halfway down, and the lower steepest part of the slope has dense vegetation cover, which helps to stabilise the slope.

Being a small neighbourhood with parks and recreation areas located around the perimeter, there is little designation of pos within the residential streets. There are some shaded resting places with benches that are a part of a pedestrian movement network, and small pocket parks which are only sufficient for passive recreation, and as thoroughfares such as the park facing Casuarina Drive next to the Bunbury Port Authority building.



*Pedestrian & Bicycle Pathways*



There is a network of pedestrian accessways that connect the Indian Ocean foreshore to the Harbour Beach foreshore and the Marlston Lookout via local streets. Because there are significant level changes between the streets set in the hill, the pedestrian accessways are short series of staircases and ramps. There is a timber staircase from the top of the hill down to the bottom street which is extremely popular for athletic training.

Whilst pedestrian access throughout the neighbourhood is generally good, there are some isolated streets that do not have footpaths, and are not easily navigated without walking on the road pavement.

Where there are steps on some of the pedestrian access routes, or no footpath provided, universal access for prams and disabled persons is not ideal.



*Lighting, Signage & Furniture*



Lighting of public places and streets in Marlston Hill meets the performance criteria specified in Designing Out Crime, to achieve the following:

- select and light safe routes and spaces
- avoid placement in areas shielded by vegetation, awnings, and other physical barriers,
- avoid unshielded lighting at eye level,
- consider light pollution,
- ensure lighting falls upon the subject matter,
- avoid lighting areas not intended for night time use,
- consider lighting in terms of vulnerable groups, elderly, people with disabilities, children, women, and night staff,
- avoid creating natural ladders with light fixtures.

(Designing Out Crime Planning Guidelines 2006:33)



Access & Crossovers



Stage 2 of the Marlston Hill Development is in the City Centre Zone and therefore has a density requirement of R100 under the Town Planning Scheme.

As this stage was developed as mixed use buildings comprising of a commercial ground floor and two storeys of residential, there is parking and access from the rear accessway, for both residents and public access. Each dwelling has an undercover parking space and a driveway, with dedicated "No stopping" carriage ways.

Successive double crossovers have been built on a sharp bend of a two-lane road, with no on street parking provisions. The expanse of driveway surface creates a lot of hardscape in the streetscape, and can create some confusion as to the manoeuvring of vehicles on and off the properties for waiting traffic.



Boundaries & Retaining Walls



Sometimes with small lots or corner properties the front fencing forms a boundary between the street and the dwelling's main area of private open space. Although fencing should remain open and limited in height, (varying in Design Guidelines areas) privacy can be achieved with moderate levels of landscaping on either side of the boundary, while maintaining surveillance of the street.

Extensive cut and fill to produce a flat surface for private open space requires excessive retaining walls, upon which fencing is added to the top. The effect from the street is an expanse of solid wall along the street boundary and the neighbouring property.

This is a common occurrence in hillside areas such as Marlston Hill, and should be accounted for in the initial stages of planning to avoid such outcomes.



Gardens & Landscaping



A visually permeable fence framed by a colourful front garden offers privacy, demonstrates neighbourhood character and identity, encloses the streetscape and positively contributes to the amenity of the area.

Private gardens should not continue across the verge to the kerb. Where Council land is grassed or has a dedicated footpath, the boundary is delineated; where a paved surface is not provided, private landscaping should not extend beyond the property boundary so that pedestrian access is not obstructed.



*Building Setback & Orientation*



Building setback requirements for Marlston Hill range from 1.5 metres minimum to 6 metres front setback. Most of the streets have a consistent 4 metre setback, which creates a harmonious street pattern. Protrusions for garaging and balconies create variations that add some relief to the streetscape when executed in a complementary style that is not excessive.

Side and rear setbacks are determined by the R-Codes (unless otherwise specified by a Design Guideline) and should only be considered if they protect the amenities of adjoining properties, including, where appropriate:

- Adequate direct sun to building and appurtenant open spaces;
- Adequate daylight to major openings to habitable rooms; and
- Access to view of significance.

(State Planning Policy 3.1, Residential Design Codes, Part 6:20)



*Building Style & Character*



Modern coastal designs usually incorporate curved roof lines for their aesthetic value or to mimic natural coastal elements. The high curved canopies shade the western and northern facades providing a pleasant area of private open space with an open vista to significant views. This particular home also takes advantage of the uneven site levels with a floating walkway from the garage to the entrance.

Monochromatic schemes do not positively contribute to the amenity of the street. The effect from one overall colour for all materials has on a single house, let alone several in a row, can be overtly bland without any variation in design features. Colour and variety provide definition between homes and a sense of ownership and personality that reflects on both the individuals and the neighbourhood.



*Building Materials & Construction*



Corrugated iron products suit contemporary and traditional designs, and provides the ability to realise more innovative and creative designs.

It also delivers a lot of practical benefits:

- Easy to maintain.
- Long lasting, extremely durable.
- Lightweight.
- Available in a wide range of attractive colours.
- Thermally efficient.
- Corrosion resistant.
- Resists chipping, flaking and blistering in normal weather conditions.

(<http://www.colorbond.com/go/home/residential/walling>)

# Character Mapping

## Local Area Character

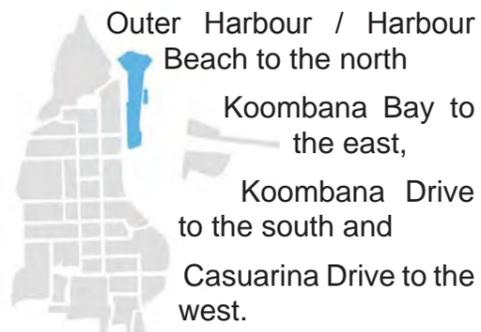
Marlston Waterfront is a mixed use area comprising high-rise apartment buildings with small businesses at ground level, as well as restaurants, cafes and bars.

This compact neighbourhood is set on the beach between the Outer Harbour and Koombana Bay, and includes the recently redeveloped Silos that are now an apartment complex with a multi-storey hotel component next door.

The beach between the Waterfront and the plug is a popular recreational beach which attracts recreational boat users, swimmers, and spectators to the area. The dock is used by tour operators as a drop off and pick up destination for day cruises.

The proposed Bunbury Waterfront Project will form an integral part of the future growth of this area as a waterfront location that is interconnected with the CBD.

## Boundaries



## City Vision Strategy

Central Business District Investigation Area.

**CBD4:** Progress Stage 1 of the Bunbury Waterfront Project following a detailed analysis of the concept relative to other proposals for the CBD and their compliance with the triple bottom line policy framework of City Vision.

**CBD21:** That Casuarina Drive be downgraded to a two lane boulevard to facilitate better connectivity between the CBD and Marlston Hill waterfront.

**CBD28:** That the State Coastal Planning Policy Amendment 62 relating to height is supported where the maximum height for coastal areas (including the Bay and Inlet) should be five storeys or 21 metres and under certain conditions and subject to criteria including broad community support, consideration may be given to developments up to eight storeys or 32 metres.

## Public Art Works

Left to right: The Sextant by Tony Jones, Various artworks by various artists, Bust of Captain Nicholas Baudin by Peter Gelencser, Enigmatic Forms by Douglas Chambers



## Marlston Waterfront

### Aerial View



## Activity Centres

Strategic Regional Centre - CBD

Below: Barbados bar/ restaurant complex.



## Landmarks / Features

Left to right: Silos redevelopment, Aristos Seafood Cafe, and the Mantra Hotel complex



Topography, Views & Vistas



Marlston Waterfront is a harbour side development with both wharf and beach frontages, and a direct link to the CBD. The topography has been levelled as the development is only a couple of metres above sea level.

The Koombana Bay beach is accessible via steps and ramps in a constructed seawall that wraps around the harbour.



Marlston Waterfront has a panoramic view from the Outer Harbour to the Inner Harbour including Koombana Bay beach, the sailing club, and frequent recreational boating activity.

Road Layout



Bonnefoi Boulevard is a two way street with parallel parking on one side and 90 degree angle parking on the other. Being in a mixed use area the road is access by both local traffic and patrons of restaurants/ small businesses in the precinct. Traffic is often steady, and speeds are reasonably low as parking is highly sought after.

Bonnefoi Boulevard has a one way accessway that returns to the southern entrance of the complex. The angle of the exit suggests that the traffic is left turn only, which would force vehicles to complete another lap of the street, when the exit is directly to the right.

This causes some confusion and delay for vehicles crossing the intersection when a vehicle that is queued at the junction misjudges the angle of the right turn and requires both lanes to correct their path.



Street Trees & Verge Treatments



The Erythrina sykesii (Coral Tree) species makes an attractive feature in the landscape whether on the street, in parks or plazas.

The bright red flowers bloom from winter to early spring and make an impressive display in numbers. The tree itself grows to approximately 15 metres in maturity and has a mottled brown, thorny bark around the trunk.

Whilst there occurrence in Marlston Hill is minimal, the impact within the marketplace is striking when the flowers are in bloom.

The she-oaks that line the verge between Casuarina Drive and the back of Bonnefoi Boulevard drop their spiny needles on the ground, coating the parking bays and garden beds in a thick blanket. This foliage can cause blockages in drains and slow down soakage of rainfall into the soil if it is not regularly cleared.



*Public Open Space*



The playground at the Jetty Baths foreshore is very popular for family events and social functions. The park has a playground with art installations, shelters and benches, public toilets and beach access.

To the south of the Marlston Waterfront near the newly developed hotel and silos complex features public tennis courts and areas for passive recreation with bbqs, bench and shade structures on the foreshore. The area is connected to the south side of Koombana Drive via a shared access path that crosses beneath the road bridge.

The market plaza is a large square of open space that is entirely paved, and is laid out with street furniture and planted trees. The space is surrounded by retail frontages and restaurants and is a prime location for social activity.

However, the plaza is under utilised and has no draw card for people to congregate. Regular market stalls and weekend activity would add vibrancy to the space that is currently void of any interest.



*Pedestrian & Bicycle Pathways*



The path around the waters edge is shared access and goes all the way around the water to the bridge on Koombana Drive, where access to the Leschenault Inlet track joins up, which is heavily used by pedestrians and cyclists alike.

There are benches at intervals on the inside of a limestone wall opposite the sea wall - Which in itself acts as a place to rest upon.

The interpretive plaques that describe the harbour at the time of white settlement are set in the hand railing overlooking the water. The surface is pre-formed concrete resembling dark timber decking.

There are two pedestrian crossings over Casuarina Drive to the Marlston Waterfront; one for both the south and north entrances. In both instances the pram ramps deviate away from the shortest link for the pedestrian.

In this instance there is excessive garden bed area between the road and the continuing path, and the beds have been trampled where short cuts have been regularly taken.



*Lighting, Signage & Furniture*



The waterfront plaza has stainless steel furniture, bike racks, art work and bollards; creative touches reflect the harbour location in the designs.

The plaza and walkways are lit at night in addition to street lighting, and interpretive historical plaques form a trail along the wharfs edge explaining the history of the Bunbury settlement and establishment of the port.

Shared sign trees between businesses create less clutter, and don't dominate the streetscape with advertising.

Whilst, the signs themselves are a positive and necessary feature, illumination of the sign should only be during the opening hours of the listed businesses, particularly when in proximity of residential development.

This sign is brightly lit and visible from a distance causing an unnecessary disturbance when illuminated at night to nearby residences.



Access & Crossovers



The multiple dwelling apartment buildings have secure internal parking bays for residents, that are accessible from a single driveway, per residential block. The internal parking layout allows for maximum public parking on the outer perimeter of the buildings as there are no other crossovers taking up the street.

Due to high density living arrangements, there are very few private accessways per individual dwelling in the neighbourhood. However, the internal road layout has been designed to slow traffic and control movement.

At the one way t-junction from Stingray Pass to the rear access of Bonnefoi Boulevard there is an overtly large, steep angled speed hump to ensure that cars stop before turning in and out of the street. The speed hump is quite steep and can cause unnecessary scraping of the underside of some vehicles.



Boundaries & Retaining Walls



This building contains both residential and small business uses on the ground floor. Where private yards are present, they are bounded by visually permeable steel fencing, providing complete surveillance of the car park that is opposite and maintaining an open streetscape.

The boundary walls of this development form a solid façade in the streetscape, which provides no level of interaction or quality of experience from a pedestrian perspective.

The ground floor of the building is raised above natural ground level and the wall is used as both a retaining boundary wall and to conceal entry ways, stairs, fire safety equipment and letter boxes etc.



Gardens & Landscaping



With so many multiple dwellings within the complex, private open space is at minimum levels per dwelling. Shared open space exists within the internal courtyards of the apartment buildings, however private spaces in the form of balconies and yards are provided for each apartment.

Small landscaped areas and outdoor settings are visible from many of the balconies and front yards, in most instances care has been taken to provide a usable, yet well kept frontage to the street.

The gardens that line the boundary between the car park and Casuarina Drive are wide expanses of garden bed with low ground cover. Because they are between the pedestrian access and the road, they are commonly used as a thoroughfare by people who are trying to cross to and from Casuarina Drive.

Whilst the high number of planting beds around the public domain makes up for the lack of landscaping on private property, these were not designed conveniently.



*Building Setback & Orientation*



The north and west facing facades of these multiple dwellings have shading devices over the major openings in the bedrooms and living spaces.

The balconies are setback within the building envelope creating shade to the living space and shelter for the open space from the balcony above.

The redevelopment of the silos consisted of a refit of the existing structure to accommodate residential apartments and a new hotel building on the adjacent site.

The construction of the new building is to the south east of the ten storey silos and is overshadowed by the large structure.

The relationship between the two buildings is awkward and views to and from the silos are obstructed by the five to seven storey addition, ruining what was once an impressive iconic feature in the landscape.



*Building Style & Character*



The mixed use building at the northern end of Marlston Waterfront fronting the Jetty Baths is a two storey development designed to replicate wave formations and hints at a nautical theme with round feature windows and curving roof designs.

The building shape and style is synonymous with coastal architecture however the understated colour scheme balances the character between a modern vernacular and an over the top coastal theme.

The fire safety equipment and access points, meter boxes and bin storage facilities can be an unattractive feature in the façade of the building if they are not incorporated in the design.

Albeit the requirements for Building Fire Safety standards and other services have placement criteria for accessibility and visibility, the design and orientation of a building should factor in the necessary service access points where they do not detract from the front entrance of the building.



*Building Materials & Construction*



A minimalist approach has been applied to the design of the building with simple exposed 'I' beams forming balconies to the eastern façade with glass balustrading.

The glass assists in maximising sunlight through the living space by not obstructing any sunlight to the dwelling and it opens up an otherwise confined space.

The top floor apartments are complete with a loft space that allows additional light to filter through the roof space.

Marlston Waterfront is built in a coastal area and is subject to additional requirements to accommodate specific coastal locations, such as overtopping. The area may be subject to overtopping of the seawalls by waves during storm events.

Steps have been taken to alleviate this risk such as creating a second deflecting wall behind the first wall to prevent overtopping, which also acts as a barrier to separate pedestrian movement from traffic.

There is also a minimum setback distance requirement from the crest of the seawall of 10 metres to the building line.



## Local Area Character

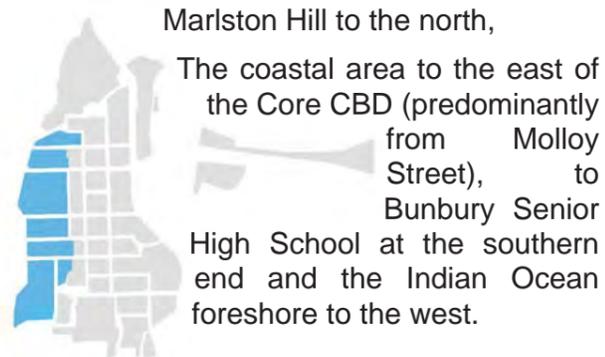
## Aerial View

Formerly Precinct 2 Central Coast (Housing Strategy, 2003). The landform is elevated and provides good views to the rugged coastline. The area is extensively developed with a mix of single residential and high density units and tourist accommodation. Redevelopment has been occurring in recent years because of the high density R-Coding in place. The streets running along the east – west axis consist mainly of older dwellings and tourist sites that are on the MI.

The coastal neighbourhood has a high level of broad open spaces and recreational facilities, including Rocky Point (Wyalup Point), the Bunbury Runners Club, Lighthouse Hill Park and Pioneer Park.

Whilst many of these parks have prime coastal frontage, the opportunity to develop the land for tourism or residential purposes is unlikely due to the historical and aboriginal heritage issues that encompass the area.

## Boundaries



## City Vision Strategy

Strategic Regional Centre Vision Focus Area;

Central Business District Investigation Area

CBD7: Ensure that planning policies and development control provisions adequately provide for the conservation and protection of heritage values.

CBD8: In accordance with the Bunbury Community Safety and Crime Prevention Plan the design of buildings, streetscapes and open spaces is to be influenced by encouraging the identification of risks/hazards through safety auditing of places and development proposals in order to inform public sector capital works/maintenance programmes and private sector development initiatives.

CBD9: Prepare a sport and recreation strategy for Greater Bunbury that addresses the needs of all age groups and identifies ways of supporting clubs and community groups.

CBD10: Identify available sites for tourist development and establish the criteria for the site mix of freehold subdivision and tourism, height and management.

CBD11: Prepare a tourism marketing strategy.

## Activity Centres

Strategic Regional Centre - CBD

Activity Corridor - Tourism

Left to right: Bunbury Surf Life Saving Club, Backpackers Inn



## Landmarks / Features

Left to right: Wyalup - Rocky Point, Pioneer Park



## Public Art Works

The Back Beach Foreshore is distinctly lacking in public artwork. The opportunity exists here for future artworks to be implemented in a complementary form to the existing high quality public spaces.

Right: Wyalup - Rocky Point, interpretive signage on the foreshore



Topography, Views & Vistas



The residential component of the neighbourhood is on a predominantly flat shelf between the CBD and the coast. The landform rises to the north and south quite significantly which is mostly covered by parks. The Bunbury Runners Club occupies a large proportion of this coastal area.

A direct visual line of sight from the Indian Ocean to the Leschenault Inlet is not possible from most points due to the ridge line that runs north-south in ground level approximately 150-200 metres from the coast.

Symmons Street is the only east-west street with a direct line of sight through the CBD as it falls across the lowest point. This linkage from water to water is considered a major pedestrian and traffic route for consideration of future strategic planning and as a visual corridor.



Road Layout



The northern end of Ocean Drive is a fifty kilometre zone with speed humps for traffic calming. A high volume of tourist traffic passes through here daily to view the coast, and vehicle speeds are generally slower than the speed limit during the day as a result of this.

The area is also highly used by pedestrians and crowd events, sporting activities and members of the Bunbury Runners Club all of which may be required to cross Ocean Drive to the public car park.

Prinsep Street is an east-west access road that ascends from the CBD and peaks across the highest ridge line exposing spectacular views of the ocean; however, as the angle of the road is so steep, it is impossible to see oncoming traffic or pedestrians when approaching from either direction.

The road forms a main route from the Bunbury Senior High School and at peak periods of the day is congested with student drivers, cyclists and pedestrians which creates a heightened risk situation.



Street Trees & Verge Treatments



The *Syagrus romanzoffianas* (Queen Palms) in Pioneer Park are considered to have cultural significance in Bunbury and are listed on the Municipal Inventory.

Pioneer Park is the former site of the Church of England Cemetery (1842-1925) and has recently been redesigned; retaining the palm trees as striking features in the landscape.

The *Melia azedarachs* (Cape Lilac/ White Cedar) that are planted along the northern side of Wellington Street have been pruned back beyond regeneration.

The gnarled and stumpy remains of the trees tarnish the streetscape serving no function or purpose.



*Public Open Space*



Ron Mort Park is a small green space on the edge of the CBD. The park is an intimate space of park benches, a basketball ring and children's play equipment bordered with landscaping and brightly coloured boundary walls. The park frames the interface between residential and commercial well and is relevant to both uses.

This pocket of land known as Lighthouse Hill is not a piece of open space that offers any opportunity for passive or active use. Located on a steep hill, there are not many activities that it is appropriate for, consideration of landscaping and facilities could make this pos a user friendly park that encourages social and physical recreation.

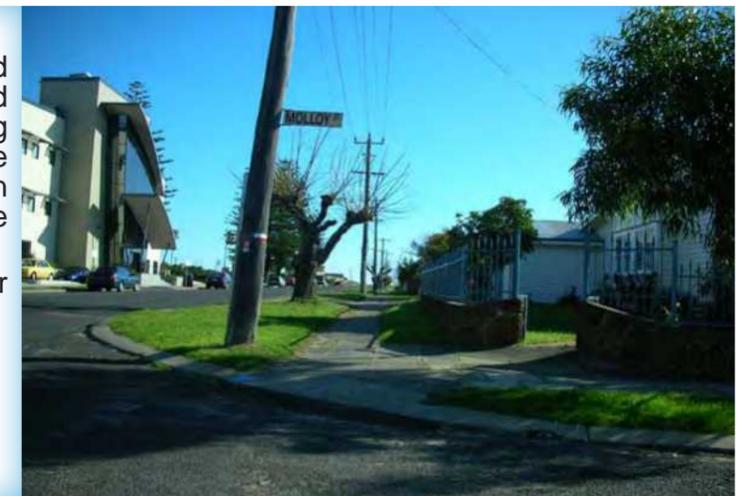


*Pedestrian & Bicycle Pathways*



The south side of Wellington Street has a shared access path with an even concrete surface and width of 1.5 metres. There are no obstructions from adjoining properties, the sight lines are clear and the path leads to the CBD. It is a common route for pedestrians parking their cars and walking to the city centre, and there is lighting provided on the opposite side of the road and passive surveillance all around.

The north side of Wellington Street is old and in need of resurfacing. The path is narrow and dips and crests along the street, at times going well below street level, then it terminates at the intersection of Upper Esplanade and Wellington Street where you cross the road to continue along the south side. There is no linking footpath on the Upper Esplanade northern route.



*Lighting, Signage & Furniture*



The street furniture and amenities along the Rocky Point stretch of Ocean Drive are of a high quality, and create pleasant passive recreation meeting places. There is ample car parking and the feature lighting, shelters, electric barbecues, picnic tables and rubbish bins form part of the landscape; artistic elements have been incorporated into the design of seating, and signage. There are public toilets, beach access and significant views making the foreshore area a popular destination.

The Surf Life Saving Club displays sponsorship signage across the front of the building, facing the car park. Each sign is painted onto a piece of sheet metal and attached to a single frame that spans the length of the building just above eye level. This form of advertising is synonymous with sporting groups and clubs, however the effect on the building façade is untidy with so many colours and logos competing for attention.



Access & Crossovers



This grouped dwelling subdivision on Carey Street is a good example of a medium density grouped dwelling complex that has been designed with an adequate shared internal driveway width and on site manoeuvrability taking the pressure off of additional on street parking and minimising the risk of collision upon entry and exit.

Grouped dwellings or multiple dwellings which are accessible via a single driveway with an entrance at one side and an exit on the other should ensure that sight lines are open for both vehicles and pedestrians.

A narrow driveway between a fence and a wall of the building with only minimal clearance width for a single vehicle is not ideal for shared residential access as they pose a risk to pedestrians already walking down the drive when a vehicle enters, and a risk of damage to the vehicle and building if there is a collision.



Boundaries & Retaining Walls



Appropriate fencing for a corner property in the CBD should be low enough not to obstruct the view of motor vehicle drivers on reasonably busy intersections, particularly in a tight road layout where sight lines are already short. Solid brick walls of no greater than 900 mm are acceptable, anything higher should have maximum visual permeability around the intersection.

The property frontages on Symmons Street are predominantly solid masonry fencing at approximately 1800 mm in height. The trends continues from within the Core Business District, and the properties range from small businesses to private dwellings, and regardless of land use are closed in from the street reducing passive surveillance.



Gardens & Landscaping



This garden has an enchanting subtropical theme; the garden appears cool and shady under a canopy of Cocos Palms with an under storey of ferns and creepers. The thriving garden creates an appealing feature in the streetscape, and is complimentary to the dwelling.

Multiple dwellings such as those built circa 1970 were generally oriented toward the street with parking at the side or rear and landscaping across the front, either in private yards or as a shared space.

The design of this particular building with garaging on the ground floor storey means that the area in front of the building becomes driveway. The result is a sterile frontage in the streetscape and no attempt to break up the hard surfaces with any landscaping has been attempted.



*Building Setback & Orientation*



This set of grouped dwellings built on the corner of Upper Esplanade and Symmons Street encompass inner city living in a coastal amenity. The orientation of the dwellings takes advantage of northern solar access and ocean views.

Upper storeys are setback by balconies which provide shade to the habitable areas; however some of the areas have been enclosed to form to protect entertaining areas against the elements.

Front setbacks for new dwelling in existing streetscapes should be developed in line with the adjoining dwellings on the street or where differing setbacks occur, the average of the two adjoining properties is appropriate. The greater the setback distance between two adjoining properties, the greater the impact on the streetscape.

Setback requirements that allow new dwellings to be setback to a standard minimum do not take into account existing conditions and cause these interruptions in the rhythm of the streetscape.



*Building Style & Character*



Clifton Street has a high density area, and recent developments reflect inner city living with short setbacks on grouped dwellings that are consistent with the rest of the established street.

The narrow row dwellings and simple gable forms reflect similar designs of the established older buildings in the surrounding area.

The variations in facade treatments and fencing provide some visual relief from the identical pattern in the built form.

These grouped dwellings are a simple box-like formation with minimal openings in the upper storey, and no aspect toward the street.

The simple form is accentuated by the flat roof design and the absence of fenestration detracts from the residential character.



*Building Materials & Construction*



This dwelling has been maintained, and the original character is present; irrespective of some work to the original stone work roof sheeting.

The maintenance and upkeep of materials contributes to the life span of the building, and creates a positive contribution to the streetscape.

Buildings that cannot be demolished because they hold heritage value are sometimes not maintained, if they are no longer in use, or lack the funding and priority for maintenance.

Boarding up windows to prevent vandalism is not a preferred means of security, as it creates an unsightly impact on the building, and character of the street. However, it is acknowledged that high exposure in a public area works unfavourably against conventional measures for preventing vandalism and entry.



# Character Mapping

## Local Area Character

Koombana Bay marks the first entry point into the City and provides the first views of the CBD across the Inlet and views across the Bay. The land is predominantly Regional Open Space under the Greater Bunbury Region Scheme and Parks and Recreation under the Town Planning Scheme, with a small residential community and caravan park, and short stay accommodation. The Koombana Bay Sailing Club and Dolphin Discovery Centre sit on the waterfront of the public beach.

The Inner Harbour is located to the south of the Bay, where the character dramatically changes from open coastal and estuarine environment to a heavy port industry, partially concealed by landscaping with immense wood chip piles and machinery puncturing the landscape.

The old Outer Harbour freight railway line follows Koombana Drive around to the Plug where it terminates at present; the future use of the rail corridor still an uncertainty.

## Aerial View



## Boundaries

The Koombana Drive / Blair Street roundabout to the north,

Koombana Bay foreshore to the east,

Inner Harbour to the south and the Leschenault Inlet and Public Open Space curving to the west.



## Activity Centres

Koombana Drive Local Centre  
(Located in the Caravan Park)



## Public Art Works

Various timber carved nautical and exploration themed artworks in POS



## Landmarks / Features

Top to Bottom: Dolphin Discovery Centre, White Mangroves



## City Vision Strategy

### Central Business District Investigation Area

**CBD31:** Subject to detailed site analysis, endorse the location of a museum, Noongar cultural centre and new visitor centre between the mangrove colony and Koombana Drive as part of a tourism node that includes the Dolphin Discovery Centre. Subject to further investigation, consideration be given to locating the Bunbury Regional Art Gallery at this location.

**CBD32:** That permanent residential not be supported (with the exception of nonstrategic tourism sites where 25% residential may be permitted) because of proximity to the port, the high value of the land for alternative uses and insufficient numbers to create a liveable neighbourhood unit.

**CBD33:** That the Koombana Bay Sailing Club location be further investigated for a marina development in conjunction with planning for the Outer

Harbour that can accommodate all water based community groups and the general public.

Topography, Views & Vistas



The topography of Koombana Bay is flat and generally characteristic of an alluvial floodplain. The 25000 year old White Mangroves form a large portion of the area along the Leschenault Inlet.

Koombana Cove is a waterside residential development with views of the city over the Leschenault Inlet, across to the rowing club and across to the Marlston Waterfront.

Views from the holiday park are of Koombana Bay and the Inner and Outer Harbours.



Road Layout



The road layout in Koombana Cove is a single two-way road that forms a rectangle around public open space with housing on the perimeter and with a small amount of housing to one inside end. There is a short cul-de-sac to the south which leads to a gated development that fronts onto the Inlet.

The road lanes are narrow with intermittent speed humps however the road serves low traffic volumes of mostly local traffic only.

The entrance and exit points to Koombana Cove are via Koombana Drive only which has an 80 km speed limit. Traffic is beginning to reduce speed heading in to town and increase speed heading away from town. The judgment of vehicle speed in each direction when exiting the area is crucial to avoid accidents.



Street Trees & Landscaping



The foreshore of the Inlet abutting Koombana Cove is an open linear strip of parkland lined with Norfolk Island pines.

The Pines are an appropriate species as they provide clear sight lines for pedestrians, cyclists and the like with the canopy beginning above human scale and not having dense foliage.

The girth of the trunk increases with maturity creating a sturdy street tree that also creates an attractive landscape when planted in linear formations.

The public open space is planted with Jacaranda mimosifolias, amongst other species. The wind speed through the park has had a negative impact on the structure of this particular tree, with branches only developing to the north.

As a result, the tree's canopy is growing to one side only and if it is left and not corrected the trees stability will be compromised which may result in the removal of the tree before it bows to the pressure of the imbalanced weight, and becomes a danger.



*Public Open Space*



Sykes Foreshore reserve is on the edge of the Leschenault Inlet between Koombana Park and the Bunbury Power Boat Club. With ample car parking and pedestrian connectivity, the park is popular with young families, and for social events and picnics. Good elements of design include; mature trees, shelters, play equipment, benches, car parking, pedestrian access and public amenities.

The parkland adjacent the existing caravan park off of Koombana Drive is an under utilised parcel of land that is zoned for both public open space and special uses at present. The oval sized area forms a shallow basin; and because the land is not flat it does not get used on a regular basis, with the exception of overflow car parking during community events.



*Pedestrian & Bicycle Pathways*



Wide, open, and clearly delineated shared access paths that connect residential areas with public open spaces are an asset to the neighbourhood. The width of a shared path should be a minimum of 2 metres and a maximum of 3.5 metres depending on the location and expected traffic flow. (Liveable Neighbourhoods 2004:58)

Pedestrian accessways need to facilitate good sight lines so that the ability to see ahead and around the route is not compromised. This is known as 'visual permeability'. Features that facilitate sight lines are low hedges, and fences, gardens and benches. Way finding is the use of symbols, cues and signage to help navigate through areas, to guide appropriate use of this space and make inappropriate use obvious to others. (Designing Out Crime, 2006:38)



*Lighting, Signage & Furniture*



The Dolphin Discovery Centre located on the edge of Koombana Beach foreshore is a not for profit organisation that conduct research and eco-tourism on bottle neck dolphins. The building is located away from the main road, and if not for the signage painted onto the side it would go largely unnoticed. The impact of such advertising is beneficial for such an organisation as it is directional signage that is prominent from the main road and forms a recognisable feature in that landscape.

Avoiding dependence on bollard lighting as the only light source and instead using lighting along footpaths that is mounted at a height that does not obstruct the pedestrian from seeing clearly ahead and around them and sufficiently covers the majority of path to avoid any dangerous lurking points in cast shadows. Lighting should be designed as an early consideration and should be appropriate in the local context. (Designing Out Crime 2006:33)



*Access & Crossovers*



The grouped dwellings that are accessible off of Lyons Cove and Marabank Loop have a shared access arrangement that accommodates ample two way access for easy manoeuvrability for two cars to pass each other whilst allowing for turning into and out of private garages with ease.

The road layout in Koombana Cove is predominantly one way traffic around a central public park. As such, drivers have a higher level of safety when reversing out of private driveways. It is also quite common for cars to use the ample verges on either side of the road for parking vehicles as the carriage way is quite narrow.



*Boundaries & Retaining Walls*



Front and side fencing sometimes encloses the dwelling's main area of private open space particularly on smaller corner lots. Combining privacy and passive surveillance of the street can be achieved with medium height landscaping on either side of the boundary, to create an informal screen.

The timber fencing that surrounds the holiday park which was once painted green is now severely stained by the ongoing use of bore water in the vicinity.

Care should be taken to design irrigation systems to avoid direct spraying of fencing, however material selection should be considered where it is known that exposure to bore water will be imminent.



*Gardens & Landscaping*



This garden applies a passive surveillance screening technique in conjunction with an open style of front fencing between private open space and the street. The vegetation is planted on both sides of the boundary and is a balance of small shrubs and trees that will mature into a well balanced screen.

Because there is a large component of high density dwellings in the development, there is not an extensive range of private gardens. However, the public street trees and garden beds incorporate a consistent level of planting to the front of each dwelling, which provides a uniform pattern in the streetscape and is maintained to a high level.



*Building Setback & Orientation*



These dwellings display good north-easterly aspect for passive solar design. The upper storey windows of the dwellings are orientated to receive winter morning to midday sunlight and have individual shading devices to prevent over heating in Summer months.

With Australia's mostly temperate climate it is recommended that all north and west facing windows/ openings that receive direct afternoon solar access should incorporate eaves/ awnings that provide adequate sunlight and shading to living areas.

This varies across Australia and calculations for solar access are determined by region, if applied correctly the use of eaves and awning can increase the thermal comfort of the building passively.



*Building Style & Character*



This residential development comprising 4 grouped dwellings is an example of how the LPP: Koombana Cove Design Guidelines were intended to be applied. The dwellings include a 3 storey component (maximum building height) that maximise waterfront views to the Inlet.

Housing design is encouraged to reflect the coastal area, and respond to climatic conditions and contemporary coastal identity.

The Bunbury Power Boat Club building on the foreshore of the Inlet (to the south of the residential estate) was built several decades before Koombana Cove was established.

The proposed Bunbury Waterfront Project (concept) aims to improve the amenity of the foreshore and provide interconnected facilities for community use, in addition to the proposed built form component. Opportunities exist to incorporate a high amenity foreshore on both sides of the Inlet, including improvements to this site, in order to provide consistency and balance in the landscape.



*Building Materials & Construction*



Quality of building materials and workmanship conveys a strong sense of character and aesthetic appeal.

The level of quality of design and materials varies across the residential building industry making the high quality housing design of this precinct a positive addition to the streetscape.

Features such as passive solar design and orientation, are enhanced with quality workmanship to achieve sustainable building design.

Untreated bore water set too close to building walls creates unsightly marking on many surfaces.

Whilst it only visually affects the structure, it can be prevented by implementing landscaping plans that are require plants to be far enough away from the wall so as not to be affected by the spray pattern of the irrigation system.



### A Vision for the Future

- The CBD will experience commercial and residential growth predominantly to the north, including the CBD Core and Marlston Waterfront precincts.
- High rise buildings may be incorporated along Victoria Street and some potential increases to the height of buildings along Prinsep and Stephen Streets, and between Victoria Street and Blair Street to the north.
- Increased residential density to reflect inner city living household needs.
- Improved pedestrianisation of linkages between the CBD Core and the Marlston Waterfront
- Improved vehicle circulation and availability of car parking within the city centre and periphery.
- The commencement of the Bunbury Waterfront Project.



### Valuable Landscape Character Elements to Promote & Enhance

- The 'Three Waters' are the city's most valuable landscapes, and together should be promoted as the city's greatest asset to lifestyle and amenity.
- The Bunbury Tower is a valuable asset to the identity of Bunbury, being the 'Milk Carton' on the skyline, it is a point of reference within the city, and has been used as an icon for logos, slogans, and advertising campaigns across the southwest.
- The White Mangroves are a significant natural landscape that has high ecological and historical value in the landscape. Accessibility should be maintained for public access and educational programs should continue.



### Important Views and Vistas to Retain

- The Marlston Lookout has significant view for 360 degrees from the top platform.
- The Bunbury Tower is an identifiable feature on the Bunbury skyline and viewsheds should be retained to the Tower from key viewpoints across the CBD.
- The Silos redevelopment is a dominant feature in the landscape and viewsheds should be retained from key viewpoints across the CBD, in particular the 'Gateway' bridge, and from the Marlston Lookout.
- Pedestrian views down Symmons Street that connect Back Beach with the Leschenault Inlet.



### Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Central Business District Local Area Plan.
- Review of the existing local planning policies in effect that regulate development, consolidation and updating of current regulations in preparation for integration with the LAP.
- Initiation of Scheme Amendments to comply with GBRS zoning for the purpose of the Bunbury Waterfront Project Stage 1 commencement.
- Introduction of CPTED principles into local planning policy guidelines.

# 2.5 Outer Business District



*Outer Business District - West*



*Outer Business District - East*



*Tuart Street Special Use Zone*



### Local Area Character

### Aerial View

Formerly Precincts 15, 16 and 22 which were St Mary's, Central and Zoe Street respectively of the Housing Strategy, 2003. The local area is bounded by East Bunbury, Central Business District, Ocean Beach and Parks local areas.

In St Mary's there are timber and asbestos workers cottages of fairly uniform character and lot sizes are generally 600 – 1000sqm (Housing Strategy 2003:99). The residential component has been seriously eroded by poor quality commercial uses and most residential development is unlikely to remain and is expected to be reused for commercial use (Housing Strategy 2003:104).

The area bounded by Cornwall Street south to Teede Street was originally part of the CBD. This part is now a part of the mixed business area and has since been developed, reasonably consistently, with trade services and commercial type land uses.

Between Spencer and Blair Streets are generally narrow and front setbacks are inconsistent, be it commercial or residential. The streets are dominated by signage on front facades and in many cases the front setback area is used to display goods (e.g. motorbikes). The streetscape is highly active and the one-way road system contributes to a poorly navigable area. South of Teede Street is a combination of industrial and commercial service land uses that exist amongst residences; in many cases residences have been converted to small offices and commercial services.

Between Strickland Street, Blair Street and Sandridge Road and to a lesser degree Albert and King Streets the verges and roads are wide and accommodating of commercial vehicles. In the centre of the OBD are mixed land uses however the lot sizes are larger and, relative to the eastern part of the OBD, lots have been developed with large showroom, retail and wholesale land uses (e.g. Condor's furniture).

The Homemaker Centre dominates this locality in terms of its size, scale and number of businesses. Elsewhere the locality is developed with land uses similar to those in the Homemaker Centre, along with commercial service uses including both historical (e.g. market gardens) and more recent developments (e.g. Corporate Express).



### Landmarks / Features

Retravisation Centre

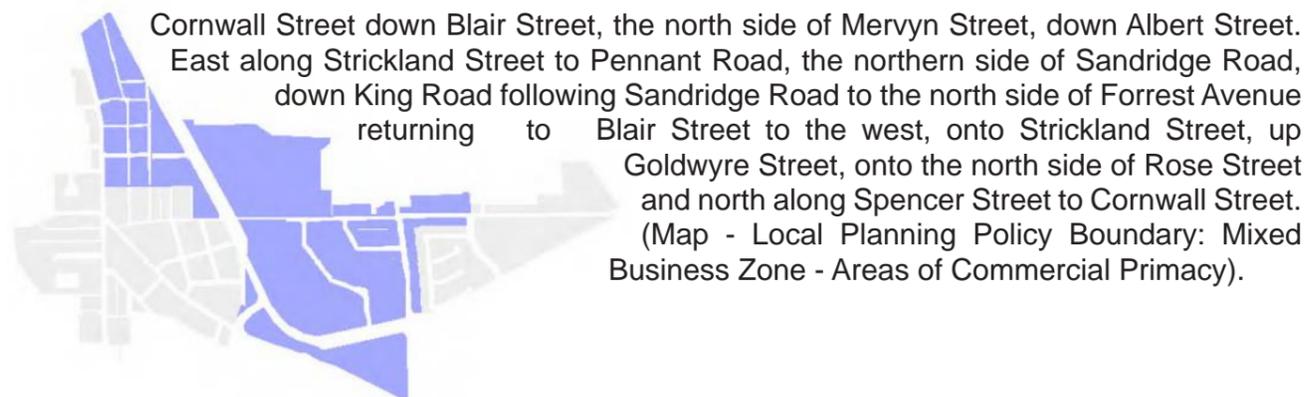


### Public Art Works

Community Artwork Mural, Stuart Street car park



### Boundaries



Cornwall Street down Blair Street, the north side of Mervyn Street, down Albert Street. East along Strickland Street to Pennant Road, the northern side of Sandridge Road, down King Road following Sandridge Road to the north side of Forrest Avenue returning to Blair Street to the west, onto Strickland Street, up Goldwyre Street, onto the north side of Rose Street and north along Spencer Street to Cornwall Street. (Map - Local Planning Policy Boundary: Mixed Business Zone - Areas of Commercial Primacy).

### Activity Centres

Mixed Business Activity Corridor:

- Strickland Street Mixed Business Area,
- Sandridge Road Mixed Business Area.



Top to Bottom: Homemaker Centre, Bunnings - Homemaker Centre, Harvey Norman Complex - Sandridge Road

### City Vision Strategy

Strategic Regional Centre Vision Focus Area; and Outer Business District Investigation Area.

**Objectives and Strategies relevant to the Commercial Primacy precinct**

**ENV6.2** Reduce motor vehicle dependency through improved urban design that facilitates pedestrian, cycle and public transport use.

**SOC4.2** Review the operation of the central bus station in the CBD with a view to improving terminus facilities and connections to attractions, businesses, facilities and adjoining districts.

**ECO1.5** Prepare an integrated land use and transport strategy that supports efficient, convenient, safe and equitable movement of people and goods and services.

**ECO1.8** Ensure that there is sufficient land supply to meet the needs of commerce and industry in the long term and that incompatible land uses do not constrain development.

The Council supports the preparation of a local area plan for the Outer Business District consistent with the goals, objectives and strategies of City Vision, with particular reference to the following key elements:

**OBD1:** Improve facilities for pedestrians and cyclists throughout the OBD local area.

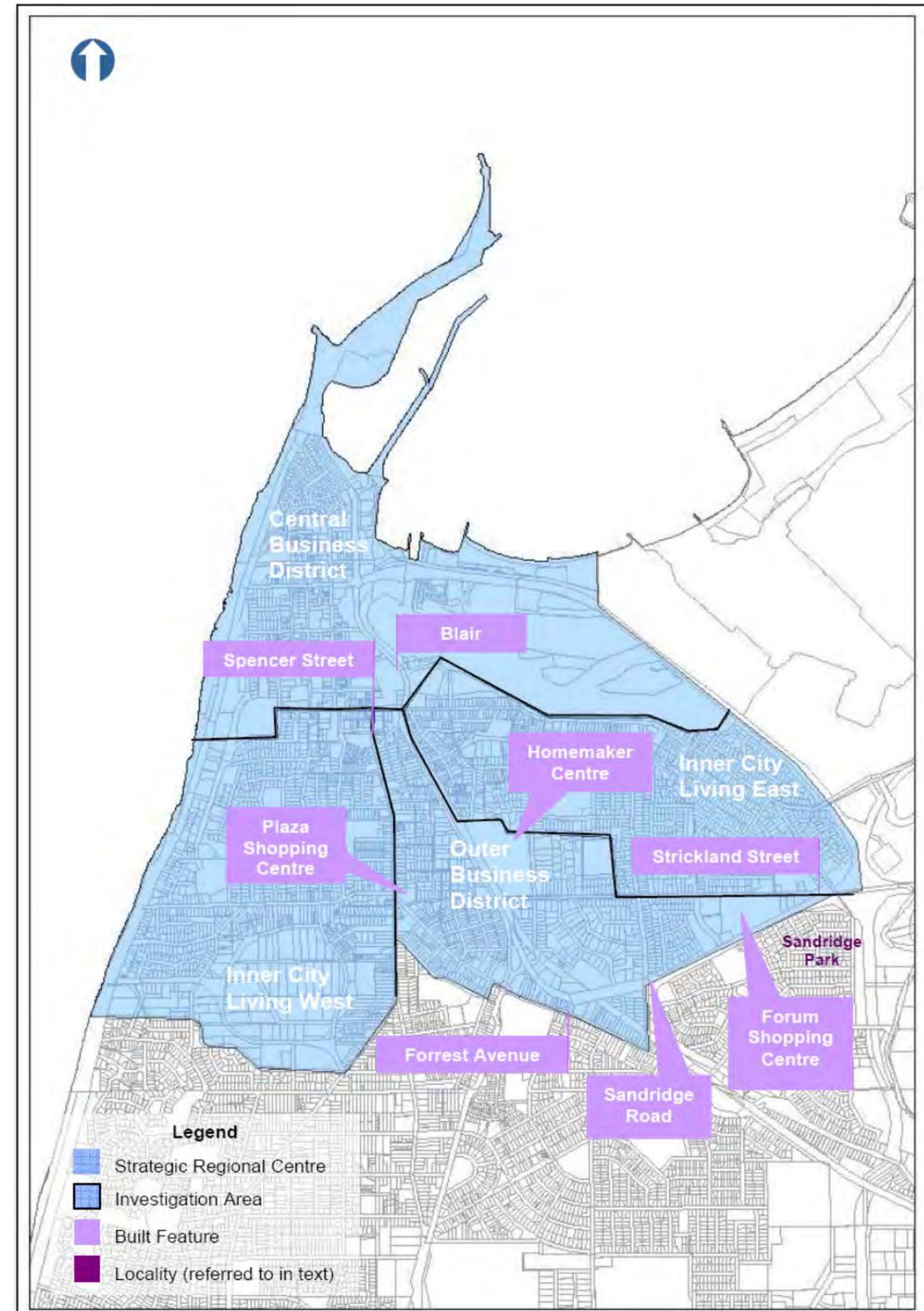
**OBD2:** Prepare a housing strategy (including land availability) for Greater Bunbury that identifies opportunities for redevelopment in the OBD.

**OBD3:** Ensure public transport services provide convenient and frequent access to services and shopping areas.

**OBD4:** Connections between Blair and Spencer Streets be enhanced or developed, including a major upgrade of Stuart Street.

*City Vision Strategy, CoB, 2007, p.100*

Figure 2.5: City Vision Strategy - Outer Business District Investigation Area



## Topography

The OBD sits on low lying land south of the CBD. There is a network of open drainage basins across the area that is interconnected and continues through East Bunbury towards the Leschenault Inlet; the most noticeable of these runs parallel to Blair Street and other permanent water bodies exist between Mummery and Denning Streets and through Mervyn Park.



## Views & Vistas

The views afforded within the outer business district are typical of mixed business activity corridors, with wide roads, and dominating business advertising and signage and display of goods.

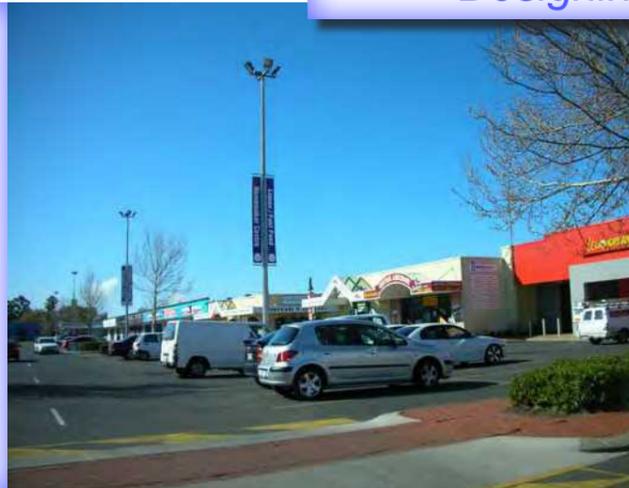
The Blair Street and Sandridge Road activity corridors are wide and open and afford lengthy views of upcoming activity and businesses, with clear lines of sight across carriage ways, wide street verges, and predominantly well set back building lines, the amenity is open and doesn't focus on any particular elements in the landscape.



## Designing Out Crime

There is a predominance of businesses that are not open after hours or weekends, leaving several properties vacant during these periods. Businesses that have car parking where through-access is possible, are particularly prone to vandalism and loitering.

Where possible large open areas that have public access should have sufficient lighting, passive surveillance from the building and adjoining properties or major roads, no entrapment spaces or large expanses of car park that are accessible but out of view from the street. Closed Circuit television cameras can be used to monitor longer periods during close of business if the site layout does not allow for these precautions.



Road Layout



The main spine of the Outer Business District is Blair Street which is an arterial Integrator 'A' road (Liveable Neighbourhoods, Element 2) of approximately 55 metres across the road reserve comprising; double lanes in either direction of at least 8 metres width separated by a 6 metre wide landscaped median and 6 metre verges either side not including reserved land for drainage. Major intersections to and from Blair Street are light controlled including pedestrian crossings due to the high volumes of traffic.

The streets between Blair Street and Spencer Street above Strickland Street are a grid of predominantly one way streets that direct traffic flow in and out of the mixed business area separately. The one way system makes it difficult to drive around the area and deters motorists from using a shorter route between Spencer and Blair Streets. The alternative routes add time and increase traffic conditions to other intersections such as Forest Avenue and Blair Street; and also redirects traffic down residential connections such as Higgins and Doris Streets that are both two way streets.



Street Trees & Verge Treatment



Albert Road is predominantly new commercial, bulky goods and retail trade premises within the Mixed Business zone (above Strickland Street) and has a higher level of amenity than some of the surrounding streets. With wide verges and car parking within the street setback, the western side of the street verge is lined with *Liquidambar styraciflua* which continue around the corner onto Mervyn Street. The deciduous trees provide an attractive feature in the streetscape all year round.

The opportunity to create a more consistent pattern of street trees exists where there are wide grassed verges and where the streetscape is barren. Traditionally the streetscape is not considered to be an important aspect within business areas as such, however, there is an increasing appreciation for improving streetscapes as new buildings are more common and often include verge treatments and landscaping. A consistent approach to appropriate street tree species would be a beneficial step towards improving the amenity of the area in general.



Signage



A sensible way to achieve optimum signage space in a prime locality is to combine several business names on the one sign tree and locate it in a high visibility area, such as before the turn off into the property. The combination of signs in one location is both easier for the user to browse and aesthetically frees up land from being dominated by individual signs competing for attention.

Several businesses along Sandridge Road and Blair Street have advertising sandwich boards out along the verge so that motorists see them; as well as the sign trees that line the property boundaries and the extensive advertising on the buildings themselves. Signage is a dominant feature in the streetscapes in mixed business areas. With signs lining the verge they potentially block the line of sight for motorists exiting premises, and in high winds they often fall over and blow around which may pose a risk to people, furniture, buildings and cars.



*Car Parking*



Stuart Street car park bounded by Stuart, George and Bourke Streets is central to many of the businesses in the area, is adequately accessible and well laid out.

The presence of trees improves the amenity and makes it a suitable and pleasant environment for all day parking, particularly in warmer months.

A lot of businesses take advantage of the wide grassed verges and low kerbing in the area for use as additional car parking. The micro-climate that is achieved under rows of trees is a more attractive parking option than the on-site allocation of parking and as is often the case, there is not sufficient on-site parking for both customers and employees.

Whilst parking requirements regulate the number of parking bays required for land use types, the businesses often outgrow their intended proportions creating a need for additional parking on the street.



*Lighting*



The Homemaker Centre's internal street access off of George Street features street lamp posts down the median in addition to the standard flood lights that are located through the car park. The additional softer lighting improves the both safety and amenity at night, and improves the streetscape (This is lighting implemented by the developer and is not a part of the street grid).

There are streets consisting mainly of auto repair, warehousing and commercial trade premises that are not open for business after normal trading hours. There is opportunity for improving the lighting conditions in streets as such because this area is still used as a thoroughfare at night. Increasing visibility at night would be beneficial to private premises to increase after hours surveillance, and for pedestrian and motorist safety.



*Public Open Space*



The Forster Street Reserve is accessible from Mervyn Street and provides a contrasting setting amongst the commercial uses surrounding it. The park is a natural buffer to the residential properties on the opposite side.

It is a dual use park as it is also a drainage basin with a semi-permanent body of water and reed bed environment which attracts birds and ducks. The park is approximately 3200m<sup>2</sup> of open space perfect for passive lunch time activity for local workers, and also perfect for the adjoining residential neighbours.

Brockman Reserve is located off of Zaknic Place and abuts the Coinda Primary School to the east. The park is surrounded on three sides by the rear boundaries of industrial properties and is separated by a wire mesh fence from the school's oval, the park has no apparent recreational use at present. There is some visual evidence of the western edge of the park being utilised by surrounding businesses for vehicle parking and storage etc. With the increase in residential uses in the area, this park has potential to be of great value to the surrounding community.



*Street Furniture*



Mixed business areas are typically car dominated due to the nature of the trades and supplies industries. Given this preference, the suburbs are not pedestrian friendly, and therefore do not feature any street furniture for the comfort and use of pedestrians. A distinct lack of public facilities such as seating, shelters, rubbish bins etc is evident in this area with the exception of bus stop facilities along Blair Street.

This bus shelter is located on a pedestrian route (setback from Blair Street) which services a major public transport route. The shelter is designed to CPTED design standard, with features such as visual permeability, toughened glass, strong steel frame, as well as providing shade/ shelter from the elements, seating and standing room. The location is alongside a main road (Blair Street) with adequate street lighting and no entrapment spots or hiding places in the near vicinity; such as heavy landscaping. These shelters should form a part of an integrated network within the public realm that accommodates pedestrians and encourages movement within and around the suburb.



*Pedestrian & Bicycle Pathways*



The pedestrian access on the eastern side of Blair Street is a continuation of the path around the Inlet foreshore to the north. Because of the road and drainage reserve the footpath is situated well back from the road, providing a safe buffer from heavy traffic volumes and providing one of the only accessways that brings people in reach of the mixed business area on foot or bicycle.

The pedestrian access on the western side of Blair Street is disjointed and an uneven surface that does not allow for continuous shared access along its length. Adequate pedestrian access begins at the Stuart Street intersection where pedestrians can cross to and from the Homemaker Centre via the light controlled pedestrian crossing.

Whilst there is some pedestrian access along Blair Street, the local access roads are not adequately catered to pedestrians. There is potential to improve the pedestrian movement network between the CBD and the OBD as all day parking facilities in the mixed business area could be greater utilised and draw all day car parking out of the CBD.



*Gardens & Landscaping*



The mixed business area comprises new and old areas of development, many of which have reciprocal rights of way, parking and landscaping areas. Street setbacks in redeveloped areas tends to address the street in a more structured way, and serve as a definition of property boundaries and designated parking areas, which prevents numbers of cars parking across the front verge.

Where there is no formal landscaping arrangement, cars generally park on the verge as a matter of convenience.



*Interaction with the Street*



Spencer Street is a major traffic route in the OBD with high levels of transitory vehicle traffic and customer volumes to commercial properties. This development has reciprocal rights for parking and access and is setback from the street to accommodate adequate parking on site. The built form is consistent and open and addresses the intersection on both street frontages. Wide open verges and clear sight lines make this property one of the more pedestrian, customer and vehicular friendly sites in the area.

Many of the older workshops and industrial properties are designed for a specific purpose and functionality, with access and security to the workshop being high priorities. As a result of this many workshop facades are dominated by large roller doors and very few windows, to minimise security risks and maximise the internal floor area of the workshop. Surveillance of the street is reduced and integration within the streetscape is minimal, as the building does not have an active frontage.



*Access & Crossovers*



The bulky goods retail portion of Blair Street and Sandridge Road spans several continuous blocks with access points off of many side and rear entrances. The use of rear access assists in reducing traffic entering into Blair Street and Sandridge Road to move from store to store. The network of side streets allows for a greater distribution of traffic.

Strickland Street has a lot of narrow frontages which makes ingress and egress difficult for business customers. The driveways are closer together on the street and mostly single access, causing queueing on the street when exiting at the same time as a new car is entering. Caution is required when traffic flow breaks for vehicles turning off or pulling into traffic with short notice. Whilst this is an existing situation that cannot be remedied, the possibility of traffic calming measures may one day be required.



*Boundaries & Retaining Walls*



Visually permeable fencing improves passive surveillance, and is less obtrusive in the streetscape, whilst providing the required security and boundary definition. Ideally fencing should also incorporate a landscaped element on commercial premises which can be used to achieve greater privacy, softening of materials and screening of unattractive storage or service areas. Cyclone mesh is used for the purpose of secure fencing, which is achieved by not providing any unobserved areas or hiding places and by providing a secure boundary that can not be climber over. Ideally, fencing should still contribute to the streetscape in a positive manner where possible, by setting it back or breaking it up with landscaping or some variation in material or design.



*Building Setback & Orientation*



New development within the mixed business area is predominantly pre-fabricated tilt panel concrete. A common feature of these buildings is a corner truncation with a feature entrance or display window. This works particularly well for lots with dual frontage, as it allows for the building to be orientated towards both streets, which improves the buildings appearance in two streetscapes and allows for safer sight lines around the intersection for pedestrians and motorists alike.

Buildings that do not address the street frontage but rather face into the lot do not contribute to the character of the streetscape. In particular where there is no relief in the facade that faces the street, the building lacks visual interest and does not provide passive surveillance of the building or the street.



*Building Style & Character*



Contemporary building styles enhance the streetscape and new buildings that combine modern architecture with sound planning principles and regulations, create better design outcomes overall. The redevelopment of commercial or industrial sites can considerably increase the amenity of the area.

The mixed business area has been evolving with functionality and land use of the area changing and increasing over the past one hundred years. As these changes occur, more land is subdivided and developed, creating pockets of modern 'tilt form' buildings amongst older (sometimes) defunct buildings such as old sheds, workshops and storage yards.

The differing characters of the built form and conditions of the premises in the area will continue to grow and change as re/development occurs frequently.



*Building Materials & Construction*



The New Lyric Theatre on Bourke Street is a two storey building of rendered brick work on the ground floor, corrugated cladding on the upper storey frontage and brickwork to the remaining sides. The upper storey was significantly destroyed in a tornado (2005), forcing major repair work and renovations, hence the current facades have varying materials and finishes creating a contrasting effect and adding visual interest to the building.

Variations in the material palette of new buildings is encouraged to create visual interest in the streetscape in general.



### Local Area Character

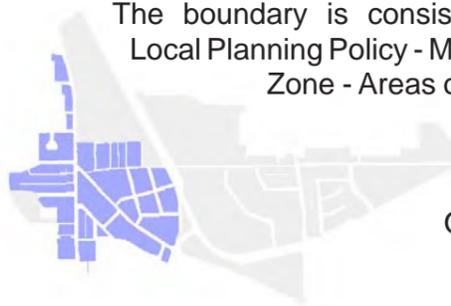
Businesses have developed along Spencer Street to take advantage of valuable street frontage and are characterised by an ad hoc mixture of older commercial developments and car yards, mixed and community uses. Business development spreads westward from Spencer Street in a sporadic fashion until becoming residential areas.

Fielder Street is a narrow access street that services a predominantly local area where traffic speeds and volumes are low and pedestrian and cycle movements are facilitated by footpaths (WAPC 2000:85). Fielder Street was formerly a residential area where homes have been renovated and are now predominantly occupied by businesses that in many cases provide a community service.

Farther south in the OBD - western suburbs, bounded by Forrest Avenue, Blair Street and Strickland Street; a greater proportion of residential properties exist. These dwellings in almost all cases are well maintained and represent a distinctive residential presence in this otherwise commercial services area.

### Boundaries

The boundary is consistent with the Local Planning Policy - Mixed Business Zone - Areas of Commercial Primacy for Mixed Business - Other.



### Activity Centres

Above right: Plaza Shopping Centre  
Below left and right: Spencer Street Mixed Use Corridor



### Aerial View



### City Vision Strategy

Strategic Regional Centre Vision Focus Area; and

Outer Business District Investigation Area

Objectives and Strategies relevant to the OBD - West precinct

**OBD1:** Improve facilities for pedestrians and cyclists throughout the OBD local area.

**OBD2:** Prepare a housing strategy (including land availability) for Greater Bunbury that identifies opportunities for redevelopment in the OBD.

**OBD3:** Ensure public transport services provide convenient and frequent access to services and shopping areas.

**OBD4:** Connections between Blair and Spencer Streets be enhanced or developed, including a major upgrade of Stuart Street.

### Landmarks / Features

The Highway Hotel



### Public Art Works

Due to the nature of the mixed business areas, there has historically been little or no effort to incorporate any artistic pieces in the streetscape. Possible future improvements to the streetscape of the OBD could include the commission of public art works that reflect the nature of the precinct.

Topography



The OBD is a large, relatively flat, low lying area of land occupying the centre of Bunbury. The western district in particular has a lower natural ground level than the adjacent suburbs of Mangles/ South Bunbury. Beach Road (heading away from the OBD) in particular demonstrates the rise in ground level to the west, towards the ocean.



Views & Vistas



The OBD has several major roads branching from key intersections within the OBD (e.g. Spencer Street intersection of Forrest Avenue, Strickland Street and Beach Road). Views are noticeably restricted to the immediate vicinity in most locations, a combination of advertising, displays, and car parking in front of brightly coloured buildings is a typical vista along any of the main roads. This can be an advantage from a patronage point of view in a mixed business area where finding the right business can be time consuming when its difficult to spot amongst so many. Given the levels of traffic that is associated with business areas it is appreciated when sight lines are long and straight for easier navigation.



Designing Out Crime



The oval associated with Bunbury Primary School is on the boundary of the OBD and sits behind a block of units and hotel fronting Spencer Street. The units have an open aspect towards the oval which provides passive surveillance to both the residential development and to the school oval. As well as improving the outlook from the units and the appearance of the park edge, it also decreases the opportunity for graffiti vandalism and anti social behaviour.

The rear carpark and loading area of the medical facility and chemist on Forrest Avenue has only rear frontages facing onto it and opens onto a wide open vacant lot and other carparks. The area is largely unsupervised at night and not adequately lit for night use. Vandalism occurs here at night as this secluded area as is evident by an apparent fire set in the garbage/ service areas behind the building.



Road Layout



Beach Road is a local distributor road that connects the OBD with the ocean and residential suburbs between. On street parking is time restricted, and the road is on a public transport route. Wider lanes allow for cyclists and vehicles to pass abreast parked cars, and there is pedestrian access on either side of the street, separated from the carriage way by tree lined verges.

Fielder Street is zoned for mixed use and is predominantly office and residential uses. Accessible off of Spencer Street and containing business frontages, the street is too narrow for the volume of cars, and has no on street parking spaces. Manoeuvrability from private properties and for vehicles passing on the street is difficult. Special consideration should be given to the approval of land uses in this street with consideration to the parking requirements in relation to spatial constraints to ensure that the existing arrangement is not further disadvantaged by inappropriate intensity of land uses.



Street Trees & Verge Treatments



Despite having a poor reputation for being a poisonous plant, the *Nerium Oleander* (Oleander Bush) is a good street tree for many reasons including:

- being drought tolerant and low maintenance;
- brightly coloured flowers in pink, yellow and white for long periods of the year;
- attractive dense, and shiny evergreen foliage; and
- the ability to be pruned into large bushy forms or slender trees up to 6 metres tall.

Oleanders can be found in street verges and parks, and commonly as screening along road and rail reserves. Whilst the tree is poisonous, the sharp bitter smell and taste of the leaves deters people from attempting to ingest them.

Beach Road and several of the surrounding local roads are lined with Oleander bushes.



Signage



Being a predominantly commercial zone, the majority of properties have advertising signage either free standing or attached to the building or fence.

This business has adopted a minimalist approach, with a small sign attached to the fence in neutral tones, with a bold property number and business name. There is no other signage to indicate that the business is operating from the premises.

This north facing window has been blocked out by a sign that could have been located on the wall. Whilst the intention was probably to provide some privacy to the premises, it is blocking natural lighting and passive surveillance of the street.

Passive surveillance is critical to successful CPTED practice in areas that combine businesses with residential uses and do not have as much passing traffic after regular business hours.



Car parking



Car parking requirements for commercial uses vary, but generally are designed to take the expected occupancy for both staff and visitors of that land use.

The OBD has a lot of commercial land uses operating from converted dwellings. They are required to comply with the same parking requirements as a commercial lot, however, the configuration of the allotment, does not always allow for adequate parking.

Corner properties and properties with wide frontages are ideal for commercial use as on site parking may be better achieved.

Where separate tenancies share car parking bays on the same site, requirements for all businesses should still be taken into account.

Angle parking in front of the building should still be accessible from a single accessway with an on site driveway for manoeuvring to exit the site in a clearly marked forward direction.

This allows for increased: on street parking, added safety for pedestrians, cyclists and motorists passing the accessway, and for the driver of the vehicle to have adequate views of oncoming traffic before pulling out onto the road.



Lighting



Forrest Avenue runs through the OBD providing an important link to major intersections that service both the inner suburbs and brings traffic in from surrounding shires. The street lighting is an important safety feature of this road as it has high traffic volumes both day and night. An ample distance between light posts is less than 50 metres apart to ensure continuous light spread for visibility at night which is most important for pedestrians, cyclist and motorists alike.

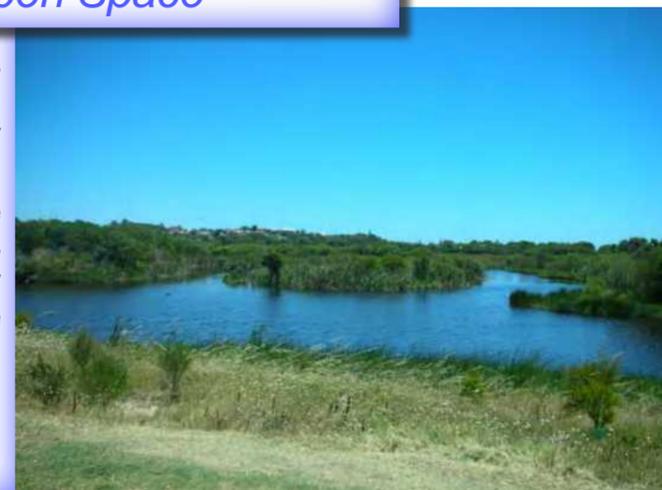


Public Open Space



There are several public reserves around this area that aren't directly within the precinct, such as Big Swamp Wildlife Reserve, Bunbury Primary School reserve and Garvey Place local park.

Whilst the majority of local residents enjoy the Big Swamp, the school hosts many local events and sporting activities on weekends, and Garvey Place is a more intimate setup for residents of the cul-de-sac.



Street Furniture



As with the Commercial Primacy precinct, the western precinct is not designed for pedestrian movement and therefore is devoid of street furniture and activity beyond the bus stops.

There are a greater number of schools in this area and with the presence of children and parents on a daily basis, attention should be given to providing comfort and necessities such as seating, bins and shelters at gathering points.

There is a public bus service that runs up Spencer Street to and from the CBD. In this instance there is a bus shelter located in the middle of the footpath which diverts pedestrian traffic around the structure. Spencer Street has high traffic volumes during business hours through the mixed business area, so whilst it is desirable to set the shelter back from the kerb, it also diverts pedestrians towards the busy carriage way to get around it.



Pedestrian & Bicycle Pathways



The footpaths on Spencer Street around the Bunbury Plaza Shopping Centre provide excellent universal access around the local centre, the surfaces are paved and have a contrasting black and white paved checkered pattern around the outside delineating the kerb and private property lines. Pram ramps are delineated with tactile surface treatment for visually impaired.

The intersection of Beach Road, Spencer Street and Forrest Avenue is a major 'hub' for pedestrian activity, however, it is not a standard symmetrical 4 way intersection, and pedestrian access is not accommodated well within it. There are no dedicated pedestrian walkways or lights at each corner which is confusing for the pedestrians and motorists.

In an activity centre with such widespread services on each intersection walkability should be promoted and a more coordinated approach to car parking and access implemented.



Alleyways



There are several rear accessway arrangements in the OBD particularly where the back of commercial properties meets residential properties or directly behind a main road frontage. The level of quality varies from street to street as does the level of use. Some properties still rely on the use of rear access to gain parking entry for staff or residential purpose.

When properties are subdivided or amalgamated, rear accessway land should be either purchased and closed off to form part of a development, or a developer contribution should be received by the City for the upgrading of surfacing and drainage of the accessway.

In instances where no work has been carried out to improved the amenity or conditions of the accessway, there is a higher risk of vandalism and possible damage to vehicles where uneven surfaces or obstructions occur. As this tends to result in lower usage the problem escalates over time.



*Interaction with the street*



The north-east corner of Bourke and Stuart Streets is occupied by buildings that are developed right up to the street frontage. Stuart street is lined with 90° parking which allows the road to remain clear of parked vehicles and reduces the impact of the solid walls around the intersection.

A new footpath has been laid along Bourke Street which includes a wide grassed verge on the roadside and a private landscaping strip separating the car park and creating a softer streetscape.

Front setback treatments should not extend to the kerb unless it includes unobstructed pedestrian access.

Maintenance of this area has a significant impact on the streetscape and can define the character of the property.

It is understood that with the changing of lease to a tenancy the design and condition of the landscaping can change significantly which may alter the accessibility and appearance of the streetscape regularly.



*Access & Crossovers*



The western end of Strickland Street is predominantly residential on the south side of the street. The residential component ranges in densities, and there are several grouped and multiple dwelling developments.

This development comprises 12 units off of one common accessway. Taking into account parking per dwelling, the development has a high level of traffic for a single accessway and the design provides open sight lines with ample room for two cars to pass each other at the entrance point and safely give way to traffic and pedestrians.



*Boundaries & Retaining Walls*



The commercial component of Beach Road looks reasonably similar to that of the residential component as most of the properties maintain a low scale frontage replicating the private garden of a private residence.

Open fencing and formal landscaping create a personable ambience suited to a mixed use frame in a transitional locality with residential uses.

Solid front fencing that is excessive in height obstructs passive surveillance and deactivates the streetscape, as it provides no interaction and little visual interest.

It also creates the opportunity for natural ladders to upper storeys where courtyard walls directly abut the building.



*Building Setback & Orientation*



This surgery (left) was built in 2008 and is a good example of passive solar orientation. It has unobstructed northern and western aspects to natural lighting.

The building is designed to take into account the angle of the summer sun with deep eaves to the west that provide afternoon shade and impervious shade structures to the north to maintain natural lighting where there are openings.

This example is a modern interpretation of a common passive solar design principle. Methods of shading west facing openings incorporated into the building design can become features in the facade, as with this design (right) which is several years older.



*Building Style & Character*



A lot of the existing properties in the mixed business area are businesses operating from residential buildings.

Adaptation projects like this one maintain the integrity of the residential character of the area and may still be used as a dwelling in the future.

The quality of housing stock that has not been converted into small business is generally high, well maintained and distinctive in character. Given the commercial nature of the area (to the north of the precinct), distinct residential properties stand out in the streetscape.



*Building Materials & Construction*



These residential grouped dwellings (left) show contemporary designs and variations in modern Australian housing materials. Materials include clay bricks, concrete panelling and colorbond cladding. This form of dwelling will blend seamlessly into the future desired character of the OBD - West mixed uses character as the bulk, scale and material palette are similar to that of the contemporary office and commercial premises that are appearing in the area (see examples of modern commercial buildings in the vicinity to the right).



### Local Area Character

The Outer Business District - East (OBD - East) neighbourhood is severed from residential localities by light industrial land uses, including the mixed business area to the west and the Forum Shopping Centre to the east and proximity to Sandridge Road.

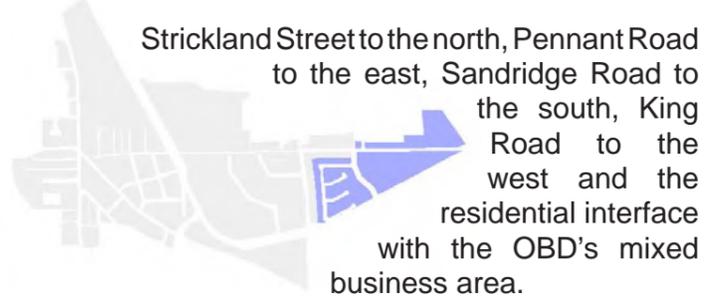
Pennant Park is along the eastern boundary of the neighbourhood however there is almost no interaction between the residences and the park. The residential interface with the park is developed with solid 1.8m high fibro-cement fencing, and there is little interaction between the two. The shopping centre also ignores the presence of the park, thus leaving it as a necessary buffer between the two land uses, where opportunity exists to improve the amenity with increased landscaping and improved amenity that could be utilised for greater pedestrian movement.

The retail/ commercial development to the east of Pennant Park has a very strong presence in this neighbourhood. The shopping centre dominates and imposes its commercial nature upon the Pennant Road, and Strickland Street frontages. In particular the residences on Strickland Street are faced with an unobstructed view of the rear of the multi-storey carpark, commercial premises and fast food outlets. The strip of Strickland Street between the OBD - West precinct and here is gradually turning into a mixed use corridor, taking advantage of the Strickland Street frontage for its exposure to traffic volumes, which is gradually diminishing the residential character of this area. There is also an aged-care independent living housing estate to the north of the shopping centre.

### Aerial View



### Boundaries



### City Vision Strategy

Strategic Regional Centre Vision Focus Area; and  
Outer Business District Investigation Area.

### Landmarks / Features

Left to right: Pennant Park, Bunbury Tenpin Bowl Family Fun Centre

### Activity Centres



The Bunbury Forum Shopping Centre

### Public Art Works

The eastern precinct of the OBD is largely residential, however the Bunbury Forum Shopping Centre is at the furthestmost end of OBD as well. There is great opportunity to incorporate public artwork in the expansion of the shopping centre during 2010, as there is currently no public artwork present in the vicinity.



*Topography, Views & Vistas*



The residential area occupies a small flat geographical area behind the public open space on Pennant Road which is a dual use drainage basin as required during winter.

There are no geographical features that identify the landform as unique or constrained, and the area itself is quite small.

Given the flat topography of the precinct, no views are afforded beyond the immediate locality. Driving east the Bunbury Forum is visible from Forum Way, and looking south is Sandridge Road through the road reserve planting.

The nature of the neighbourhood is designed to orientate the community inwards in an enclosed manner, rather than outwards towards the commercial uses, which was a strong suburban design principle at the time of development.



*Road Layout*



While a small number of residential lots exist in the northwest of the precinct abutting the mixed business area, the bulk of dwellings take access off Forum Way and its three cul-de-sacs as opposed to Strickland Street or Pennant Road which are high traffic areas.

Cul-de-sac streets within a relatively small precinct create a sense of intimacy and encourage slower vehicle speeds.

Pennant Road to the east is a four lane road of relatively short distance that provides access to Strickland Street to the north and Sandridge Road to the south.

Pennant Road is wide relative to its length however, Pennant Road experiences high levels of traffic and the turning lanes in and out of the shopping centre are valuable to ensure the flow of traffic is not always interrupted by the traffic from both Strickland Street and Sandridge Road.



*Street Trees & Verge Treatments*



A buffer of mature trees exists between Sandridge Road and the residential area. The buffer makes a positive contribution to softening of the visual amenity of the street that adjoins the main road, contributes to a perceived acoustic barrier from traffic noise and creates a sense of privacy for the neighbourhood.

There are no street trees or landscaping of verges in the neighbourhood. As a result of this individual properties have shown a propensity towards developing their own extensive landscaping. Lavish gardens have individual appeal; however they do not generally create uniformity in the street, as they reflect differing styles, species, and maintained appearances. It may be difficult for to implement a street planting plan in future as it would require the removal of some personal plantings on the verge.



*Public Open Space*



Pennant Park is behind the rear property lines of the predominant residential portion of the OBD- east and there is almost no interaction between the retail/ commercial uses and Pennant Park and there is also connection to the residential area. With no real visual surveillance of the park from the from either side the park generally serves as a place to take a walk, as a play area, or as a dog exercise area during the day time.

A number of mature trees are scattered across the park. The park is reasonably large relative to the immediate residential precinct to the east that it serves, and is probably utilised more as a thoroughfare than as serving a recreational purpose.

The residential interface with the park is developed with solid 1.8m high fibro fencing and the other three sides are exposed to busy roads, there are no pedestrian crossings to facilitate access to the park and it is devoid of public facilities, however it does also act as a drainage swale which creates an uneven ground formation making it difficult for active recreation whilst sodden.



*Pedestrian & Bicycle Pathways*



The opportunity for dual use paths (DUP's) exists to incorporate this strip as part of an interconnected network that link public transport, neighbourhood centres and community facilities. This neighbourhood is located in a position to maximise walkability, given the opportunities that exist for public transport and location being next to a district centre.

Very few footpaths have been provided in the precinct, they occur sporadically and are not an interconnected DUP system.

There is a pedestrian accessway that leads into Pennant Park from the residential area, however the footpath fails to meet up with any formalised footpath in the residential street.



*Lighting, Signage & Furniture*



The residential suburb is surrounded by commercial uses and therefore has visible signage from several view points. Minimising the obtrusive presence of signage to dwellings may be achieved with shared sign trees, no illuminated or flashing signage, and an overall height that does not dominate vistas but is still visible to motorists. Signage that is excessive in height detracts from the amenity of a residential scale environment.

Colour schemes should be harmonious with their surroundings and be of a bulk and scale that is appropriate in its context whilst providing adequate advertising of the intended purpose.

The suburb appears to be adequately lit at night, and does experience some overflow of light from the adjoining car parking area and signage.

There is a lack of street furniture beyond the property of the shopping centre, including through the park and on the main roads which should be implemented as part of an interconnected pedestrian network.



*Access & Crossovers*



Access is from the primary street frontage, wider blocks allow adequate on street parking between crossovers, and accessways do not dominant the frontage. Crossovers are at street level given the flat topography, so it doesn't interfere with the with the informal pedestrian access route across the verge areas.

The properties at the end of this cul-de-sac are disadvantaged by not having any street frontage; the driveway meets the road in a dog-leg formation.

A pedestrian accessway lies between the two end properties and is barely discernible from private property, as it is only fenced to one side. The accessway leads to Pennant Park and through to Bunbury Forum.



*Boundaries & Retaining Walls*



Whilst the area is predominantly open frontages, low open fencing such as 900mm high timber picket fencing may be used to delineate the private and public domain, whilst maintaining an open street frontage and passive street surveillance of the street.

Solid masonry fencing, particularly on a corner property, obstructs visual sight lines around the corner for vehicles and pedestrians, dominates the streetscape on approach from both directions, and conceals the dwellings from the street.

It is understandable where a frontage backs onto a main road or reserve, where an acoustic/ visual buffer may be required, that additional height and security may be implemented, however, this does not generally apply to standard residential circumstances.



*Gardens & Landscaping*



Front gardens delineate the boundary between private and public. Pedestrians need to be able to differentiate between private property and the verge, this is where garden and landscaping features are used to create privacy and form a natural boundary.

With a garden feature positioned along the boundary, it creates an invisible barrier that pedestrians can identify with. Maintained and landscaped front gardens offer privacy, demonstrate neighbourhood character and identity, encloses the streetscape and positively contributes to the amenity of the area.

Gardens that spill over the boundary of private and public, may potentially obstruct the footpath. The height and nature of a garden should be designed appropriate to the boundary of which it is situated abutting a public accessway.

Maintenance requirements for landscaping as such, require pruning to ensure that there are no sharp branches, or foliage at eye level, and that safety is not compromised for users of the footpath.

Landscaping is often used to conceal services or waste disposal areas, and is sometimes preferred to be of a dense nature where suitable.



*Building Setback & Orientation*



The neighbourhood has consistently large verge areas and front street setbacks to dwellings. This offers generous front gardens, an open vista of the street and a high level of interaction, as well as a pleasing streetscape, and sense of place. This is a characteristic of areas that have been developed simultaneously, and it complements the overall streetscape positively.

The interface between residences in the neighbourhood and the mixed business area is characterised by poor amenity with little to no buffer or transitional zone where the openness draws attention to the differing land uses and their opposing orientations.

This is accentuated by not having a visual buffer between the loading docks and the residences exposed to the rear facade of the centre. Redevelopment should explore an active contribution to the Strickland Street frontage on both sides of the street.



*Building Style & Character*



Notwithstanding its relative isolation by busy roads and uncomplimentary surrounding land uses, this neighbourhood has a distinctive character and a high level of amenity. Typical housing stock in the eastern neighbourhood area displays the following attributes: solid brick construction, tiled roof, and garages and/or carports under the main roof.

Built form is generally single storey and consistent in scale and front setback. The neighbourhood is characterised by typical Australian vernacular style of dwellings that were built between 1960 and 1990. In most cases the front yards have not been fenced although examples exist of low open picket style fencing and solid 1.8m high fencing along the full frontage of the lot.



*Building Materials & Construction*



Typical construction materials in the eastern neighbourhood are brick and tile. Housing stock is generally in good condition, reflective of a strong neighbourhood character and identity.

Given that the era of development is tight and reasonably uniform in material selection, there are a few evident exceptions to the neighbourhood that have either redeveloped/ renovated since construction with white/ metallic surfaces, white paint and light coloured concrete.

The visual impact is great in such a consistent area, which changes the dynamics of the streetscape and is reflective of change.



## Local Area Character

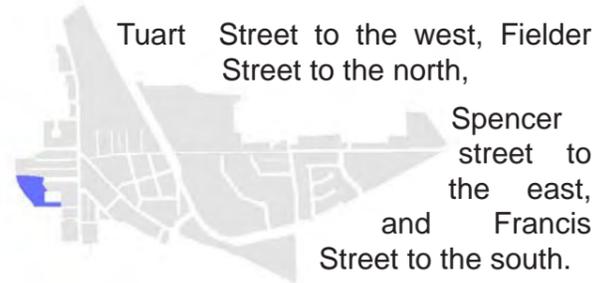
## Aerial View

Between Big Swamp reserve and Fielder Street is the Tuart Street neighbourhood. This area is being developed in response to the recent housing boom and, although it is a dedicated to Special Use zone that could contain multiple land uses, it is being developed predominantly as residential, never the less there are further stages of land being scheduled for release in the future.

Along Plaza Street, solid 1.8m high colorbond fencing has been installed in neutral tones. Two storey residences are visible however they do not interact with Plaza Street; there are no balconies and only some overlooking windows. Plaza Street is wide and has been developed with mountable kerbs, which is conducive to higher vehicle speeds.

Secondary streets are cul-de-sacs and are developed with minimal but consistent front street setbacks. Front gardens are formal and narrow, and are framed with open style fencing. There are garages developed forward of the building line however these are often developed with balconies above. While being only recently constructed and with significant opportunity for improved amenity with the establishment of vegetation, the streetscape appeal of these secondary streets is reasonably high.

### Boundaries



### City Vision Strategy

Strategic Regional Centre - Inner City Living West

#### Objectives and Strategies relevant to the OBD - Tuart Street Precinct

**ICLW1:** The management arrangements for the Big Swamp Regional Park need to ensure that the viability of the wetland vegetation and fauna habitats are the highest priority.

**ICLW2:** Support improvements to the health and welfare of communities through programmes that upgrade pedestrian and cycle paths and provide facilities that encourage people to interact.

**ICLW5:** Ensure public transport services provide convenient and frequent services particularly to key activity centres south of the CBD.

### Activity Centres

The precinct forms a part of the OBD and is adjacent to the Spencer Street Mixed Use Corridor.

It is also within 200-400 metres walking distance from the Beach Road Local Centre.

Below: Beach Road Local Centre



### Public Art Works

The Tuart Street Special Use zone borders the Big Swamp Wildlife Park where there is already a selection of artworks and sculptures by local artists and students along the walk. Given that this precinct is relatively small it is reasonable to assume that it is not a high priority to incorporate any artwork within the precinct.



### Landmarks / Features

Right top and bottom: Big Swamp Conservation Park

Below: The Aqwest water treatment plant is a dominant feature in the streetscape.



*Topography, Views & Vistas*



Tuart Street occupies a small geographical area running around the eastern perimeter of Big Swamp Park, the landscape is reasonably flat.

The views afforded from dwellings in the neighbourhood are of Big Swamp, as it was encouraged through the City's Design Guidelines that living spaces be orientated toward the reserve, to take advantage of the outlook. There existed a unique opportunity for this subdivision to exist in a mixed business area, whilst having a natural outlook for the residential component.



*Road Layout*



Plaza Street is a through road for traffic to Big Swamp and the Ocean Beach area.

The internal roads have been constructed for access to this development specifically, consisting of short cul-de-sac access roads with rear laneway access and on street parking, branching off of Plaza Street.

Because Plaza Street is a straight road with no formal lane delineation or traffic calming, and is used as a short cut route, the road experiences anti-social driving behaviour.

The volume of traffic that accesses Plaza Street divides the neighbourhood, preventing a tight-knit sense of community.

This may be alleviated by traffic calming in the future if it becomes necessary.



*Street Trees & Verge Treatments*



The use of a dominant tree specimen within new developments provides continuity and promotes the establishment of a landscape theme that contributes to the overall local character.

The use of olive trees provides the positive attributes of good drought tolerance and low water consumption, and shading of pathways and setback areas.

Vegetation of ground covers and under storey with species such as kangaroo paw do offer excellent drought tolerance and ecological values.

However, where landscaping is used, it should promote the reestablishment of a diversity of native species within urban environments to provide ecological corridors for movement and population of fauna and flora. Olive trees, are an introduced tree species and have a number of disadvantages that include:

- Need for frequent maintenance (e.g.: clean up of dropped fruit material);
- Have little to no historical relationship to the locality; and
- Limited (or negative) contribution to ecological values.



*Public Open Space*



As in the case of street trees, landscaping of park lands with mulched garden beds, ground cover, under storey and medium to top story vegetation should seek to achieve many of the same outcomes as good street tree planting – providing soil stability, visual amenity, shade, buffering, habitat in a manner that minimises water consumption and supports appropriate levels of use (e.g. passive and active recreational opportunities).

Whilst this locality has not created any significant parkland, given its proximity to Big Swamp, the public accessway linking Wisteria Court to Tuart Street, has been well vegetated in a manner that uses native species whilst ensuring sight lines are preserved.

Consideration should be given to Crime Prevention Through Environmental Design (CPTED) principles in the design and management of landscaping, which should also be constantly monitored through maintenance programmes.



*Pedestrian & Bicycle Pathways*



The footpath on Plaza Street directs pedestrian traffic to Big Swamp from Spencer Street. The footpath is on one side of the road only, and continues on the residential side of Tuart Street.

The path also continues across the opposite side of Tuart Street and forms a dual access path around the swamp. The neighbourhood is well connected within its surroundings.

The cul-de-sac streets have predominantly fenced in front yards with no vehicular access to the primary frontage.

The verges are landscaped and provide on street parking bays, with no formal pedestrian access. There are pedestrian accessways/ footpaths at either end of the street with no connecting paths in between. This is achieved because they are local streets only and with the use of rear access, pedestrian paths to the primary street frontages are superfluous.



*Lighting, Signage & Furniture*



There is a distinct absence of furniture and signage in the neighbourhood, being so small: however as the suburb is a recent development, the streetscape is of a high standard, including lighting. The light poles are located at regular intervals; with a reasonable clearance from street trees to prevent future obstruction of light spill.

Each light is located on a freestanding designer post, instead of being mounted on stobie poles as the power lines are located underground in this area.

Plaza Street is on a public transport route and has a bus stop on either side of the road.

The stops are marked with the standard 'hail bus here' marker that is barely visible from the street. The verge area has the opportunity to support a bus shelter and paved area for waiting passengers that is interconnected with pedestrian access.

The improvement of interconnected pedestrian oriented facilities would assist residents in making a connection between the Tuart Street residential area, and that beyond it, to the Plaza Shopping Centre as a walkable catchment area.



*Access & Crossovers*



The neighbourhood is a medium density development designed for rear lane access to dwellings. There are two rear accessways built into the neighbourhood to service four street frontages of single dwellings. The dedicated accessways for vehicle access creates a higher quality streetscape at the primary frontage because there are no garage or driveway interruptions to the street.

This street frontage has been utilised for rear access with garages spanning the entire frontage of each allotment. The effect on the streetscape is negative, in particular to the dwellings that have primary frontages on the opposite side of the street. The expanse of driveways on the street restricts on street parking.



*Boundaries & Retaining Walls*



All housing has visually permeable fencing consisting of brick plinth and piers with tubular steel designs no higher than 1500mm are appropriate. Corner fences should included a corner cut off to maintain sight lines of approximately (3m x 3m).

Solid fences (e.g. "colorbond" or good neighbour type fencing) reduce visual permeability and offers no interaction between the street and houses (public and semi public/ private areas). Where solid fencing is used to provide privacy to private open space within yards, incorporation of design features and variation, vegetation, etc should be used to soften the streetscape and provide interest.



*Gardens & Landscaping*



Private gardens frame dwellings and provide a degree of streetscape interaction. Vegetation within private gardens is still under establishment – being generally formal and well maintained. Front gardens are limited to landscape strips, but delineate the public and private spaces, and reinforce a sense of ownership.

There are still some lots that are yet to be developed, which can also have an effect on the streetscape if they are not maintained. Treatment of vacant land should be considered if no development plans are foreseeable in the near future. When establishing a front garden, there are some streetscape considerations that should be taken into account, in particular where landscaping is not included. Front setbacks without vegetation or that are poorly maintained creates negative:-

- perception of hot and barren urban environments with poor amenity and micro climates;
- little visual differentiation between public and private domains; and-
- impacts on neighbourhood character, identity and sense of ownership.

*Building Setback & Orientation*



On internal access roads building setbacks are minimal (approximately 3 metres), but are regular, which creates a sense of consistency and enclosure. This consistency is derived from the Design Guidelines to create a consistent setback along short streets.

On Plaza street which is a primary connector between the Plaza Shopping Centre and Big Swamp, buildings are not orientated onto or address the road frontage. This results in minimal passive surveillance and interaction to the streetscape.

The opportunity to provide active frontages to this road has been lost – and should be explored in future development where connecting roads have appropriate mixed-uses that are compatible with residential development, but which also take advantage of the location and its pedestrian linkages.



*Building Style & Character*



Building styles reflect contemporary residential development, with a reasonable degree of variation that includes some architectural designed homes and quality building designs.

There is variety of single and two storey dwellings, which usually incorporate porches, balconies and verandas.

Opportunities for greater climatically appropriate design features should be explored in modern development.

Contemporary styles including parapet walls and flush eaves should not be incorporated into north or west facing facades.



*Building Materials & Construction*



Buildings are predominantly constructed of double brick, corrugated iron and tiles. Contemporary development is occurring that demonstrates a diversity of form, styles and use of a variety of local timber and stone materials.

Roofs constructed in powder-coated steel, especially in reflective colours, can create excessive glare and heat, and also forms a dominant feature in the landscape that can be visible from long distance.



# Strategic Planning

## A Vision for the Future

- A more sophisticated approach to car parking and access for individual businesses, addressing site constraints and intensity of land use.
- An interconnected dual use path system for cyclists, pedestrians and linkages to public transport, with stronger connections to the CBD.
- Higher aesthetic value placed on the streetscapes of mixed business areas, including coordinated landscaping and street furniture.
- Active mixed use corridors of compatible land uses that are suitable for mixed use and of an intensity not suited to the CBD,
- Medium density residential, designed for adaptation for ground floor mixed use development.

## Valuable Landscape Character Elements to Promote & Enhance

- Maintain the level of public open space that exists at present and enhance public facilities within the public realm to accommodate a larger residential population.
- Promote pedestrianisation.
- Enhance the local amenity of commercial and residential areas by creating high quality streetscapes and promoting crime prevention and community safety.

## Important Views & Vistas to Retain

- Sandridge Road is the arrival point of many of the major intersections into Bunbury from the linkages to outer suburbs and other shires and is recognisable by the nature of businesses and landmarks as a mixed business area, which is typically the lead up to the outer suburbs of a CBD. Once the road swings into Blair Street the CBD is visible in the distance.
- The Blair Street Mixed Use Corridor is an important linkage to the CBD and is a major commercial hub within the City. The road width is much wider, and the lot sizes are larger with greater building bulk. This corridor is essential to commercial traffic, public transport and residential traffic of both the City and other Shires.
- Spencer Street is a tighter corridor with an enclosed view shed, but provides a straight and unobstructed business corridor which allows easier navigability beneficial in a more intimate streetscape than Blair Street, with smaller lots and a greater number of businesses to digest. The corridor is a major transitory route and is shared by local residents and commercial traffic alike.

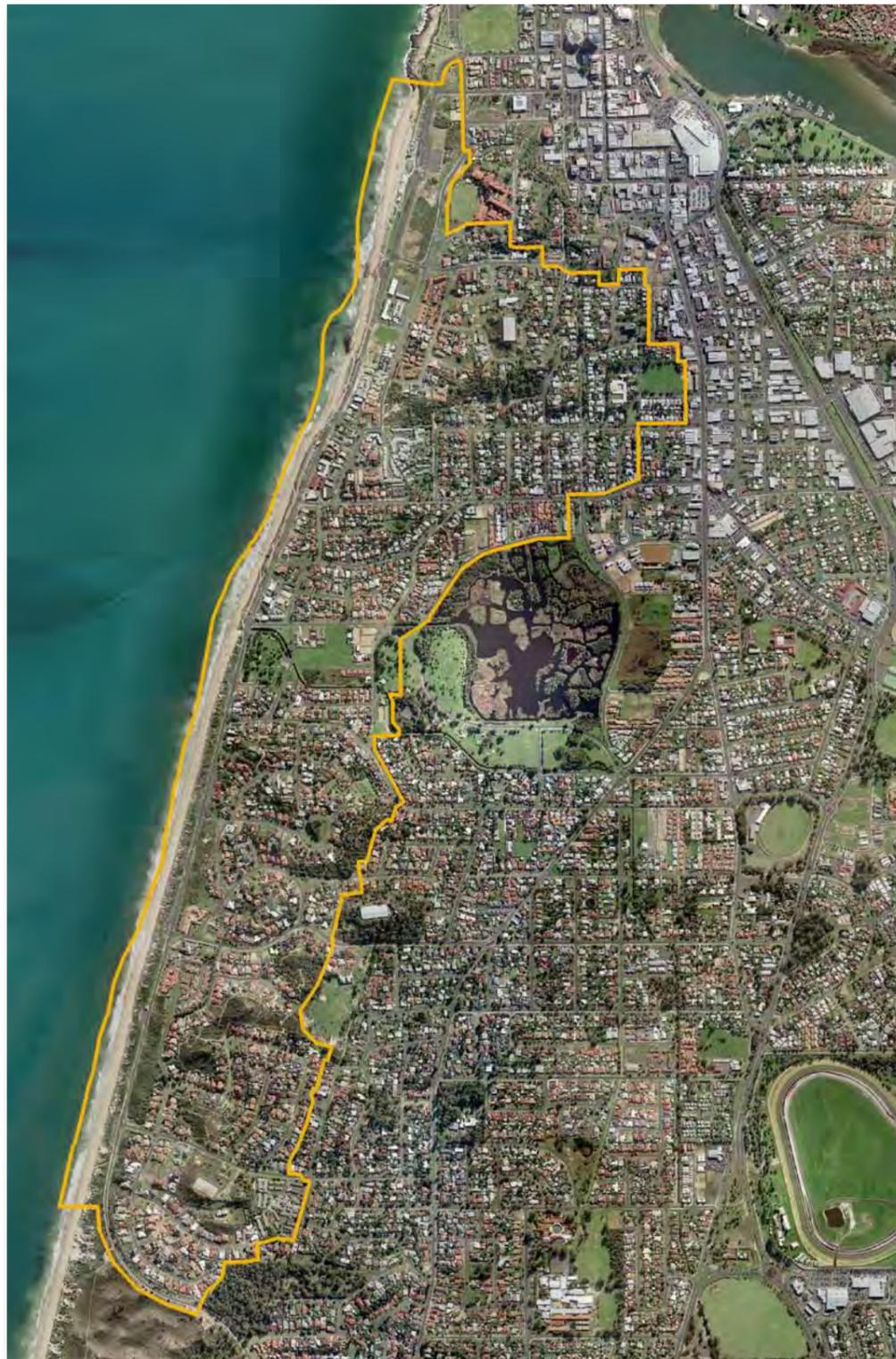
## Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Outer Business District Local Area Plan.
- A Town Planning Scheme Amendment to introduce a true mixed use zoning with a high residential amenity that encompassing living and working within the local area.
- Review of the Local Planning Policy: Non-Residential Development within or adjoining Residential Areas, to update frame areas, local activity centres and corridors.
- Introduction of CPTED principles into local planning policy guidelines.

## Outer Business District



# 2.6 Ocean Beach



*Ocean Beach - General*



*Tree street Area*



*Mindalong Heights*



# Character Mapping

## Local Area Character

Formerly Precincts 2 and 11, which were Central Coast and South Bunbury respectively (Housing Strategy 2003). From approximately 200 metres back from the coast the landform is elevated and provides vast views to the ocean spanning Bunbury from north to south, with views further south to Busselton if the sky is clear. This local area sits between the CBD and South Bunbury - Mangles local areas. The area is extensively developed with a mix of single residential and medium density flats, units and tourist accommodation. The precinct has few heritage dwellings and the mixture of high density units to single lot developments prevents the streetscapes from being orderly. Because many of the existing high density lots are rental properties with high land values, many of the properties fall into disrepair, as the focus is on obtaining ocean views.

Lots are generally larger (on Ocean Drive) and support medium density development fronting the ocean (Housing Strategy 2003:86). Intermixed with the single lot residential dwellings are tourism sites such as The Welcome Inn, Hungry Hollow tavern, Fawley Towers Motel (recently demolished to accommodate a new tourism site) and the Ocean Drive Motel.

The site known as 'the Punchbowl' caravan park has recently been rezoned for tourism and mixed use residential development, bounded by Ocean Drive, Hayward Street and Pental Street.



### Boundaries

From the bottom of Haig Cres to the north, Indian Ocean foreshore to the west down to Mindalong Beach. To the east are Mangles and Big Swamp Reserve, to the southwest is Manea Park.

### City Vision Strategy

Strategic Regional Centre - Inner City Living West

Southern Suburbs Vision Focus Area

Objectives and Strategies relevant to the Ocean Beach - General precinct.

**ICLW1:** The management arrangements for the Big Swamp Regional Park need to ensure that the viability of the wetland vegetation and fauna habitats are the highest priority.

**ICLW2:** Support improvements to the health and welfare of communities through programmes that upgrade pedestrian and cycle paths and provide facilities that encourage people to interact.

**ICLW3:** Prepare a housing strategy (including land availability) for Greater Bunbury that identifies opportunities for coastal short stay residential.

**ICLW6:** Identify and promote sites for tourist development on the coastal strip and establish the criteria for site mix of freehold subdivision and tourism, height and management arrangements.

**ICLW7:** Allocate sufficient resources for the planning and development of the Big Swamp Regional Park so that the area is established as a major tourist and recreation attraction.

**ICLW9:** That alternative tourist/commercial uses be investigated for the Punchbowl Caravan Park site.

### Activity Centres

Tourism Activity Corridor



Top to Bottom: Hungry Hollow Tavern, Welcome Inn Motel



### Public Art Works

Left to right: Fish Sculpture, Mrs Scott's Washing Line, Kath Weatley



### Landmarks / Features

Left to right: Hungry Hollow Beach, Big Swamp Conservation Park



Topography, Views & Vistas



The land adjacent to the beach rises and falls in crests along the coast. Much of the topography is uneven, with many of the streets having steep inclines. Whilst this is beneficial for creating ocean views, the constraints of housing design, access and walkability throughout the neighbourhood are challenging.

Properties on Ocean Drive and other high points in the neighbourhood have the advantage of approximately 180° views of the Indian Ocean. Many of the houses on higher ground can also view the city and outer suburbs of Bunbury and a few houses are built to take advantage of 360° views over the ocean and City.

This locality forms a dominant feature in the City's topography and therefore provides a significant contribution to the landscape character of Bunbury. It encompasses the best elements that promote the quality of life enjoyed in Bunbury, namely its coastal location.



Road Layout



In 2008 the City completed an upgrade of the Ocean Drive foreshore including new carriage ways, verges, pedestrian access, car parking and landscaping.

A feature of this upgrade is increased pedestrian accessways and assisted crossings at junctions between car parks and beach accessways.

Reduced speeds and single carriage ways are designed to slow down traffic along the strip and make the road more pedestrian friendly.

The north and south regions have poor street legibility, a haphazard layout of roads that appear to have been formalised from historical 'common routes' prior to subdivision.

Due to the steep topography of the area, to the north and south, many of the suburban streets have steep grading, and wind an unconventional path across some of the highest topographical areas, creating a curvilinear maze up the hillsides. There are many inclines that do not have visibility beyond the peak.



Street Trees & Verge Treatments



The 2008 upgrade of Ocean Drive incorporated coastal strip planting and street trees, including rows of *Callitris preissii*. This species is a drought tolerant sturdy tree with coniferous (often multiple trunked) informal stature; growing to approximately 6 metres in height.

If the trees survive to maturity in the strong wind speeds and salty conditions of the coast, they will provide a continuous uniform feature in the streetscape.

Excessive pruning of street trees over many years has resulted in their decline in health, affecting new growth and causing stunted formation. Commonly used trees in this area are *Melia azedarach* (Cape Lilacs) and *Erythrina sykesii* (Coral trees). The trees are very old and are wide spread around central to south-east bunbury.

In areas where the trees have not been pruned under power lines they are thriving well structured street trees, that provide shade and positively contribute to the streetscape.



*Public Open Space*



West Road Reserve is obscured from the public view as it forms a basin behind large dunes. Access is from West Road and via Ashbank Court from Mangles Road to the north.

The park has a dramatic backdrop of sandy dunes with walking trails to the top that link with other reserves and the foreshore.

A playground and half court for basketball are located there and the park is filled with young trees that will one day form a shady cover over the majority of the space. The park is approximately 3.5 ha and has passive surveillance from adjoining residences to the north and south-east.

Local parks up to 3000m<sup>2</sup> should be provided for local children's play and as resting places, designed as small intimate spaces, where appropriate, and to allow pedestrian connectivity and create a sense of place.

Lot, street and landscape layout should provide good visual supervision. Local parks should be provided in 150 to 300 metres (of safe walking distance) to all dwellings. (Liveable Neighbourhoods, 2007, Element 4:7)

Many of the reserves in this locality serve a dual use as drainage reserves.



*Pedestrian & Bicycle Pathways*



This section of pedestrian access services an aged care facility. The specialised steps and hand rails have been designed to assist the nearby elderly residents in walking up and down the steep hill. Each level is long enough to take several steps before a level change and each riser is delineated with paving for the visually impaired. Seating has also been provided for the comfort of pedestrians.

Footpaths should ideally be provided on both sides of all streets. For cost reasons, footpaths may be omitted from one side of lower order access streets, unless the street forms an important pedestrian link (e.g. to a school, centre or station).

A standard footpath width of 1.5 metres is specified. This enables two pedestrians to pass with comfort, and enables ease of use by people with prams, wheelchairs and other mobility aids (Liveable Neighbourhoods, 2007, Element 2:9).



*Lighting, Signage & Furniture*



The street furniture and amenities along the Back Beach are of a high quality, and create pleasant passive recreation places and meeting spots for day and night use. Solar powered lighting, electric barbecues, picnic tables and rubbish bins form small nodes along the foreshore for public use, which are also covered by shade sails during the summer months.

Whilst the existing furniture along the southern end of Ocean Drive reflects the coastal character of the foreshore, there is a need to upgrade aging timber structures that are prone to vandalism and damage.

As many families, children and elderly make use of the provided shaded picnic benches, public safety is a paramount issue, as well as comfort, and some level of protection from the elements all year round.



*Access & Crossovers*



There are three east-west local distributor roads west of Spencer Street that service the area. These roads are predominantly residential and have a wider street width, which allows for on street parking.

Distances between crossovers ranges from 15-25 metres in some instances which not only provides for ample parking now, but will also assist in achieving future infill development requirements.

Some inopportune situations for private access and crossovers occur around winding roads where visual sight lines are short and carriage ways narrow.

The natural topography of the area has made this an unfortunate constraint that has to be taken into consideration, and should factor heavily in redevelopment options.



*Boundaries & Retaining Walls*



This picket fence is approximately 1200mm in height does not conceal the property. The staggered fence design compliments the natural grade of the lot by maintaining the same height on fence from the relevant natural ground level below, and provides visual permeability to the street.

Solid fencing should generally not exceed 1.5 metres in height on a residential boundary on primary and secondary street frontages.

Excessive height on a boundary where it forms a part of a structure (e.g. a garage wall or retaining wall) is not a positive contribution to the streetscape as the perceived impact of the height is increased by the presence of the solid wall.



*Gardens & Landscaping*



The inclusion of a well maintained garden design can reduce the dominance of a retaining wall or grade separation at the front of the property.

Hedging is an acceptable method for separating areas and creating boundaries, but should still respect standard fencing height requirements.

With the absence of foot paths and fencing, the line between public and private property is blurred. This can be inconvenient for pedestrians, who sometimes have no alternative but to walk on the road to avoid dense landscaping.

Dense shrubbery on the corner boundaries of a street intersection provides a physical and visual barrier for pedestrians and vehicles alike.



**Building Setback & Orientation**



Solar access to high density developments (e.g. row and terrace housing) is lessened by having adjoining walls on two adjoining sides. Good design and orientation of buildings is essential to achieve adequate lighting and ventilation of these dwellings, particularly when they are clustered or more than one row deep on the site.

Once orientation is established on the site, the design of the buildings is a critical in achieving thermal comfort in relation to summer and winter sun paths. North-south and east-west facing dwellings require different measures to achieve this. The use of light wells, and skylights provide an effective solution when there are constraints.

Setback requirements under the Residential Design Codes allow subdivision of lots to occur with the front dwelling set as close to the street as the relevant R-Coding allows; irrespective of the existing street setback pattern.

It interrupts the rhythm of the streetscape where circumstances of land size won't permit all of the street to subdivide, and creates a chain reaction for other properties to extend forward with carports and additions, eventually resulting in the street setback creeping toward the front boundary and alters the existing character.



**Building Style & Character**



It is generally expected that the development of coastal areas will contain higher density development, as the views are highly valued, traditionally consisting of two and three storey apartment complexes and townhouses.

While many of these are typically retained for several decades, increased coastal land values generally encourage the maintenance and renovation of these complexes approximately every ten years; coastal strips often reflect differing eras of modern design, featuring interesting roof lines, colours and finishes in style at the time.

As a consequence of building on sloping lots; in particular when achieving significant views are a goal, land gets built up to excessive heights through cut and fill and supporting retaining walls.

The resulting dwelling and retained landform is conspicuous in the streetscape, and often can be seen in the landscape from greater distances.



**Building Materials & Construction**



Weatherboard is a durable material that is moisture, termite and weather resistant and has many construction applications.

As a cladding, weatherboard is particularly good for coastal areas, and is more accommodating in achieving architectural design features such as cladding angular walls and tight corners.

Weatherboard can be finished in any colour and is commonly applied in feature colours for contemporary architectural effect. Today's standard of manufacture are far more sustainable and do not contain harmful fibres, such as previous materials containing asbestos.

Housing stock in coastal areas is exposed to salt spray, and extreme wind and rain conditions. Corrosion of materials such as; timber, bricks and mortar, render finishes and corrugated iron can occur if correct galvanising and finishes are not applied.

The visible effects are evident as early as 12 months after construction, and due to maintenance costs, are sometimes left in disrepair until permanent damage has occurred.

Symptoms are accelerated by factors such as the use of bore water too close to a building, weak foundations, tree root systems and direct exposure to the elements.



# Character Mapping

## Local Area Character

The area is largely residential with some offices along the east boundary. There is a local shopping centre on Beach Road that services several neighbourhoods.

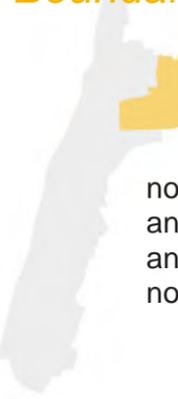
The Tree street Area is characterised by undulating topography, higher ground to the north steeply sloping from Sampson Street to Stockley Road and gently sloping to Beach Road (Considine & Griffiths Architects Pty Ltd & Chinnery 2004:8).

The area includes a number of character dwellings that appear on the City's Heritage List and Municipal Inventory.

In the 1890's a large part of the first land grant in Bunbury (Stirling's grant over Leschenault Location 26) was subdivided and developed into 10 acre residential lots (Considine & Griffiths Architects Pty Ltd et al 2004:4). This land encompassed a vineyard at Big Swamp (Considine & Griffiths Architects Pty Ltd et al 2004:4) and market gardens and small farms (Staines & Parker 2001:B158) and included a proposed Tree street Heritage Area (Tree street Area).

By around 1920 the Tree street Area was cohesively developed with 'timber and iron dwellings' (Considine & Griffiths Architects Pty Ltd et al 2004:6) and its streetscapes could be identified with existing characteristics that included: ...wide street verges, substantial set back of the dwellings, the cohesive nature of design styles and building materials, front and rear gardens, with timber and/or cyclone wire fencing, low level at the front boundaries providing an open aspect to the street (Considine & Griffiths Architects Pty Ltd et al 2004:6).

## Boundaries



To the north are Scott and Sampson Streets, to the east is Banksia Street, Picton Crescent, and the northern part of Tuart Street; and to the south are Karri, Tuart and Jarrah Streets down to the north side of Beach Road.

## Public Art Works

The Tree Street Area is recognised for its cultural and historic significance to Bunbury as a residential neighbourhood with a formal grid street layout; of which all have been named after species of trees.

The streets themselves are lined with well established trees that date back to early development period in the 1900's.

There is no public artwork as such because the significance of the areas is expressed in both the housing stock and the established street tree patterns.

## City Vision Strategy

Strategic Regional Centre Vision Focus Area; and Inner City Living West Investigation Area

**Objectives and Strategies relevant to the Ocean Tree Street precinct.**

**ICLW2:** Support improvements to the health and welfare of communities through programmes that upgrade pedestrian and cycle paths and provide facilities that encourage people to interact.

**ICLW4:** Include appropriate provisions in the City's Local Planning Scheme to guide decision-making associated with developments in the proposed Tree Street Heritage Area.

## Tree Street Area

### Aerial View



## Landmarks / Features



Top to bottom: St Boniface Cathedral, the iconic tree lined streets that contribute to the character of the area.



## Activity Centres

Beach Road Local Centre



*Topography, Views & Vistas*



The Tree street Area is characterised by undulating topography, higher ground to the north steeply sloping from Sampson Street to Stockley Road and gently sloping to Beach Road (Considine & Griffiths Architects Pty Ltd & Chinnery 2004:8).

The views as such are predominantly in an eastern and southern direction over Big Swamp and South Bunbury, and from the peak of Stockley Road you can see the ocean over the crest of houses on Upper Esplanade.



*Road Layout*



The Tree Street Area has some of the oldest streets in Bunbury; the layout is a modified grid with streets aligned north-south for the most part, with major intersecting east-west connectors (Stockley Road and Beach Road). There is high legibility and consistency that contributes to the landscape character.

The area was developed in the early 1900's and contains some connecting streets that are particularly narrow. This layout creates a sense of intimacy, however, with the steep grades in the topography, the street widths makes it difficult for vehicles to manoeuvre around parked cars or road works, and is an inconvenience for waste management services.

This well established layout is as significant to the character of the Tree Street Area as the trees themselves, and supports the current housing density in a complementary manner. Its is accepted that changing any of these contributing elements would significantly alter the historical character that the Tree Street Area enjoys.



*Street Trees & Verge Treatments*



The Tree Street Area is characterised by wide grassed verges and consistent street tree plantings of Cape Lilacs and Peppermint Trees '...giving rise to a public domain' (Considine & Griffiths Architects Pty Ltd et al 2004:9).

The use of a consistent street tree specimen provides a valuable landscape theme that is reflected in the street names and strongly contributes to a sense of continuity and local character. These mature trees also shade walkways, soften the streetscape and improve the amenity of the public domain where they are in good health.

Excessive pruning of street trees has in a number of cases resulted in the fatal decline of whole rows of trees, drastically changing the streetscape for which the area is known.

The health of the Cape Lilacs has become so dire that many of them have to be removed and replaced; which will ultimately change the character over a period of time, as young trees are introduced. As a result, a Tree Management Plan has been proposed with the consultation of the local community, given that the cultural significance of the trees is important to residents within the area. This is a process that could take many years, to maintain the predominance of mature tree species.



*Public Open Space*



There is public open space situated near the area which starts at the north of Irwin Street and winds across high grounds to descend on Upper Esplanade. The views from the reserve span the south of Bunbury, the distant hills to the east, and the ocean to the west.

There is also proximity to Garvey Place, Big Swamp, and Bunbury Primary School.

Across the peak of the Irwin Street Reserve is quite dense, and the walking trails become enclosed with vegetation on either side.

There are personal safety issues which are synonymous with any naturally vegetated area, and future works to the park would provide the opportunity to improve surfaces, hand rails, furniture etc, that indicate that this park is for day time passive recreation, and deterring after hours use by way of warning signs.



*Pedestrian & Bicycle Pathways*



As with the roads in the area, the footpath widths are equally narrow where they are present. Some streets, e.g. Stockley Road have new foot paths to create a more continuous pathway through the neighbourhood with improved surfaces, greater width and standardised pram ramps.

This has made the neighbourhood more pedestrian friendly which is particularly valuable because there is a public school in the area and there is school children present throughout the day walking to and from their local homes.

A footpath that is set far back from the kerb makes it difficult to cross the street at your own convenience. However, it does improve safety where the path navigates the pedestrian away from a curve in the road or dangerous intersection etc.

Footpaths should be at, or close to, street level to allow visual sight lines across the road for pedestrian safety and to take advantage of the street lights at road level.

A safe separation distance between the footpath and the carriage way is desirable for sight lines, and can be achieved by landscaping the kerb side or the presence of on street parking.



*Lighting, Signage & Furniture*



Lighting throughout the tree streets (including Stockley Road) is set out at approximately 50 metre intervals, (or every second house) providing good coverage of the streets.

This is particularly beneficial for Stockley Road which is a highly used thoroughfare between Beach Road and Spencer Street.

Incidentally, the pruning of the trees increases light spill at street level when foliage is minimal.

The design of resting places should take account of their surroundings within passive recreation areas that are highly vegetated and undulating, by being placed along active walking trails, with surveillance from multiple locations.



*Access & Crossovers*



Driveways have been installed predominantly to the side of dwellings, and garages and open carports are developed behind the main building line (Considine & Griffiths Architects Pty Ltd et al 2004:9).

In this regard driveways, carports and garages do not dominate or detract from the character or potential heritage value of existing dwellings or to the streetscape appeal of the area.

For a small number of recent developments, double garages have been constructed forward of the building line, which dominates the dwelling and occupies a significant portion of the frontage.

In this regard they require equally dominating crossovers which reduce the consistency of the interconnected pedestrian access that is sought.

Modern surface finishes (such as pebble-crete) are not consistent with the traditional character of the Tree street Area and contribute to altering the desired historical character.



*Boundaries & Retaining Walls*



Front setback areas have largely been developed with '...open gardens, timber picket fences, or hedges' (Considine & Griffiths Architects Pty Ltd et al 2004:9).

Picket fencing delineates the boundary between public and private domain, is consistent with the character and heritage value of the area, does not distract from the dwelling and does not interrupt streetscape interaction.

Solid front fences obstruct the view of dwellings from the street and offer no interaction with the streetscape. In this regard they can have an adverse visual impact to the amenity of an area and to the enjoyment of character and heritage buildings.

Where solid fencing is used to enclose private open space, incorporation of visually permeable elements, design features and variation, vegetation, etc should be used to soften streetscapes, improve interaction and provide interest.



*Gardens & Landscaping*



Private gardens frame dwellings and provide a degree of streetscape interaction. In Tree street Area reasonably consistent and generous frontages are developed with informal gardens.

Established, well maintained and informal front gardens lend to the relaxed character of the area, and mature trees on private properties contribute to the positive local amenity.

Landscaping in the front setback should allow some form of passive surveillance of the street if possible. Whilst heavy vegetation has positive thermal comfort qualities and character, the element of visual permeability that contributes to opening up the street and creating a safe public environment is forfeited.

The character of the tree street area is strongly attributed to landscaping features and from this stand point is considered a positive attribute to the streetscape.



**Building Setback & Orientation**



Dwellings are orientated predominantly east/west due to the street layout, and in many cases greet the street with a front balcony or porch. Reasonably consistent and generous front street setbacks are developed with formal front gardens. The level of streetscape interaction is high.

Inconsistency in front street setbacks between new and established developments interrupts the streetscape rhythm and offers minimal interaction between neighbouring developments.

Contrasting building materials emphasise the differences between the character dwellings and recent dwellings and is more obvious in the streetscape because newer dwellings sit closer to the front boundary. The changes in setback patterns and materials is gradually changing what was once a significant established character within the trees street area.



**Building Style & Character**



The scale and height is predominantly single storey. By around 1920 the Tree street Area was cohesively developed with 'timber and iron dwellings' (Considine & Griffiths Architects Pty Ltd et al 2004:6) and its streetscapes could be identified with existing characteristics that included:

"...substantial setback of the dwellings, the cohesive nature of design styles and building materials, front and rear gardens, with timber and/or cyclone wire fencing, low level at the front boundaries providing an open aspect to the street" (Considine & Griffiths Architects Pty Ltd et al 2004:6).

Development that occurred after the established character was set does not contribute to the valued character and heritage of the area.

In particular, regard should be had to maintaining front street setbacks; upper floor additions behind ridge of the original roofline; consistent height, scale and bulk; and use of complimentary building materials.



**Building Materials & Construction**



The majority of housing stock is reasonably consistent development of single storey timber framed or clad dwellings with iron roofs (Considine & Griffiths Architects Pty Ltd et al 2004:9) and where relevant most properties have respected the authentic restoration of heritage dwellings.

Expanses of solid material along the front and side boundaries draws attention to itself within the streetscape. In particular if the material is not consistent with existing fencing materials and colours along the street.

Any blank walls in the public realm creates the opportunity for vandalism and at the same time reduces visibility against such risks.



### Local Area Character

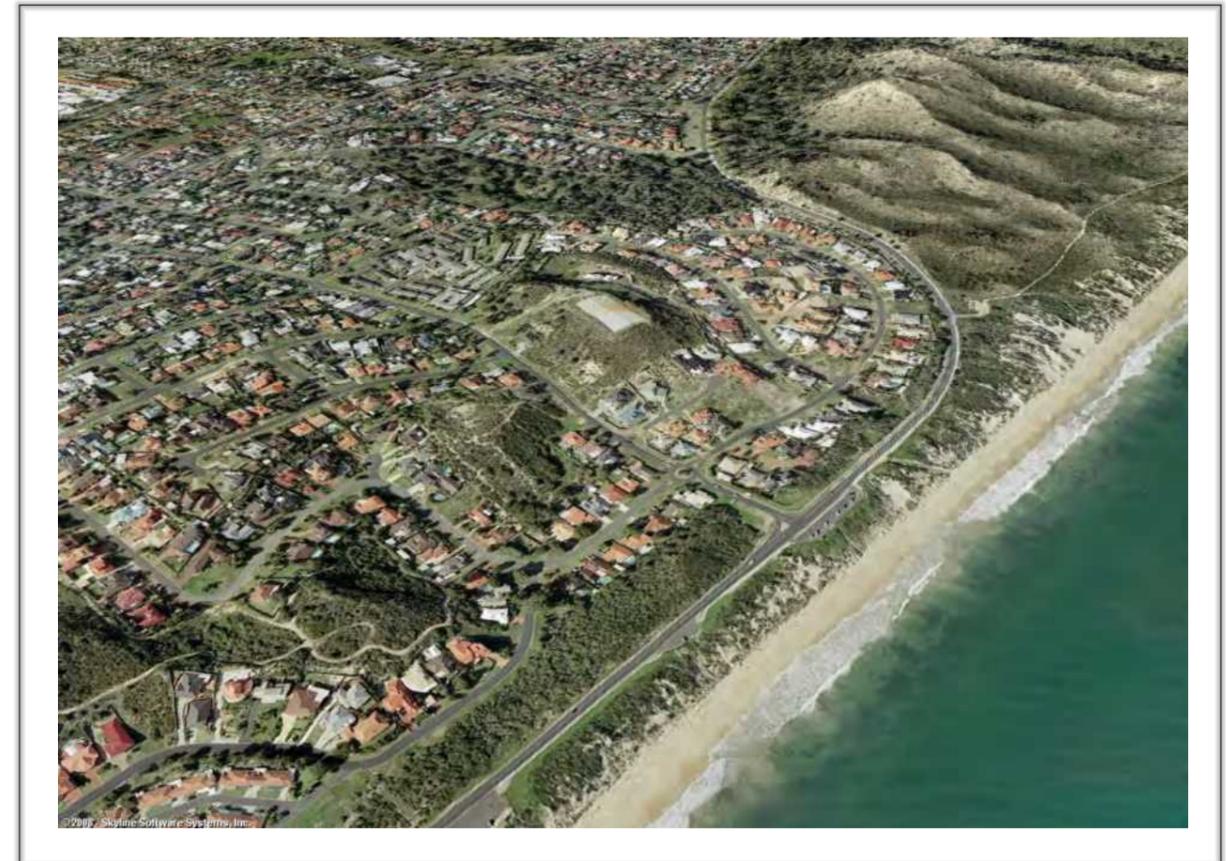
Formerly Precincts 2 and 11, which were Central Coast and South Bunbury respectively (Housing Strategy 2003).

In Mindalong Heights development occurred predominantly in the early 1990's. The landform is elevated and provides good views to the ocean. The area is extensively developed with a mix of single residential and some medium density flats and units for aged care and tourist accommodation. The precinct currently has no dwellings on the Heritage List or Municipal Inventory.

Lots are generally larger and support medium density development fronting the ocean (Housing Strategy 2003:86) and there are many examples of large scale, grandiose homes in this area.

Accessibility to the beach is well established from several points with assisted pedestrian access across Ocean Drive. Hastie Street provides good availability to the public transport system.

### Aerial View



### Boundaries



Hastie Street is to the north, Mindalong Close to the south and curving back up Crowea Street and Myrtle Street along the eastern neighbourhood boundary and Ocean Drive forms the western boundary.

### City Vision Strategy

Southern Suburbs Vision Focus Area

Objectives and Strategies relevant to Mindalong Heights.

SS17: That proposals for the expansion of the Minnipup Forum Shopping Centre be consistent with the commercial centres strategy endorsed by Council and the WA Planning Commission.

### Activity Centres

The closest shopping precinct is the Minnipup Forum Neighbourhood Centre



### Public Art Works

Mindalong Heights is adjacent to the beach opposite Ocean Drive. While there is always an opportunity for public artwork along the coast, this section of the beach does not currently have any features.

With the development of a tourism site on Ocean Drive, in proximity, there is opportunity to improve the amenity of Ocean Drive, including continuing the high level of public artwork to the north.

### Landmarks / Features

Ocean Views of Mindalong Beach



Topography, Views & Vistas



Mindalong Heights is located on what was once a part of the sand dunes at the southern end of Ocean Drive.

The residential development was designed to fit rationally into the natural contours (in the range of 12AHD to 40 AHD) of the land, and take advantage of significant views of the ocean. This creates little visual interruption in the landscape from greater distances, as built form does not dominate the skyline, beyond the natural contours of the land.

Allotments have been orientated toward the ocean, most of the streets elevate gradually allowing greater views to a number of properties.

Views are reasonably unobstructed as there are no mature trees in this neighbourhood that reach such heights.



Road Layout



The street layout is curvilinear to take advantage of the natural topography, enabling the land to be utilised to a fuller potential; especially on higher ground where a grid network would not be appropriate.

The sub-division covers a reasonably small geographical area, and most of the properties are accessible from two main access roads that have cul-de-sacs branching either side.

The streets are steep where the contour levels rise and fall dramatically. This makes the streets difficult for pedestrian access, and the lack of footpaths restricts pedestrians to walking on the road and on verges.

There are some blind spots created in the curve of the road, and across peaks in the topography, however, it is a minor constraint in this curvilinear street layout, as the street frontages are open and sight lines are maintained throughout.



Street Trees & Verge Treatments



There is an absence of street trees in the neighbourhood which may be attributed to the coastal location and desired vistas that trees may potentially obstruct.

The land around the entry statement and bus stop is landscaped with *Syragus romanzoffianas* (Cocos palms) which is not a theme that extends into the housing development.

An attempt to establish Norfolk Island Pines on the street verge (in the late 1990's) may have established a distinct coastal suburban environment if it had been continue the length of the street, however it is most likely the efforts of a private land owner that introduced them.

As there are no footpaths in the area, there is ample verge area to establish trees in the streetscape. It is possible that this has never been established as mature trees would obstruct ocean views to residences.



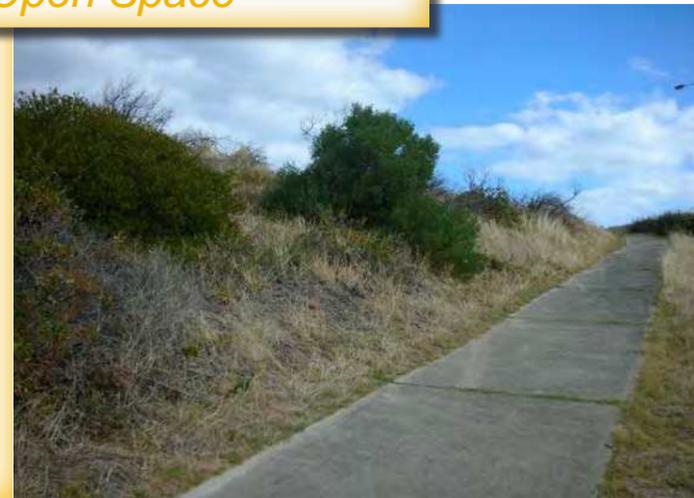
*Public Open Space*



Heavily vegetated dunal areas make up the peripheral POS content of this neighbourhood, which is not optimal for active recreational use.

There is more pos near the reservoir set above the residential area on the hill but it has the appearance of private land, and is also not appropriate for active recreation.

While it appears that the suburb is surrounding by parklands, there is a grade separation, and issues of access between the residential area and the parks which prevents integration between the two.



*Pedestrian & Bicycle Pathways*



This is a short and direct dual pedestrian accessway which is lit at both ends by street lighting and the target destination is visible, with no entrapment spots.

This accessway is a successful example of a CPTED tested design.

This pedestrian accessway is between the neighbourhood and the beach however the accessway has no visual surveillance along it, being between two solid walls and it turns a corner halfway.

The undulation of the dunes prevent sight lines across the reserve, in both directions. There is no street lighting along the path and it has no connectivity to an active pedestrian network.

This accessway is not a successful example of a CPTED tested design.



*Lighting, Signage & Furniture*



Shelters should be located on an active public transport network, connected by dual use paths, designed for disabled access, provide shade, shelter and natural surveillance, and lighting and should be constructed of durable materials. It is evident that connectivity between either side of the road has not been considered, as one side is compliant and one side is lacking good design elements and fails to connect to an active pedestrian network.

Street lighting is located at approximately 75 metre centres (or every 4 houses) and is on a standard Western Power grid.

As the suburb is purely residential, there is no advertising signage to speak of with the exception of the entry statement located on the corner of Ocean Drive and Hastie Street which is incorporated into the stone wall of the corner allotment.



*Access & Crossovers*



In lower density neighbourhoods the on street parking and crossover arrangements are generally better executed than in higher density areas. There is space within the front setbacks for ample on-site parking, and on street parking between crossovers. The overall effect is a less cluttered streetscape and easier manoeuvrability for traffic.

Mindalong Heights is a good example of ample parking provisions which includes several cul-de-sac street ends that include on street parking.



*Boundaries & Retaining Walls*



Front fencing is not permitted within 3 metres of the front boundary under the Design Guidelines for Mindalong Heights. Side and rear fencing shall not exceed 1.8 metres in height and should feature a screen of vegetation.

Several properties do not comply with the criteria for side and rear fencing. Where a front fence does exist, the presence of a structure on the boundary is dominant amongst the otherwise open frontages on the street. Front fencing should still meet the standard criteria for good fence design in height and visual permeability.

Retaining walls have greater impact on the streetscape, in particular, where they are combined with a fence or wall on a corner property is adjoining the primary frontage of its neighbour and the land has been built up.

Development of lots that are not flat at natural ground level should attempt to design with respect of the natural lay of the land, and stagger the development across the site to complement the natural ground level.



*Gardens & Landscaping*



Mindalong Heights has primarily open-fronted properties and there are many well maintained gardens that provide an informal boundary line delineating the private from the public. Private gardens should not extend to the kerb where the lot line is further back.

Private gardens should not continue across the verge to the kerb. Where Council land is grassed to the street, landscaping should not extend beyond the private property boundary obstructing pedestrian access.

Some landscaping may be acceptable where there is no pedestrian access required, or there is an alternative means of access and landscaping is not so dense as to obscure vision to the road.

Pedestrian safety should be considered particularly where the streets are not flat or straight.



*Building Setback & Orientation*



Mindalong Close and Kalari Rise are both curving streets and each house is orientated and setback on an angle from each other so as to face the street. It appears that each dwelling is set slightly in front of the next, following the curve of the road as a result of this.

Garages that are forward of the main face of the dwelling dominate the streetscape with roller doors.

Once built, the opportunity to create dwelling additions above the original garage footprint becomes a concern as the bulk of the building increases towards the front boundary.

Open carports forward of the dwelling have less impact on the streetscape if designed for minimal visual impact.



*Building Style & Character*



The neighbourhood was created in the early nineties for the most part, however many blocks stayed vacant until approximately 2003 when another surge of housing emerged. The general style reflects the coastal location; a combination of contemporary and traditional styles exist together, light neutral tones and bare brick finishes with dark colorbond or tiled roofs.

Unique architectural designs draw positive attention to the streetscape even if they are located among typical housing stock. While this is encouraged in coastal areas, it is often the case that construction periods take longer than standard building designs would, and it remains a building site for extended periods of time. The appearance of a building left incomplete over a number of years may become tired or experience decline in material quality before the construction is finished, and often deviates from the approved plans as new trends come into style.

It is important that development involving more than one lot are constructed in the same period, as it significantly changes the balance of the development in the streetscape if only one of the dwellings is completed and the building designs were complementary to, or dependent on sharing a common boundary.



*Building Materials & Construction*



The design guidelines for Mindalong Heights specify that all walls shall have a clay brick, stone or concrete block finish in earthy colours. Roofs shall be constructed of clay/ concrete tiles or colorbond custom orb style metal decking in earth colours.

For the most part, the development is consistently built in these materials, with colour schemes being mostly natural clay brick or rendered masonry in neutral colours.

Depending on the time of each development, a lot of the houses feature contemporary roof designs building angles and facades that reflect turn of the century (21st Century) modern Australian vernacular.

Natural stonework has changed considerably over the decades, and a once popular method of retaining earth with irregular shaped loose stonework with mortar, is now a distinct feature of some of the older housing stock in Bunbury. Today's local stonework is predominantly cut limestone.



# Strategic Planning

## A Vision for the Future

- The formalisation of the 'Tree Street Area' as a precinct for regulation of future residential development in order to sustain the existing character.
- Recognising the 'Ocean Beach North' tourism corridor, as depicted in the Local Planning Strategy for Tourism (2008).
- High quality medium density infill development throughout the suburb where higher R-coding is applied.
- The development of the 'Punchbowl' site as a mixed use tourism/residential development with a high quality sub-division and building design that accentuates its coastal locality and serves the local population.

## Valuable Landscape Character Elements to Promote & Enhance

- Residential character and amenity of the Tree Street Area.
- Ocean views from significant public view points, and across peaks in the topography where ocean views are revealed.
- The high quality foreshore pedestrian accessways and public facilities.
- Public art work and interpretive signage to continue along the foreshore that are engaging and interactive for pedestrians.
- Promote tourism sites and supporting businesses/ accommodation to establish a thriving tourism corridor.

## Important Views & Vistas to Retain

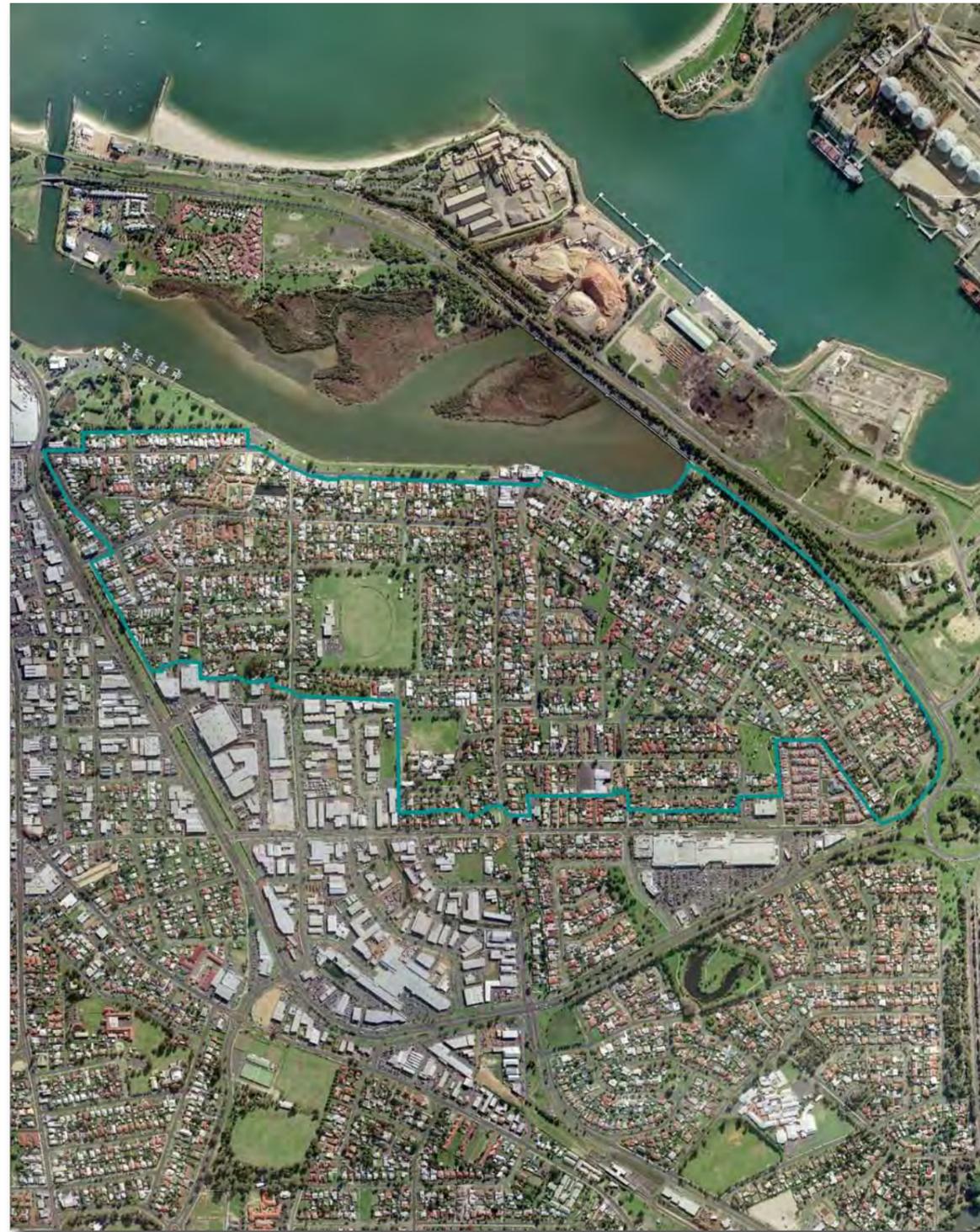
- Ocean Drive vistas, north and south, including views of landmark features in the landscape, such as the light house.
- The vista from the peak height of Stockley Road over South Bunbury and Big Swamp, and west towards the Indian Ocean over the top of Upper Esplanade and Ocean Drive.
- The views from Irwin Street Reserve that span over South Bunbury and the ocean.

## Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the Ocean Beach local area planning process and subsequent Local Planning Policy documents that will inform development within the LAP.
- Propose a Local Planning Policy: Tree Street Area Design Guidelines
- Conduct a review of the Local Planning Policy: Building Height for Ocean Beach.



# 2.7 East Bunbury



*East Bunbury Heritage Area*



*Rathmines*



## Local Area Character

## Aerial View

The precinct is almost entirely residential with some non-residential land uses along Stirling Street, with the closest activity centre on the corner of King and Stirling Streets. The precinct is mostly residential with moderate medium density. Housing condition is generally good. The area is characterised by historic and character housing and pleasant streetscapes (Housing Strategy 2003:88).

The East Bunbury Heritage Area comprises residential development with the exception of the Red Mill Store on Stirling Street and the Neighbourhood Deli on Charles Street, which have historically served the local area. Neighbouring local areas include the Central Business District and the Outer Business District.

The topography of the area is flat and the street layout is predominantly east / west along the southern bank of the inlet in a traditional grid pattern. Lots are narrower than in Rathmines to the south. The streetscape is established with existing mature street trees on private lots and street verge trees in some areas. Most of the residences demonstrate heritage characteristics and provide some level of contribution to the historic heritage significance of the area, they are a combination of weatherboard and stone, a large proportion have been renovated to an authentic standard and almost all have visible evidence of occupation.

The precinct is considered to have aesthetic areas, 'cultural landscapes' and distinguished streetscapes. These areas contain 'harmoniously related buildings of similar scale and character' and representations of 'major historic themes of human settlement' and '...a range of social, cultural, educational and spiritual associations' (Staines and Parker 2001:B158).



## Boundaries

As per the Local Planning Policy - East Bunbury Heritage Area Boundary

## City Vision Strategy

Strategic Regional Centre Vision Focus Area; and Inner City Living East Investigation Area

Objectives and Strategies relevant to the East Bunbury Heritage Area precinct

**CBD1:** Allocate sufficient resources for the planning and development of the Leschenault Inlet Regional Park so that the area is established as a major tourist and recreation attraction.

**CBD7:** Ensure that planning policies and development control provisions adequately provide for the conservation and protection of heritage values.

## Landmarks / Features

Left to right: The Red Mill Store, The State Infant School



## Activity Centres

Left to right: Charles Street Delicatessen; which is not a recognised local centre in the draft LPS Activity Centres & Neighbourhoods and Leschenault Quays which is no longer inside of the heritage area boundary; is the closest local centre shopping facility.



## Public Art Works

There is no recognised public art work within the heritage area, however there is a close proximity to public artworks being implemented at the Queen's Gardens on the Leschenault Inlet foreshore.

*Topography, Views & Vistas*



The topography of the area is flat and generally characteristic of an alluvial floodplain that supported a wetland system at the mouth of the Preston River.

All of the land within the Heritage Area falls within a flood plain, and is subject to inundation from rising water levels during major storm events. However, at present such an event has not occurred since the late 1960's when the whole of the East Bunbury and CBD area became flooded.

With a flat topography, there are no views from within the precinct, with the exception of development along the Inlet foreshore. In this regard, views are afforded of the city centre to the west, the white mangroves to the north, and banks of the Inlet and potentially further east to the Darling Scarp. The closure of Stirling Street access onto Blair Street obstructed the view of the Inlet enjoyed from the CBD.



*Road Layout*



The street layout is predominantly east / west along the southern bank of the Inlet in a traditional grid pattern. Stirling Street is an east-west neighbourhood connector road, which was formerly a main arterial road into the City, which is now blocked at the western end at Blair Street.

Stirling Street is an important connection for the existing commercial centres and provides access onto north-south neighbourhood connectors (Albert and King Streets), (Liveable Neighbourhoods, 2000:23)

Stirling Street was developed in the 1880's to 1890's and includes many accessways that provide alternative access to longer lots with double street frontages.

Where these accessways have formally become streets, they are generally north-south orientated and narrower than the east-west axis streets. Because of their width, most of the streets are designated as one way and serve local traffic only. The difficulty in navigating the streets lies in the lack of directional signage where it is not apparent to motorists who has the right of way.



*Street Trees & Verge Treatments*



Street trees are only appropriate where there is an adequate verge, and there are no conflicts with footpath and verge widths. The absence of street trees on the kerb verge provides unobstructed views to heritage buildings.

The absence of street trees within the precinct is noticeable with the exception of Thomas Street (not all within the area) which has many mature natives lining the boundary of private and public properties. Given the level of mature trees and vegetation throughout private properties, the area is not considered to look barren or devoid of vegetation and the older trees that are still scattered about contribute to the historic context of the area.



*Public Open Space*



The Queens Gardens is peripheral to the neighbourhood abutting the heritage area and the foreshore to the north and is easily accessible for residents.

The area is undergoing upgrades to children's facilities, car parking, picnic facilities and shade. There is also a skate park in the vicinity which is utilised largely by local youth.

There is also vehicle access through the garden area that allows access from Blair Street through to Stirling Street.

The gardens continue around the foreshore and link up with grassed open space along the Inlet all the way down to the Parade Hotel. A series of children's play equipment and rest stops are scattered along the way. Some much needed improvements have been occurring along this stretch in the past year.



*Pedestrian & Bicycle Pathways*



The footpaths along Stirling Street have been incrementally improved for pedestrian access, replacing large damaged square concrete pavers with poured concrete, and /or clay pavers for a flatter, more consistent surface.

It is beneficial for surface material to be consistent along the street, to provide a continuous and uniform path that contributes to the character of the area.

The path around the Inlet foreshore presently does not provide connectivity with the residential area of the East Bunbury Heritage Area and should be upgraded to a dual use path in width, delineated for pedestrians and cyclists.

Stirling Street and the local streets of the precinct, generally have a footpath on both sides of the street. Due to the width of the historic streets, the footpaths are quite narrow as well and are showing signs of age.



*Lighting, Signage & Furniture*



The Red Mill Store has been run under same name for many years, regardless of changes in the land use. The painted signs on the front fascia and side of the building are old and worn giving them a rustic look that is complimentary to the historical significance of the building.

Else where in the area there is no obvious signage, as this is predominantly a residential area.

Lighting to Stirling Street is adequate, however linkages to Queens Park should be well lit for pedestrian safety, as this thoroughfare borders the CBD.

Historically, the north side of Stanley Street has formed the rear entrances to lots facing Stirling Street. As a result of subdivision, all of the properties in this section now have primary frontages to both sides of the street.

Lighting infrastructure is only provided at intervals on the south side of the road, however, with the creation of a whole new street frontage, lighting may need to be increased to both sides of the road in the future.



*Access & Crossovers*



This house has been modified to incorporate a double carport to the side of the main roof and a double width crossover to the street.

This house is a good example of how a dwelling with historical heritage significance can be altered to accommodate modern family requirements whilst maintaining its original integrity.

The sliding gate is a permeable structure that is not obstructing either sight lines to pedestrians or vehicles and the original home remains the dominant feature in the streetscape.

Where there are adjoining garages, the expanse of hard surfaces can dominate the streetscape, and reduce the capacity for on street parking.

On site parking is also reduced where short setbacks allow the building to be closer to the street than a standard parking length.

The effect on the streetscape caused by two adjoining double garage doors is significant considering that the majority of original dwellings in the area do not have access to garaging from the primary street frontage.



*Boundaries & Retaining Walls*



Properties that have low, visually permeable fencing offer a high level of streetscape interaction, do not detract from the building and provide demarcation between the private and public realm.

Given that the neighbourhood is a designated Heritage Area under the Local Scheme, there are additional requirements and restrictions for fencing style, height and material that require any structures on the boundary to be complimentary with the cultural heritage significance of the dwelling.

Solid front fencing inhibits interaction with the public domain and interrupts the rhythm of the streetscape.

In addition to the loss of passive surveillance caused by solid fencing at a greater height than eye level, the views to a house of cultural heritage significance may be lost in the streetscape.



*Gardens & Landscaping*



Front setbacks are generally short in the area and there is a predominance of well maintained front gardens that consist of a hedge or row of manicured shrubs/ roses with a small lawn and medium sized trees or shrubs, the overall effect is compact and tidy and contributes positive to the local amenity.

Landscaping in the front setback provides a positive contribution to the immediate locality, and softens the impact of large areas of hard surfaces.

Once mature, trees and shrubs on private properties also make a significant contribution to the amenity of the area, particularly in the absence of verge trees.



*Building Setback & Orientation*



Consistent front boundary setbacks contribute the positively to the streetscape. Narrow street widths and minimal front street setbacks enclose the streetscape and create a sense of place.

Buildings that are orientated towards the street, particularly those that have front porches, contribute to streetscape interaction.

Charles Street has a saw-tooth pattern row of lots that is considered to contribute to the character of the Heritage Area.

Front setbacks that are not in line with adjoining dwellings create a disjointed rhythm along the street.

Front setbacks for new dwellings in existing streetscapes should respect the existing pattern of setbacks of dwellings on the street or where differing setbacks occur, a reasonable average surrounding properties is appropriate.



*Building Style & Character*



New dwellings, and alterations and additions to dwellings that contribute to the historic heritage value of the area should respect the original character, bulk, scale and period of the existing dwelling, and not detract from authentic historic heritage character of surrounding properties and the streetscape in general.

Likewise, maintenance of original dwellings ensures that the significance of the Heritage Area is maintained for years to come.

Design Guidelines are in place to ensure that the area is developed to a standard synonymous with the historical heritage value of the area.

Dwelling additions should incorporate significant features from the character of the original dwelling that is retained. This may include roof pitch and lines, scale, window orientation and size, materials and colours.

Additions should complement the existing dwelling and should not detract from the surrounding character homes or dominate the streetscape.



*Building Materials & Construction*



The use of traditional materials is encouraged in restoration work corresponding to the original style and period of the development.

Consistent use of materials in existing developments should be reflected in new dwellings. Sharp contrasts of forms, colours and materials should be avoided, unless the intentional use of contrasting materials is compatible with the form and scale of the existing dwellings in the surrounding locality.



### Local Area Character

The precinct is largely single residential with a significant amount of medium density built in the last 20 years. Housing condition is good and most residences were built after the 1960's. There are little or no dwellings that are included on the Municipal Inventory (Housing Strategy 2003:89) with the exception of those areas previously included within the Stirling Street Heritage Precinct.

Development in Rathmines is characterised as homogenous residential development that comprises low density, single storey, red brick and tile dwellings on large lots with generous street verges and front gardens. The existing dwellings are in sturdy condition and appear to be a good representation of dwellings typically constructed after the 1960's.

Front gardens exist up to the footpath reducing the distinction between the front yard and the public verge. Most dwellings have front porches which are in some cases used as sitting areas. The dwelling, front yard and verge design give an impression of openness and interaction with the streetscape.

Dominating visual elements in the area are large television antennae, street lights and overhead power lines of up to four thick electrical wires between timber power poles. Street verge trees that exist beneath these power lines have been excessively pruned and take on a stunted and disfigured appearance. The presence of the power lines, television antennae, native street trees, wide grassed verges and wide paved streets give a strong impression of a traditional Australian suburban neighbourhood that is largely unchanged from the time it was first developed.

### Aerial View



### Boundaries

Stanley Street to the north-west (the boundary of the East Bunbury Heritage Area), then north on George Street up to Austral Parade, all of the streets between the Inlet and Austral Parade, down to Koombana Drive on the east, Strickland Street is to the south, Blair Street to the west.

### Activity Centres

Leschenault Quays Local Centre



### Landmarks / Features

South West Italian Club



Payne Park



### City Vision Strategy

Strategic Regional Centre Vision Focus Area, Inner City Living East Investigation Area

Objectives and Strategies relevant to the Rathmines precinct

**ICLE1:** Prepare a housing strategy for Greater Bunbury (including land availability) and include an analysis of the potential for higher residential densities in the ICLE area.

**ICLE2:** Ensure structure planning for port expansion and development meets environmental standards for cumulative impacts.

### Public Art Works

There is no recognised public art work within the neighbourhood of Rathmines, East Bunbury.

*Topography, Views & Vistas*



The topography of Rathmines is flat and generally characteristic of an alluvial floodplain that, at the time of Colonial settlement, supported a wetland system at the mouth of the Preston River.

As with most of East Bunbury, the land is within a flood plain, and is subject to inundation from rising water levels during major storm events. However, at present such an event has not occurred since the late 1960's when the whole of the East Bunbury and CBD area became inundated.

Given the flat topography of the area, no views are afforded beyond the immediate locality. However, the houses that abut the Inlet enjoy views of the Harbour and CBD, as well as the Parade Hotel, which takes advantage of the waterfront vistas.

At peripheral locations such as closer to Koombana Drive the machinery and stock piles of the Inner Port is visible from some areas, but for the most part vistas are limited to a suburban standard.



*Road Layout*



The road layout is an interconnected grid system of wide streets and some culs-de-sacs developed off local collector roads. The area is serviced by a public transport system.

District distributors (Strickland Street) and neighbourhood connectors (Herbert and Albert Streets) provide efficient access across the neighbourhood, in particular enabling high connectivity between Payne Park, Kooinda Primary School and the child care centre.

Activity centres such as schools are serviced by access streets that typically;

- are 6 metres wide,
- have no on street parking,
- Struggle with traffic volumes during peak periods; leading to conflicts between pedestrians and vehicle movements.

Vehicles that are dropping off or picking up school children have to park on the grassed verge in order for traffic to keep flowing. However, this widest part of the verge is where children should be walking to safely avoid walking on the road.



*Street Trees & Verge Treatments*



Consistent choice of street tree plantings creates continuity and a rhythm to the streetscape.

The presence of mature, native tree species provides shade, makes a positive contribution to the streetscape amenity, and is distinctive of an Australian suburb.

The significant height of mature street trees demonstrates the established nature of the neighbourhood.

Excessive pruning of street trees, particularly around power lines, disfigures the canopies of the trees and when inconsistently applied interrupts the rhythm of the streetscape.

When this treatment has been occurring for decades, as is the case in most of the established suburbs of Bunbury, it is almost impossible to reverse the damage to the tree that has taken effect.



*Public Open Space*



PC Payne Park is a significant area of active public open space and defines the neighbourhood character and identity of East Bunbury. The oval is the home ground for the Bunbury Football Club and Bunbury Athletics Club.

There are few entry points to the park which is surrounded by a two metre high cyclone wire mesh fence with barbed wire which is uninviting in the streetscape.

The park is an integral part of the neighbourhood and has the potential to be more open and accessible to the public as a highly valued area for active recreation, particularly as the residential population of the suburb increases.



*Pedestrian & Bicycle Pathways*



Dual use paths should be provided as part of an interconnected network that links public transport, neighbourhood centres and community facilities. Where they are present in the neighbourhood they are functioning well, however, not consistently throughout the neighbourhood.

The neighbourhood connector roads around Rathmines have footpaths to one side of the street only.

There is a pedestrian accessway between White Street and Strickland Street to gain access to the Bunbury Forum Shopping Centre, however the accessway is over 160 metres in length and has no visual surveillance, and no lighting. CPTED principles should be considered as part of any future upgrade.



*Lighting, Signage & Furniture*



Street furniture should be durable, well maintained, should not create conflicts with pedestrians and vehicles and should provide adequate security and natural surveillance. It should form part of a well connected pedestrian network.

Street lighting is reasonably sufficient throughout the suburb, as this is an older area, there is a strong presence of power lines in the streetscape, which also provides ample posts for street lighting.

Commercial signage becomes more visible to the north where Parade Road commences, and to the south where the interface with Strickland Street commences.

Bus shelters should be located on an active public transport network, connected by dual use paths, designed for disabled access, provide shade, shelter and natural surveillance, and should be constructed of durable materials.

There are a variety of examples in the area which do not represent a united theme to encourage the use of public transport, or provide continuity along the route, which is important for recognising pick up locations.



*Access & Crossovers*



Accessways are generally from the primary street frontage, wider blocks allow adequate on street parking between crossovers, and accessways do not dominant the frontage.

In some instances, dwellings have been developed with vehicle access through existing rear laneways only, which frees up street frontage for on street parking and pedestrian access.

The use of historical laneways (night cart) should only be encouraged for vehicle access where they are adequately sealed, drained and dimensioned to permit safe vehicle maneuvering.

In the process of redevelopment it should be decided whether to keep them open or permanently close unused laneways, and selling the reserve to adjoining properties.

The suitability of rear accessways should be assessed in accordance with Liveable Neighbourhoods and Designing Out Crime principles.



*Boundaries & Retaining Walls*



There is a minimal number of front fences in Rathmines, with the absence of footpaths, the majority of properties are landscaped to the kerb. The fences that do exist across the front boundary of properties are often 900mm high visually permeable fences such as tubular steel pool fencing and picket fencing.

Solid fences reduce visual permeability and offer no interaction between the street and private property. Where solid fencing encloses private open space, incorporation of design features and variation, vegetation, etc should be used to soften streetscapes and provide interest.

Fencing around intersections should use the following approach, unless specific Design Guidelines specify otherwise:

- 1 metre maximum height,
- 3 x 3 metre corner cut-off,
- Permeable materials to maintain site lines.



*Gardens & Landscaping*



A maintained and landscaped front garden offers privacy, demonstrates neighbourhood character and identity, encloses the streetscape and positively contributes to the amenity of the area.

Front setbacks without vegetation do not contribute to the streetscape such as:

- Little visual differentiation between public and private domains,
- Loss of neighbourhood character, identity and sense of ownership.



*Building Setback & Orientation*



Due to the formal grid layout of Rathmines, dwellings are primarily orientated north-south and have an average block size of approximately 930m<sup>2</sup>, which allows for adequate solar access to blocks.

Future subdivision of some of these areas will change the historical lot pattern, as has happened in other larger suburbs of Bunbury such as Carey Park.

There is an occurrence of irregular shaped lots at street intersections and road ends, creating unconventional orientation of dwellings on corner properties, in order to accommodate the angularity of the blocks. This is typical of many of the intersections, particularly to the south of the suburb.



*Building Style & Character*



Typical housing stock in the Rathmines area displays the following attributes: solid brick construction, tiled roof, central front entrance, large windows and open frontages, or;

Weather board/ fibre board construction, protruding entrance with front steps, post footings, corrugated or tile roof materials, pale or pastel shades on the exterior finish.

Built form is generally single storey and consistent in scale and front setback. Where upper storeys do occur they are often setback behind the ground floor setback.

New two storey dwellings built in an established single storey streetscape will change the character of the street regardless of whether it is a positive or negative impact.

There are design elements that reduce the impacts of two storey dwellings such as setting back the upper storey, reducing overall wall height, and breaking up large expanses of wall with openings or features.



*Building Materials & Construction*



Typical construction materials in Rathmines are brick, tile, colorbond, weatherboard and fibre board. Housing stock is generally in good condition, reflective of a strong neighbourhood character and identity predominantly 1960's - 1970's.

This area is included in the Preston River Flood Study, and development is therefore affected by requirements for finished floor levels (FFL's) above the flood level for a 1:100 year storm event.

It is acknowledged that the increase in FFL height of new dwellings will affect the dynamics of the streetscape, as dwellings will appear to be raised, and therefore eave heights will be affected as well as entry level, and the possibility of over looking issues between adjoining residences, caused by higher sill heights of windows.



# Strategic Planning

## A Vision for the Future

- Given the age of housing stock and its proximity to the CBD and waterfront it is subject to redevelopment pressures, accounting for the need to have flood mitigation measures in place. As such, redevelopment should seek to achieve a coordinated approach with the well established character of the area, whilst exploring innovative means of integrating the necessary finished floor levels, that will have an obvious impact on the rhythm of the street.
- Increased R-Code densities around activity centres, e.g. Leschenault Quays local centre, will draw more residents into the neighbourhood and provide housing types suitable to high density living in a walkable catchment. This will graduate to lower densities that will preserve the established character and housing stock of Rathmines. This re-coding of the neighbourhood will ensure that infill development is conducted in a logical manner and is based on sustainable planning principles in accordance with the WAPC's Liveable Neighbourhoods.



## Valuable Landscape Character Elements to Promote & Enhance

- The East Bunbury Heritage Area should be promoted and acknowledged for its contribution to historical character in Bunbury.

## Important Views and Vistas to Retain

- The Leschenault Inlet vista from Stirling Street / Austral Parade is a valuable asset to the community from both private and public realms. Views to the CBD are afforded and should be retained.
- It would be beneficial to decrease the views across the Inlet to the Inner Harbor operations and stock piles, however the mass scale of the shipping operations makes screening difficult.

## Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the East Bunbury local area planning process and subsequent Local Planning Policy documents that will inform development within the LAP.
- Review of the Stirling Street Heritage Area Design Guidelines, including the renaming of the precinct to encompass the true boundary of the Heritage Area beyond the extent of Stirling Street.



# 2.8 South Bunbury - Mangles



# Character Mapping

## Local Area Character

Formerly Precincts 10 and 12, which were Mangles (South) and Big Swamp/Mangles (North) respectively (Housing Strategy, 2003). This Local Area is adjoined by Ocean Beach, Outer Business District, Parks and Minninup-Usher Local Areas.

Mangles is predominantly residential; however, the Spencer Street mixed use corridor divides the residential areas. There are three local neighbourhood centres supporting the area, and several non-residential premises disbursed through out the neighbourhood such as: a caravan park, churches, Newton Moore Senior High School, South Bunbury Primary School, a bus depot, sporting grounds, and a number of retail uses. Whilst there is a current predominance of low density detached housing that is generally in good condition, there is a growing number of subdivisions on larger lots where the ad hoc R-Coding has permitted grouped dwellings. The opportunity for infill development exists, but should be respectful of the established character and amenity by increasing density within 400m walkable distances from local centres. Many of the larger subdivisions are catering for aged care facilities as well. The streetscape amenity here consists of mature trees, wide streets, and a mixture of character homes predominantly between 1950's-70's, many of which are being restored. A tornado in 2009 caused a great deal of damage to residential housing stock and established trees and infrastructure in localised areas between Mangles and Hastie Streets.

## South Bunbury - Mangles

### Aerial View



### Boundaries

The northern boundary goes along Prince Phillip Drive, down to Prosser Street west of Blair Street.

Blair Street forms the eastern boundary, with Knight Street forming the southern boundary, heading south on Minninup Road to Hudson Road including a portion of Ocean Drive, and back up to the intersection of Gibson and Clarke Streets.

### City Vision Strategy

Strategic Regional Centre - Inner City Living West Investigation Area

#### Objectives and Strategies relevant to the ICLW Area

**ICLW1:** The management arrangements for the Big Swamp Regional Park need to ensure that the viability of the wetland vegetation and fauna habitats are the highest priority.

**ICLW2:** Support improvements to the health and welfare.

**ICLW5:** Ensure public transport services provide convenient and frequent services particularly to key activity centres south of the CBD.

### Activity Centres



Left to right: Minninup Forum Neighbourhood Centre, Mossop Street Local Centre, Spencer Street South Local Centre



### Landmarks / Features

Left to right: J.E. Hands Oval, Big Swamp Wildlife Park, Playground



### Public Art Works

Yoo Walkool Doy Inj - Coming Together by Andrea Bach & NMSH Students



Topography, Views & Vistas



The topography of South Bunbury varies from low, flat palusplain in the east, rising up the undulating slope of the secondary dune towards the west.

Where South Bunbury meets the Ocean Beach Local Area, the land is higher, and the streets are steep and winding, affording the properties greater views of both the ocean or inland areas, depending on their location.

The views afforded from the higher ground of South Bunbury are mostly facing inland. The CBD is not visible from this area because the ridgeline of the secondary dune faces more to the north-east over the urban area all the way to the Inner Harbour, and the northern ridgeline at the south end of the CBD completely obscures any views further north.



Road Layout



The majority of South Bunbury is arranged in a modified grid layout, with Minnip Road running diagonally through the centre of the neighbourhood.

Curvilinear streets line the southwest corner of the neighbourhood to accommodate the undulation of the landform.

Some traffic calming measures have been put in place throughout the suburbs including school crossings, and speed humps.

Where steep curving streets exist, blind spots are created in the sight lines of vehicles, which compromises entry and exit manoeuvring of private accessways that are located around a bend in the road or over a ridgeline.

Some speed humps already exist in the neighbourhood to help neutralise this problem.



Street Trees & Verge Treatments



South Bunbury has many established trees in the streetscape, and public open spaces. Where native species have reached maturity, they create a natural setting and contribute to the character of the area.

In general there is a high number of tree species in good health and a widespread, consistent cover across the area. Retention of mature species is encouraged, and appropriate management of pruning is required to prevent permanent structural damage or increasing susceptibility to termite infestation.

As with much of the established neighbourhood tree stock in Bunbury, there are some instances of poor pruning of street trees, particularly around power lines, which can disfigure the canopy and limb formation and compromises the life span and future growth of the tree, as well as detracting from the streetscape.



Public Open Space



Fitzgerald Park, on Montgomery Road, is approximately 10000m<sup>2</sup>, and is densely vegetated with mature native trees which create a canopy over the park which provides natural shade. The park consists of an open recreation area with children's play equipment and walking trails through scrubland.

South Bunbury has a very well-connected network of open space reserves to the western side of Minnipup Road.

Opportunities to better connect and enhance the available open space to the east of Minnipup Road should be exploited.

Parkland design and management should be visually attractive and inviting and supportive of the recreational and social needs of the local community.

Large areas of grass are difficult to maintain with increasing watering restrictions. Opportunity to relandscape public parks should consider alternative surfaces with limited grassed areas, a combination of native plants that provide a low understorey of shrubs and grasses and a higher shade giving canopy with tree species that do not obscure views across the park. Drainage basins should be landscaped and integrated in park design as a wetland feature.



Pedestrian & Bicycle Pathways



Wide, open, and clearly delineated dual use paths that connect residential areas with public open spaces are an asset to the local area. They provide safe and comfortable movement for pedestrians and cyclists around the neighbourhood.

The width of a dual use path should be a minimum of 2 metres and a maximum of 3.5 metres depending on the location and expected traffic flow. (Liveable Neighbourhoods 2004:58)

Narrow, unlit pedestrian accessways overgrown with weeds and foliage overhanging from adjoining properties create a hazard to pedestrian safety and are unsightly in the streetscape.

Pedestrians are less likely to take advantage of such a short cut after dark as there is no way of seeing ahead or behind you once you have entered. This potentially lengthens the walking distance between two destinations which could otherwise have been avoided if the access was sufficient for more user groups at any time of day.



Lighting, Signage & Furniture



The City's current bus shelter design provides a positive contribution to the built public environment. The shelters provide protection from the elements, seating, and wheel chair access with a variety of materials and design features that make them attractive and functional. The tactile surface and pram ramp provide universal access and visually impaired persons.

Vacant commercial buildings in residential areas give an impression of abandonment. Dilapidated signage left on building facades and around the property create an unattractive street presence and misleading information as to what facilities are available in the neighbourhood.

Aging signage can also represent a historical element of the site if left for long enough they become a part of the established character of the area.



*Access & Crossovers*



The wide streets are reflective of their era, and vehicle access is mostly from the primary street via driveways that are generally quite long with garages set further back behind the dwelling. This accommodates ample parking on site which meets family household needs and home based business needs.

Egress from driveways onto local distributor roads (such as Minnipup Road) should be done so in a forward direction where possible and crossovers should be setback from an intersection at a distance that meets Australian Standards.

Where corner properties historically utilised the street intersection for access, these should be decommissioned during redevelopment to comply with modern standards.

Verge parking is occurring in front of lots where setbacks are reduced and insufficient on site parking has been provided. Family household needs are typically higher than what is being accommodated on grouped dwelling lots.



*Boundaries & Retaining Walls*



Where front fencing occurs in the area, the trend is for all of the properties along the street to have fencing. Generally fencing is 1.5-1.8 metres in height, permeable in tubular steel, pickets or pillar and plinth designs.

The consistent presence of fencing creates rhythm along the street.

Solid fences reduce visual permeability and offer no interaction between the street and private property.

Where solid fencing is used to enclose private open space, incorporation of design features should be used to soften streetscapes and provide interest e.g. variations in materials, colours, heights etc.

This effect is most pronounced on corner properties where the secondary street boundary has solid fencing down the length of the lot to provide privacy to rear yards.



*Gardens & Landscaping*



Gardens have potential to provide visual interest, define a boundary and provide privacy to the property whilst maintaining a level of passive surveillance over the street where possible.

Some gardens form a dominant feature in the streetscape that becomes a focal point and recognisable landmark to motorists.

Trees in private gardens should be pruned to prevent their canopies from overhanging the footpath and obstructing clear sight lines for pedestrians and cyclists. Likewise, the same requirements apply to shrubbery that protrudes through fencing across accessways, obstructing sight lines from driveways.



**Building Setback & Orientation**



Lots should be orientated with their long axes within the range N20W to N30E, or E20N to E30S to maximise winter solar access and summer sun deflection. (Liveable Neighbourhoods 2004:73) The street lot layout pattern in Mangles is predominantly east/ west facing streets on a north/ south spine, creating well orientated single residential lots.

Diagonal orientation on grouped or multiple dwellings may not achieve adequate passive solar design. In particular, where there is a dwelling attached either side on narrow lots. Housing orientated south - east is disadvantaged by the least amount of solar access, and housing design should take into consideration orientating habitable living spaces towards the northern facing boundary to increase natural lighting and thermal comfort.

This is frequently the case for subdivided properties where lot layout is accommodated on site around existing conditions such as existing buildings and accessways.



**Building Style & Character**



Well maintained homes create a sense of place, and contribute to the character and amenity of the neighbourhood. Renovations (including maintenance) extends the life of the building and is a key element in sustaining the established level of amenity and character of the street.

Consecutive subdivided blocks of grouped dwellings that have individual common access driveways create numerous gaps in the rhythm of the streetscape by increasing the number of crossovers.

The properties accessed by these driveways do not address the street and therefore, are not afforded any outlook or contribute to the character of the street.



**Building Materials & Construction**



Typical construction materials are brick, tile, and corrugated iron. Housing stock is generally in good condition, reflective of a strong neighbourhood character and identity. Whilst there are many lots being subdivided, many of the existing homes are being restored or renovated and kept on site because the quality of housing stock is high.

The condition of buildings may be compromised by factors such as irrigation set too close to the building. Years of bore water spraying against a wall creates unsightly arcs of rust coloured spray patterns and gradually corrodes some surfaces.



# Strategic Planning

## A Vision for the Future

- To retain the strong sense of identity of South Bunbury as a traditional family neighbourhood that possesses all the necessary local centres, schools and parks that makes it a self-contained and liveable neighbourhood.
- To maintain the quality of life while providing opportunities for greater diversity of housing choice that reflect local household needs through a logical pattern of residential densities that increase around walkable catchments from local activity centres, and retain the strong traditional lot layout of South Bunbury and Mangles for family sized lots.

## Valuable Landscape Character Elements to Promote & Enhance

- Maintain and improve upon the high quality of interconnected public open space reserves and promote the use of local parks.
- Promote walkability/ cyclability through enhancement of interconnected pedestrian and bicycle pathways linked to public transport facilities.
- Implementation of a street tree planting program to retention, replacement and expansion with desirable tree species.

## Important Views & Vistas to Retain

- Private dwellings located on the secondary dune are afforded vast views of South Bunbury to the east and of the ocean to the west.
- As the majority of the suburban area is on lower ground, the views are predominantly internal and contain no major landmarks or view points of significance. Wide straight roads and open space areas are important from an intimate street level to the place's landscape character.

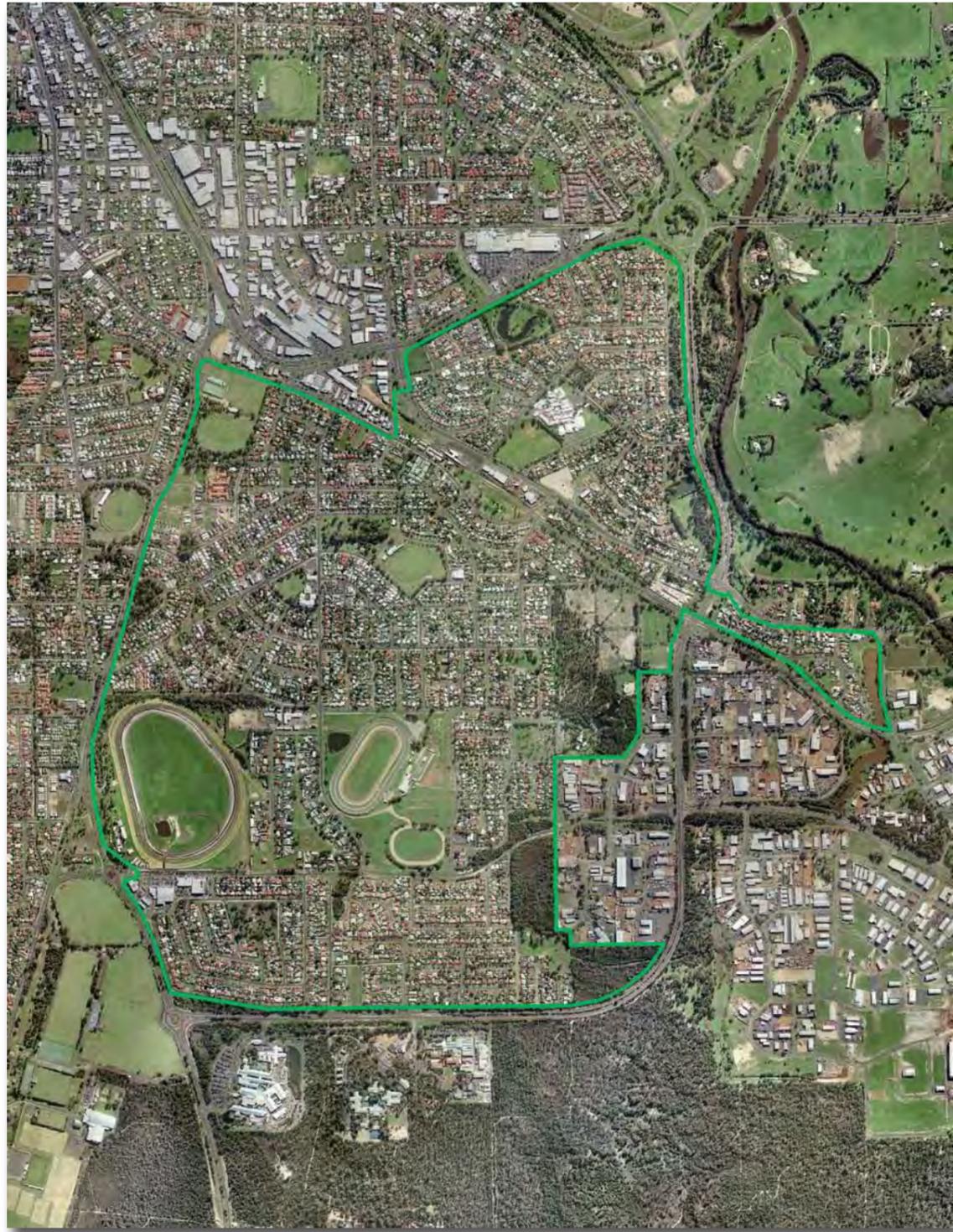
## Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of Local Area Planning process and subsequent Local Planning Policy: South Bunbury - Mangles Local Area Plan.

## South Bunbury - Mangles



# 2.9 Parks



Carey Park



Sandridge Park - Wollaston



# Character Mapping

## Local Area Character

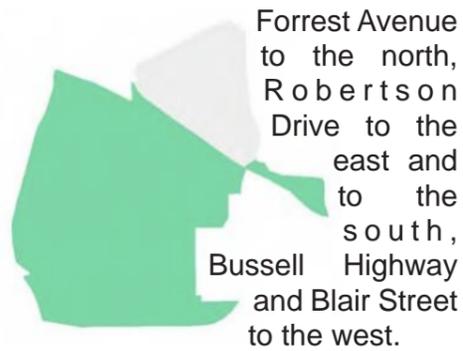
Formerly Precinct 7 (Housing Strategy 2003), it largely comprises single residences, with some medium density and an area of Special Residential (R5) for horse trainers, exists between the two racecourses. The Parks LAP is bounded by the OBD, South Bunbury - Mangles, College Grove - Tuart Brook and Glen Iris - Moorlands Local Areas.

The Bunbury Cemetery and Crematorium are located on the edge of Carey Park, acting as a buffer between residential and industrial to the east of Robertson Drive and with dense shrub to the south.

The train station is located to the north of Carey Park, with the rail reserve demarcating between residential and commercial uses on Picton Road.

The local area is geographically located in the centre of the city and hosts a number of regionally important facilities such as; a district shopping centre, the Bunbury to Perth train station, a neighbourhood centre and two local centres, public primary school, as well as many sporting facilities; trotting club, racecourse, cricket club, football club.

## Boundaries



## City Vision Strategy

Southern Suburbs Vision Focus Area

### Objectives and Strategies relevant to the Southern Suburbs

**SS4:** That planning policy for subdivision, development and redevelopment include requirements for lot and building orientation that maximises the impact of sun in winter and minimises the impact in summer. In addition, building design needs to encourage the use of materials and location/size of openings that reduce the need for artificial climate control.

**SS14:** That as part of an assessment of sporting facilities and their capacity to host major events, particular emphasis be given to the replanning of the Bunbury racecourse and trotting track, a football ground that could host AFL and WAFL level matches and ancillary facilities to support the Olympic swimming pool.

## Public Art Works



Top to bottom: Horse & Rider by Jon Tarry, Binoculars by T Jones & J Forrest, Now by A & M Mickle, Live by A & M Mickle, Surveying the Team by T Jones & J Forrest.



## Carey Park

## Aerial View



## Landmarks / Features

Left to right: Bunbury Passenger Terminal, Bunbury Cemetery, Bunbury Trotting Track



## Activity Centres

Left to right: Frankel Street Local Centre, Crosslands District Centre



Topography, Views & Vistas



The topography of Carey Park is reasonably flat, it is not located near the coast, but the land does rise to the south towards the tertiary education and health campuses.

The Bunbury Cemetery is located on a large rolling parcel of land to the east of the neighbourhood; the mounded land around the crematorium is heavily wooded, which provides a landscaped buffer between the residential area and the industrial area.

The dominant views from around Carey Park are towards the west, the street layout creates vistas of the Maidens Reserve dunes as a backdrop from many vantage points.

Towards the southern most end of Kinkella Gardens where the land is higher, the Bunbury Tower is visible to the northwest, and in the opposite direction the campuses, and Manea Park/ woodlands to the south.



Road Layout



The road layout is a modified grid, predominantly north south and east west in orientation.

The distinctive radial subdivision pattern features public open space and schools at their hubs. (Similar to Hilton, Fremantle, characteristic of the planning and surveying practice of Hope & Klem Surveyors during the 1930-50's era).

The neighbourhood is very well interconnected and is accessible off of Bunbury's major roads including Robertson Drive, Blair Street and Forrest Avenue. Internally, the neighbourhood is connected by major intersecting access roads: Ecclestone Street, Frankel Street and Brittain Road.

Ecclestone Street is a north-south access road running between Forrest Avenue and Brittain Road; spanning the length of the whole neighbourhood.

Such roads should include physical features that stand out, such as; furniture, median strips, verge treatments, trees and line marking etc. in the streetscape that influence driver behaviour in a manner that causes them to reduce speed and drive sensibly.

The City of Bunbury Plan of Principal Activities 2005/2006 - 2009/2010 identifies that traffic management measures are scheduled be put in place during this five year period.



Street Trees & Verge Treatments



The *Platanus acerifolia* (London Plane Tree) is an excellent street tree for its aesthetics and shading capabilities. As the tree is deciduous, it does drop its leaves seasonally, which has some street maintenance implications.

Plane trees add character to the streetscape, and can grow to be very large, which continually contributes to the sense of place in the neighbourhood.

Trees that have been poorly pruned from a young age do not achieve a balanced branch structure and never develop a healthy canopy.

Other factors for poor canopy structure may include root damage in the primary root zone. This can be caused by excavation within the drip line of a tree, or contact with the foundations of a building.

With infill development, attention should be given to the retention and replacement of mature specimens to maintain the healthy presence of trees that exists in the streetscape.



**Public Open Space**



There are several adequately sized usable parks in the suburb for active recreation, for both public use and private clubs. Neighbourhood parks consist of mature trees, playground equipment and open space suitable for ball games.

As most of the vegetation in Carey Park is well established, a clear under storey provides passive surveillance across open space making it a safer playing atmosphere, and safer thoroughfare after dark.

Public open space should avoid dense vegetation which impedes sight lines for park users and pedestrians passing through.

An open landscape plan and regular maintenance routine can alleviate some of the perceived dangers of using public spaces, if the area is well lit and visually accessible.

Park entrances should not be enclosed or consist of areas that may be used to conceal persons or activities.



**Pedestrian & Bicycle Pathways**



Carey Park has a reasonably well connected network for pedestrian access. Pedestrian access should incorporate the following CPTED principles:

- Lighting for safe movement at night
- Elimination of entrapment spots
- Walkable streets that encourage activity and social interaction
- Continuous accessible paths of travel for all users
- Passive surveillance from adjoining properties.

(Designing Out Crime Planning Guidelines 2006)

Given the subdivision pattern, PAW's are necessary to provide direct and convenient access to services.

A limited number of PAW's do not meet all of the risk criteria for Designing Out Crime (Reducing Crime and Anti-Social Behaviour in Pedestrian Access Ways Planning Guidelines, 2009).

For example, where the landform prohibits clear sight lines, adequate lighting should be located along the path to maintain visibility for a minimum of 15 metres from any point, and have passive surveillance from adjoining properties, or regrading of the PAW to open up sight lines.



**Lighting, Signage & Furniture**



Street lighting is of a standard that is adequate to its subdivisional era.

Signage is well contained within the district centre precinct, but is in numerous forms such as; roof mounted, on building walls, free standing and pole mounted in verges, roundabouts and garden beds. Given the level of non-residential uses in Carey Park signage control will be fundamental in retaining the residential amenity in the future.

There is a reasonable pedestrian movement network, however, there is potential for enhancement of street furniture to provide a more supportive environment for physical activity (walkability).

Entry signage should complement the residential area that it represents, and project the identity of the community or historical land use associated with the site.

The life cycle of an entry statement should be determined in order establish the appropriate quality of design and materials, and level of integration with surrounding landscaping of public spaces.

Permanent entry statements, where they are acceptable to the local government, should be durable, low maintenance and accessible in order to ensure that their condition is feasibly preserved as a valued local landmark.



*Access & Crossovers*



Carey Park was predominantly developed in the post-war era and housing construction typically included detached garages/ shed being built in the rear yard with a single driveway down the side of the dwelling to the primary street.

At the time of development, there was adequate provisions for car parking; however, as cars per household increase, the requirement for undercover parking spaces does as well. Because a lot of the established street setbacks are greater than current standards, there is a high incidence of freestanding carports being erected over the existing driveways in front of dwellings, as this is where most of the free space is located. Infill subdivision has caused a large number of such structures within the front setback.



*Boundaries & Retaining Walls*



Whilst there is predominantly unfenced properties in the original green title parcels there are some instances where front boundary fencing has been erected. Timber post and rail frames, with infill sheeting is an effective fencing style, and complies with fencing requirements for corner properties: not greater than a metre in height. The style compliments the dwelling without obstructing passive surveillance or detracting from the streetscape. Tubular steel has been a common material of choice.

With infill development proper site analysis and development planning should encompass consideration of boundary treatment between dwellings as an integral part of the landscape design. High, solid internal boundary fencing within grouped dwelling developments is often a consequence of poor design as it seeks to compensate for a lack of privacy. Solid fencing forward of the building line reduces visibility for reversing vehicles at street level and excludes the dwellings from interacting with the street, especially where the land has been subdivided and the frontages are narrow.



*Gardens & Landscaping*



A maintained and landscaped front garden offers privacy, demonstrates neighbourhood character and identity and positively contributes to the amenity of the area. A wide clearance from the kerb is important on corner properties to maintain sight lines.

Gardens that have an unkempt appearance can stand out in the streetscape. Attention is drawn to discarded items and clutter when it exists in the front yard of a property.



**Building Setback & Orientation**



Uniformity of street setbacks is generally more evident in established areas than in areas that are experiencing infill development. The regularity creates a solid sense of identity, as there is a visible connection between each dwelling and the period in which the area was developed.

New dwellings should attempt to fit into the existing streetscape where possible. When the existing setbacks on the street are forward of current minimum setback requirements, effort should be made to integrate the new dwelling frontage as inconspicuously as possible.

Techniques that may be employed include staggering the front façade setback and setting the dwelling on the opposite lot boundary to create some separation.



**Building Style & Character**



Small weatherboard and fibro homes feature regularly in the post-war; late nineteen fifties – early sixties era in Carey Park. Front verandahs of timber slatted sides and decking with a hand rail and an incorporated verandah in the roof line with a brick chimney on the side façade make up the common features of this style of home.

The classic ‘corner store’ character of the Frankel Street and Mondak Place local shops are a significant contributor to the neighbourhood’s character.

Active management and maintenance of buildings is critical in preserving the valued character and is one of the Designing Out Crime principles relevant to reducing perceived risks of crime.



**Building Materials & Construction**



A common dwelling construction type in Carey Park is timber post and beam frames that are raised above ground level.

There is timber and fibrous cement sheet cladding, with tiled or corrugated iron roofing. Brick cladding is not as common as a single material, and is usually used to window sill height only, substituted with fibrous sheeting or timber slatted cladding. Brick chimneys on the side façade are a common feature of this style of home.

Fibre board clad homes built in the 1950-1960 era are most likely going to have an asbestos content in the walls and ceilings. Sheet cladding products weren’t manufactured without asbestos until approximately late 1980’s.

As some of the housing stock is deteriorating more of these homes will be demolished. Regulations surrounding the lawful removal and disposal of asbestos, once any alteration work is carried out, is that it not to be reused.



# Character Mapping

## Local Area Character

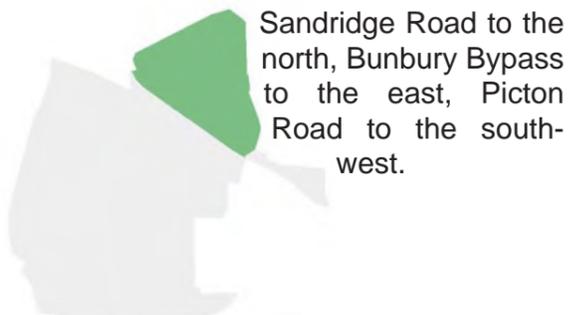
Sandridge Park and Wollaston (Formerly Precincts 8 and 9 of the Housing Strategy, 2003) are almost entirely single residential with a local shopping centre adjacent to Picton Road. The interface with Picton Road is dotted with commercial uses, and a recently established car yard opposite Wollaston Shopping Centre (redeveloped 2009). Housing condition is generally good and the Precinct has an established suburban character with 1960's brick and tile dwellings that are relatively uniform. The Precinct has one property on the City of Bunbury Municipal Inventory (MI) 2001 (St Mark's Church and Cemetery).

Wollaston is low lying and flood prone but some areas have views of the Preston River. Wollaston is almost entirely single residences (90%) and housing condition is variable. There are no dwellings on the MI: however, the area does support some small workers cottages that should be considered for retention.

The northern end of the suburb interfaces with Sandridge Road opposite the Bunbury Forum; however, the suburb is segregated from the centre with no direct access to Sandridge Road, to prevent general traffic from using the suburb as a thoroughfare to Picton Road. Horseshoe Lake is a natural oxbow surrounded by park lands and is framed by the residential lots on three sides.

The Bunbury Catholic College is located off of Picton Road, and therefore a school zone for buses and student pick-up and drop-off points on Petherick and Rodsted Streets exists at peak am/pm periods. The high school has numerous bus services operating because this is the only catholic education facility servicing the region.

## Boundaries



Sandridge Road to the north, Bunbury Bypass to the east, Picton Road to the south-west.

## Activity Centres

Wollaston Local Centre



## City Vision Strategy

Southern Suburbs Vision Focus Area

### Objectives and Strategies relevant to the Southern Suburbs

**SS5:** That pedestrian and cycle facilities and public transport services be improved within and between neighbourhoods and activity centres.

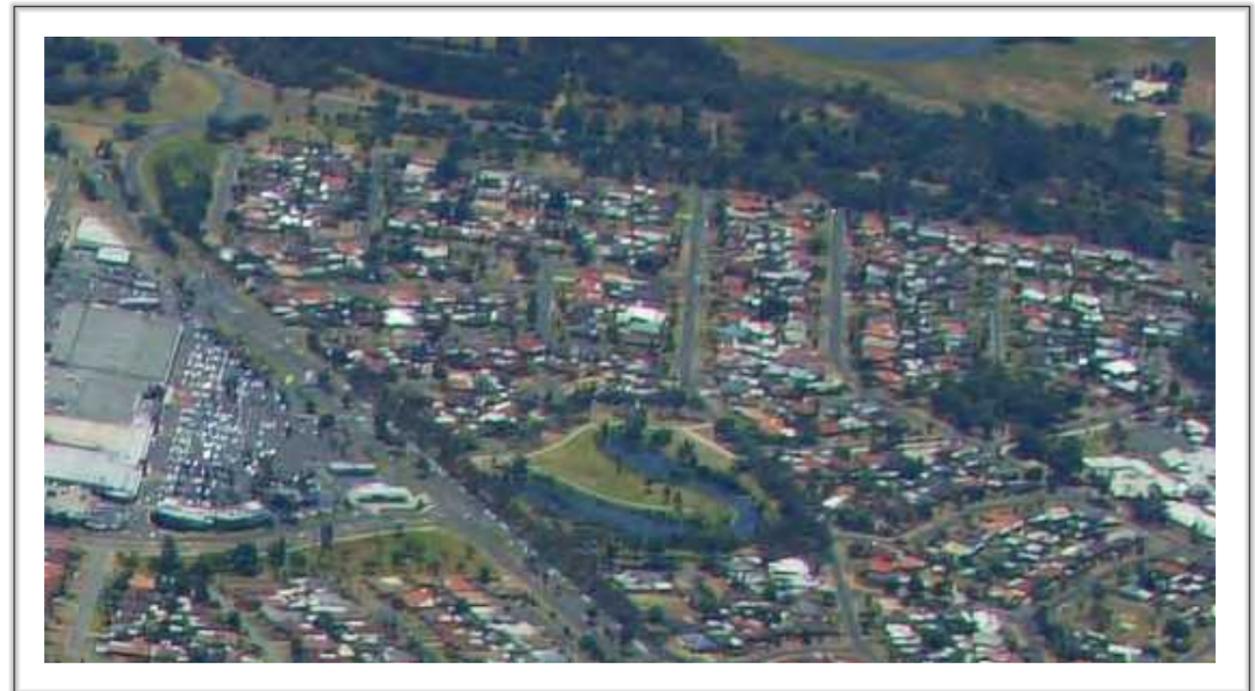
**SS6:** That a housing strategy be prepared for Greater Bunbury that includes an analysis of whether the current housing mix in the Southern

Suburbs will meet future needs and recommendations as to changes that may be required to meet those needs.

**SS11:** That planning for sport and recreation facilities include a detailed analysis of trends in community needs for physical activity and the distribution of costs for the establishment, improvement and management of those facilities that service regional needs.

**SS12:** That a housing strategy for Greater Bunbury including an analysis of the potential to redevelop, improve or renovate housing stock in the Southern Suburbs for aged persons accommodation.

## Aerial View



## Landmarks / Features

Top to bottom: Horseshoe Lake, St Mark's Church and Cemetery, Bunbury Catholic College



## Public Art Works

Public art is minimal from a conventional point of view, however the presence of St Mark's Church and cemetery in themselves provide a significant historical expression of artistic merit.

Topography, Views & Vistas



Sandridge Park has an undulating landform, and sits within 200 metres of the Preston River bank. Horseshoe Lake functions as a drainage basin to the north of the suburb, sitting south of Sandridge Road which forms the northern neighbourhood boundary.

The views from Sandridge Park vary depending on the orientation and elevation of land form. The predominant views are to the north through the public open space towards the Bunbury Forum Shopping Centre.



Road Layout



There are a number of east west linkages through the suburb with 20 metre road reserves that form a part of a modified grid primarily accessed from Picton Road.

There is only one access point on Sandridge Road at present which limits the traffic volumes to predominantly local traffic and school traffic only. The majority of the suburb is accessible off of Picton Road.

This road layout is known as a modified grid (as opposed to a strong grid, like the Tree Street precinct). This subdivision pattern normally incorporates landform as a design influence.

In this case, there is a ridgeline running east-west, creating undulating landform which the roads do not contour. The undulation in the roads creates blind spots for oncoming traffic and restricts views of parked cars, and pedestrians who may be walking on the road.

Dual use pathways would increase walkability in this neighbourhood, and improve pedestrian safety.



Street Trees & Verge Treatments



Sandridge Park is an established suburb with mature tree lined streets. The *Eucalyptus leucoxylon* features on many of the road reserves and their bright red (sometimes yellow) "bottle brush" shaped flowers creates an attractive feature during the autumn / winter months.

Several years of pruning street trees to accommodate power lines has created a uniform disfigurement of the crown of the street tree canopies where power lines are present. Not all of the streets have overhead power lines so some of the streets have maintained full height trees whilst others have been stunted.



*Public Open Space*



Horseshoe Lake is an idyllic location, aptly named for its horseshoe shape, and popular for its natural features, including the lake, bird life and scenic pedestrian route. The park acts as a buffer to the residential area from the main road and the Bunbury Forum shopping centre opposite Sandridge Road.

This park is of a district park scale, and is one of Bunbury's finest pieces of open space and has a lot to offer for passive recreation.

The reserve on the corner of Petherick and Flynn Streets is primarily a drainage basin and does not provide adequate passive or active recreational opportunities. Dual use parks should also be supportive of the recreational and social needs of their local community.

Opportunity to relandscape public parks should consider alternative surfaces with limited grassed areas, a combination of native plants that provide a low understorey of shrubs and grasses and a higher shade giving canopy with tree species that do not obscure views across the park. Drainage basins should be landscaped and integrated with the rest of the park's design as a wetland feature.



*Pedestrian & Bicycle Pathways*



There is interconnecting accessways from the eastern side of the neighbourhood through to Horseshoe Lake. Although the paths are wide enough, bollards prevent vehicles from entering the accessways, making it safe for pedestrians and cyclists only.

There is an open quality about them with several points of access and passive surveillance from multiple vantage points along the corridors.

Whilst some of the more recently upgraded pedestrian accessways have improved surfaces and safety rails at the point of ingress/ egress, an enclosed accessway should have visual contact with the opposite end of the path.

Places of entrapment are created where the user is restricted to one destination that is not visible from the outset; such as on a steep incline or around a corner.



*Lighting, Signage & Furniture*



The signage announcing the entrance to the Bunbury Catholic College from Picton Road is a simple, freestanding timber structure with the school's name and logo only. It does not try to dominate the roadside with advertising; it is just there for directional purposes. This is perfect for a residential environment, giving just enough information for people who are intending to find the school.

Signage from the neighbouring shopping centre is visible across Sandridge Road which illuminates at night.

Many of the residences surrounding the park are exposed to all forms of signage associated with the shopping centre and take away food outlets.

Signage within the neighbourhood itself is minimal as there is a strong residential character.

There is a proliferation of signage with the increasing number of peripheral businesses appearing on the Picton Road interface.



*Access & Crossovers*



In lower density neighbourhoods the car parking and crossover arrangements are generally better executed than in higher density areas. There is space within the front setbacks for ample on-site parking. The overall effect is a less cluttered streetscape and easier maneuverability for traffic.

Unlike East Bunbury's historical laneways (night cart) that can be adapted into rear accessways, these reserves are for drainage and other infrastructure and are not suitable for formalised vehicle access under Liveable Neighbourhoods.



*Boundaries & Retaining Walls*



Good examples of front fencing, particularly on corner properties, use 'pool fence' style tubular steel and pillar and plinth designs. Permeable materials provide surveillance of adjoining parklands and uninterrupted sight lines around an intersection is a good suburban example of front fencing.

The WAPC's Liveable Neighbourhoods and Designing Out Crime documents encourage properties facing onto public parks to embrace open frontages to provide passive surveillance.



*Gardens & Landscaping*



This garden has a natural appeal with well established trees away from the street that is framed by the landscape of the public reserve adjacent. The overall effect enables the house to fit into its surroundings without intruding on the native character created by the backdrop of vegetation.

With the absence of foot paths, the line between public and private is blurred. Where no one takes ownership of the verge area, it impacts on walkability by displacing pedestrians on to the road in order to avoid overgrown landscaping.



**Building Setback & Orientation**



North facing street frontages have ample solar access and are generally designed accordingly. Sandridge Park was developed predominantly in the early 1970's and the street pattern reflects a well structured modified grid with lot orientation gaining the advantage of north-south or east-west frontages.

Under the R-Codes it is possible to build forward of the building line irrespective of the established street setback pattern. Street setbacks are more consistent when housing is developed at the same point in time, as is the case in Sandridge Park. This is why dwelling additions, carports and garages within the front setback, disturb the rhythm of the streetscape by coming forward of the established setback line.



**Building Style & Character**



This dwelling style showcases a typical Australian vernacular design. The house is a simple yet balanced asymmetrical design featuring gables on either end with a bull nose verandah in between housing the entrance and creating a covered porch.

The front picket fence and formal garden enhance the character and sense of pride in the family home.

In mixed business frame areas where commercial and residential uses share an adjoining boundary the interface between the two should be sympathetic to the residential component for aesthetic purposes as well as functionality.

The boundary treatment of the non-residential building should take into consideration the bulk and height of commercial buildings and their outlook onto habitable rooms and private outdoor areas of residences.

However, because there is higher residential density in this area, the importance of good urban design is critical to achieving a high level of residential amenity without compromising the adjoining non-residential land-use potential.



**Building Materials & Construction**



Additions such as pergolas with creeping plants and leafy canopies overhead provide natural shade to living spaces and enhance the character and environmental performance of a building whilst adding modern elements to an aging building design.

Dwelling alterations / additions should attempt to complement the existing dwelling in order to contribute to the streetscape.

Modern garaging needs might be greater than what the original house was designed for and it may be difficult to complement particular roof lines, heights and styles of the original dwelling with new materials.



### A Vision for the Future

- The Parks Local Area represents a diverse collection of neighbourhoods each with distinctive character. Consideration of future changes in residential density coding must take account of the established character, and be reflective of the full range of household types.
- Carey Park will have a range of housing types as a result of the increase in R-Coding around activity centres. A range of one bedroom units, aged accommodation and group or multiple dwellings will be established around key facilities such as the hospital, university and local shopping centres to promote walkability and suitable accommodation types for students, seniors and single person households.
- The historical association with horse stables and training yards that are between the Bunbury Racecourse and the Trotting Track shall remain in the 'Special Residential' R5 density coding to accommodate the needs of the industry.
- Sandridge Park - Wollaston will remain largely unchanged, as the well established residential character is strong. Some increase in residential density may continue to occur in the peripheral areas adjacent to the Wollaston Shopping Centre.
- The greatest changes will occur in the Kinkella Park south of Brittain Road and north of Robertson Drive, where it is envisioned that a range of student housing will be appropriate between the Crosslands Shopping Centre and the University Campus.

### Valuable Landscape Character Elements to Promote & Enhance

- There is a high level of amenity associated with public parks and reserves throughout Carey Park. It is essential to maintain this level of aesthetics in the public realm, so that the community embrace ownership of their open space as a part of their identity.
- A strong sequence of public artwork moves through the suburb depicting local community activity such as football and horse racing. Interpretive art works are located in roundabouts, on verges and in the parks that reflect local history and evoke pride in the residents. These elements are a valuable addition to the streetscapes and they also lead people in the general direction of both Carey Park Football Club and the Bunbury Racecourse.
- The St Marks Anglican Church and Churchyard in Sandridge Park is a beautiful old church and historic grave yard that sits in a park, creating a natural ambience appropriate to its historic heritage significance. This church was completed in 1842 is the second oldest surviving Church in Western Australia.

### Important Views & Vistas to Retain

- Maintaining views of the local area's significant parks and the racecourse are intrinsic to preserving the local identity.

### Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Parks Local Area Plan.



# 2.10 Minninup - Usher



*Withers*



*Usher*



*Glen Padden*



# Character Mapping

## Local Area Character

Formerly Precincts 13 and 14 which were Withers / Usher and Withers (Housing Strategy, 2003). Abutting local areas include South Bunbury - Mangles and College Grove - Tuart Brook.

There is a high proportion of medium density development in the north and towards the south-east where some significant two / three storey multiple dwelling developments. The boundary of Parade Road is flanked with independent living aged residential developments. The area has a high level of public housing and the general condition of housing stock is good.

The area was created with the first subdivisions in the 1970's and as yet there are not any dwellings on the Municipal Inventory. Communities like Withers that were designed along the principles of the 'radburn model' experienced issues in relation to congestion of cul-de-sacs where parking is limited within driveways of grouped and multiple housing, there is insufficient maintenance of common areas, anti-social behaviour and crime in open spaces (typically in poorly design PAWs) where crime prevention through environmental design factors are lacking.

Withers is a residential neighbourhood with supporting services including, the library, community centre and Minninup Shopping Centre, (incorporating a vacant service station, a liquor store, and nearby library and community centre). St Joseph's Primary School is located on the intersection of Parade Road and Washington Avenue and Withers Primary School is located on Westwood Street.

### Boundaries



The northern boundary is at the corner of Hudson Road & Ocean Drive, left on Minninup Road to Knight Street down Parade Road on the east, to Washington Avenue on the south boundary and back up Ocean Drive to the west.

### Public Art Works

Left to right: Figure by Andrew Hickman, The Maidens by Russel Sheridan, Fish by Shaun Chambers



### City Vision Strategy

Southern Suburbs Vision Focus Area

#### Objectives and Strategies relevant to the Southern Suburbs

**SS11:** That planning for sport and recreation facilities include a detailed analysis of trends in community needs for physical activity and the distribution of costs for the establishment, improvement and management of those facilities that service regional needs.

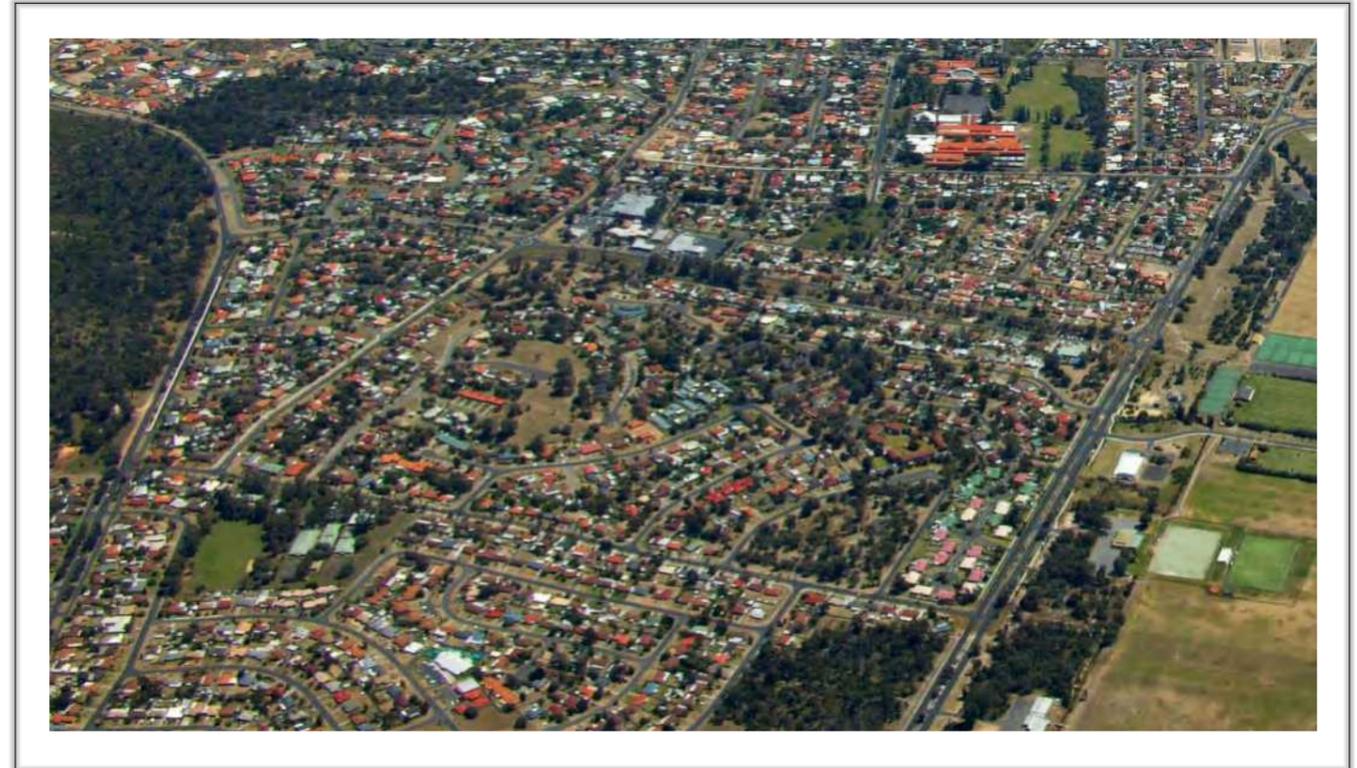
**SS16:** That the Withers/Minninup area be planned and redeveloped to facilitate a greater sense of community through improvements in urban design, housing choice, commercial and community purpose facilities and pedestrian, cycle, public transport and vehicle facilities and systems.

**SS17:** That proposals for the expansion of the Minninup Forum Shopping Centre be consistent with the commercial centres strategy endorsed by Council and the WA Planning Commission.

**SS18:** That the proposal for the extension of Hudson Road through Hay Park to Robertson Drive is not supported taking into account recent road planning and development improvements in the area and the impact of a major district distributor road on safety, amenity and the effective use of the Hay Park facilities.

Withers

Aerial View



### Landmarks / Features

Left to right: Southwest Sports Centre, Des Ugles Reserve, Bottom right: the Maidens Reserve



### Activity Centres



Right : Minninup Forum Neighbourhood Centre

Topography, Views & Vistas



Withers has an undulating landform throughout giving rise to long distance views across to the east.  
To the west of Ocean Drive is the Maidens Reserve which has a steep increase in height across the back of the sand dunes, forming a dramatic backdrop to the residential area.

With the coastal dunes flanking the western edge, there is a dramatic view of the vertical face of the Maidens Reserve and also out across the top of Hay Park, Tuart Brook and across the Council boundary with the Shire of Capel.



Road Layout



The road layout and subdivision pattern of Withers reflects some of the principles of the 'radburn model' of community design. Radburn is attributed with introducing the urban design concept of homes being on cul-de-sacs, with most ending at a park that formed part of an interior open space system. The integral access roads are Hudson Road, Parade Road, Washington Avenue and Ocean Drive.  
The suburb recently acquired a new roundabout at Parade Road and Washington Avenue to accommodate the additional traffic from the connecting road to Dalyellup (opened in 2009).

Westwood Street is a central entrance into the development, accessible off of Ocean Drive and Parade Road. The street runs east west connecting the internal streets to a central spine. In general, the internal street layout is not very legible and can be confusing to navigate the curvilinear layout.



Street Trees & Verge Treatments



The residential streets of Withers are reasonably sparse of street trees in a conventional layout; however, the landscape is rich with native mature trees around the neighbourhood parks and reserves. Maiden's Reserve contains some of the only remaining native *Eucalyptus gomphocephala* in Bunbury.  
The landscape character of Withers is boosted by their presence and the vegetation is valued as one of Bunbury's most significant landscapes.

Where local access roads are narrow, shrubs and street trees are not encouraged, as there is greater chance of foliage obscuring sight lines across the carriage way.  
Where landscaping is required as a buffer from a main road; species that can be trained in an upright formation or hedged and are low maintenance are more appropriate.



*Public Open Space*



Withers has several neighbourhood parks providing a reasonable mix of passive and active recreation opportunities including Maidens Reserve; which is a well located, shady playground, appropriate for passive recreation. There is ample car parking and connectivity with walking trails and beach access.

As the reserve is on a main road, there is a high level of visibility and passive surveillance from adjacent residential streets.

Des Ugle Park is a good sized neighbourhood park, with plenty of activity to offer; however, the dense level of vegetation provides many locations for anti-social behaviour, and hiding places, which makes the reserve an unsuitable place after dark.

The park is surrounded by high density development, that does not adequately surveil the park. There is lighting through a specific pedestrian route, however a perceived risk of crime and lack of personal safety still exists, for users after dark, as passive surveillance is minimal.



*Pedestrian & Bicycle Pathways*



Withers has a well-connected system of dual use paths linking a series of lineal parks along Hudson Road between Ocean Drive and Parade Road.

This allows pedestrians and cyclists to not have to share the road with motorists, and it is a more pleasant route.

The 'radburn model' was explicitly designed to separate cars from pedestrian with a footpath network that does not cross any major roads at grade. Where the 'radburn model' has been applied well (accounting for socio-economic factors) it has been demonstrated that a higher proportion of residents walk for short trips made to local centres for groceries, etc.

There are several pedestrian accessways that connect cul-de-sac streets across the neighbourhood. Some of the accessways have poor visual surveillance because they have not been designed as straight corridors, which creates route predictors and entrapment spots when you cannot see the destination at all times.



*Lighting, Signage & Furniture*



Aged housing developments should have appropriate signage to indicate reduced speed limits for shared use spaces, adequate lighting, directional signage, and mountable kerbs throughout for ease of use with walking aides, wheelchairs and pedestrians alike.

The Westwood Street entry statement is an interpretation of a historical seaman's fable of how the ships recognise Bunbury from sea. The sand dunes protruding from the land are said to appear like a maiden's bosom.

The interpretation of the story in the sculptures is not well enough translated that visitors would connect the story to the artwork; and as the detail in the artwork is quite a literal interpretation, their appearance may be questionable to those who are not familiar with the story.



*Access & Crossovers*



Withers was developed as a low density suburb with medium to high density pockets around interconnected public open spaces.

A minimal amount of subdivision has occurred since initial development, and therefore the blocks are wide enough to allow adequate on street parking between crossovers. Higher density developments provide off street car parking and single access driveways that service multiple dwellings.

Access from Ocean Drive into the neighbourhood is predominantly via Westwood Street; however, there are smaller accessways leading to portions of Ocean Drive that are behind a median strip.

The t-junction intersections are tight for turning traffic to pass safely, creating a traffic hazard for vehicles entering and exiting Ocean Drive.

'Battle-axe' infill developments for more than one dwelling should be encouraged to share accessways to achieve better design outcomes and to decrease the number of individual cross overs to the street.



*Boundaries & Retaining Walls*



The area has predominantly open frontages, with low open fencing (such as 900mm high timber pickets) delineating the private and public domain, thus maintaining an open street frontage and passive street surveillance.

Solid fences reduce visual permeability and offers no interaction between the street and private property.

Where solid fencing is used to protect private open spaces exposed to excessive road traffic noise and head light glare, incorporation of design features and variation, vegetation, etc should be used to soften streetscapes and provide interest.



*Gardens & Landscaping*



A wide grassed verged gives the impression of long front yards, however, the property boundary can be up to 3 metres from the kerb.

This boundary is generally recognised by the distinct line of garden edges and fences in a row. Hedging, garden beds, trees or built in letter boxes are used on the periphery to establish a sense of boundary without a formal enclosure being required.

The presence of clutter and discarded objects in a front yard creates an unappealing streetscape, and draws attention to other details such as overgrown landscaping and lawns, and other maintenance issues.



*Building Setback & Orientation*



Housing stock built for the State Housing Commission is generally in the form of grouped or multiple dwellings of similar design and layout. Housing complexes that face the street with a uniform front, equal in design and setback, and that are mirror images of each other create a consistent streetscape.

Where the opportunity to face a large reserve exists, housing should be orientated towards the park with open frontages, to create both a pleasant outlook from the dwelling and to provide passive surveillance of the park without the height of fencing consistent with rear boundaries affecting the streetscape.



*Building Style & Character*



This housing estate has been designed with an internal road system, which the houses are orientated toward. The grounds are spotted with mature trees and neat grassed areas which contribute to a pleasant and well cared for living environment. The overall effect is cosy and welcoming, and the arrangement of housing provides ample passive surveillance of pedestrian movement and over car parking spaces.

The three storey apartment buildings typify public housing. These buildings are gradually being demolished to make way for modern public housing units or sold to private investors and renovated. The stigma attached to public housing developments is in part to blame for the out-of-date social planning techniques of which these high concentrations of recognisable apartment buildings represent.



*Building Materials & Construction*



Typical construction materials are predominantly brick with a tiled roof. Housing stock is generally in good condition and aged at approximately thirty years for the most part. Where housing stock is showing signs of deterioration it is caused by bore water in close proximity to walls, and salt damp. Whilst the housing stock will be structurally sound for many years, many homes have taken on a tired appearance and have been the subject of renovation, and cosmetic changes to the outside, or demolition all together.



# Character Mapping

## Local Area Character

Formerly Precincts 13 and 14 which were Withers / Usher and Withers of the Housing Strategy, 2001.

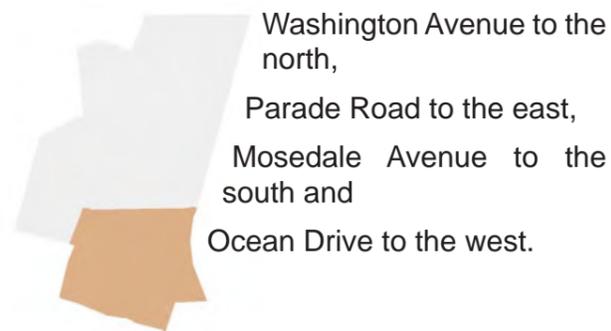
Usher is almost entirely low density single housing with some medium density group dwellings; the general condition of housing stock is good. The area was created with the first subdivisions in the 1970's and 1980's and there are no dwellings on the draft MI.

Usher was first subdivided in the 1970's and 1980's and has no structures on the MI at present.

Usher's curvilinear subdivision pattern with its numerous cul-de-sacs was based upon conventional road layout designs of the time, which reinforced the neighbourhood as a 'cell'. This urban form, colloquially described as suburbia, dominated the modern era in response to the prevalence of car ownership in latter half of the 20th century, and was promoted by planning policies such as Development Control Policy DC 2.6 - Residential Road Planning, which stated:

"1.3.2 Access Roads: Access roads serve only to provide access to individual dwellings and are the link between these dwellings and the local distributor. It is on roads in this category that the domestic environment should predominate over the needs of the motor vehicle."

## Boundaries



Washington Avenue to the north,

Parade Road to the east,

Mosedale Avenue to the south and

Ocean Drive to the west.

## City Vision Strategy

Southern Suburbs Vision Focus Area; and Withers / Minninup Investigation Area.

### Objectives and Strategies relevant to the Southern Suburbs

**SS7:** That current public bus services be progressively improved to provide a more efficient, convenient and safe transport option for regional residents.

**SS8:** That the suburbs of the City be surveyed to establish their key defining elements and a plan be developed to enhance and improve those elements.

**SS16:** That the Withers/ Minninup area be planned and redeveloped to facilitate a greater sense of community through improvements in urban design, housing choice, commercial and community purpose facilities and pedestrian, cycle, public transport and vehicle facilities and systems.

## Public Art Works

There are no notable works of art in the neighbourhood at this stage.

Given the amount of open space that exists in the area, there is ample opportunity for incorporating community artwork for local community groups, schools or artists.

## Activity Centres

Parade Road (Future) Neighbourhood Centre



## Usher Aerial View



## Landmarks / Features

The Tuart Walk, and plenty of ample public open space reserves with modern facilities



Topography, Views & Vistas



Usher is on a reasonably flat plane, with some undulation to the north giving rise to vast views to the east from higher ground. With the coastal dunes flanking the western edge, there is a dramatic rise towards the coast, and a densely vegetated backdrop around the south western periphery. The northern end of Usher is quite undulating in comparison to the more level plane to the south. Views across Hay Park and the southern bush land tree tops are visible from these higher points. The peaks of the coastal dunes are a dominant feature visible from the western most areas and down towards Ocean Park. The green backdrop provides a more natural quality for the peripheral dwellings, which are on the City's boundary.



Road Layout



Given the age of Usher, it has a curvilinear subdivision pattern based on a conventional road layout design that reinforces the neighbourhood as a cell (As described by Development Control Policy DC 2.6 - Residential Road Planning). Traffic calming measures such as raised sections of carriage way in contrasting paving materials slows vehicle speeds as they mount and dismount the level change, however slight or steep. This is a more successful method on narrow roads where the speed hump is unavoidable.

Mosedale Avenue is on the periphery of the precinct, flanked on one three sides by dense bush, it services the south of Usher and forms part of the public bus route. The surface condition clearly suggests that the road regularly experiences anti-social behaviour (hoon driving). The only traffic calming devices on the street are a single roundabout, and two raised humps rounding the elbow on the south-east corner.



Street Trees & Verge Treatments



Dudley Drive Park is lined with Native Peppermint Trees (*Agonis flexuosa*) along its the boundaries and also scattered across the park. The Peppermint tree is a popular choice of street tree across the City and is an appropriate species for a street or park tree given that it has a high canopy to provide shade and has an aesthetically pleasing form.

Smeeth Park is a valuable open space reserve for recreational use in the neighbourhood. The park is equipped with play equipment, park benches and plenty of active open space; however, there is no provision of shade or shelter provided by the presence of trees etc. The landscape is open with the exception of a scattering of peripheral trees and shrubs that do not contribute to the amenity. Consideration should be given to supplementing the existing landscaping by planting appropriate advanced native tree species.



*Public Open Space*



Dudley Drive Park is designed for passive and active recreation. A high level of amenity is achieved with plenty of trees and high quality landscaped areas, shelters, barbecues and park benches.

The park is amenable to residents, and has passive surveillance from the adjacent dwellings, as do all of the parks in Usher.

POS areas at the intersections of Ocean Drive with Washington Avenue and Mosedale Avenue are presently barren grassed areas with limited active and passive recreation potential.

The parks require upgrading to rejuvenate these corners as a place of recreation and to attract members of the community.

Consideration should be given to enhancement of the park in a manner that supports greater community use through provision of landscaping and facilities that support physical and social activity.



*Pedestrian & Bicycle Pathways*



Wide, open, footpaths that are located along public transport routes are a safe means of access around residential areas. Footpaths should be located on at least one side of the street, and should interconnect across intersections by means of safe and legible crossing points.

Pedestrian accessways should be maintained to a standard that promotes actual and perceived safety and convenience of use by pedestrians. Where the path is between two adjoining properties with solid fencing, a clear line of sight should be achieved along the corridor and lighting should be present to provide passive surveillance from properties adjacent to the point of entry/ exit to ensure pedestrian safety.

Poorly maintained public areas can be perceived as an unsafe environment for one to be alone in, simply by appearing uncared for.



*Lighting, Signage & Furniture*



Lloyd Street reserve encompasses the three elements of lighting, signage and furniture in the design of the picnic area.

The park has internal lighting, as well as being on a well lit road network.

The barbecue and picnic area is sheltered under a steel canopy, and partially enclosed with a brick wall.

Unfortunately, due to the use of untreated bore water in public parks, the furniture is stained from the iron content in the water.

The corner entrance to Dudley Drive Park features an art installation with the park name and logo emblazoned in bright colours.

Because the writing is stained beyond recognition the signage has lost the effect that was initially sought and the effort that was put into the design work.



*Access & Crossovers*



Accessways are generally from the primary street frontage, the area is low density and therefore wider blocks exist which allows adequate on street parking between crossovers. As this is a new neighbourhood subdivision there is unlikely to be any future subdivision of these lots, and this amenity will be retained.

Crossovers on corner properties should have clear sight lines to the street from driveways in order to ensure that there is a safe distance for reversing out of a drive way without obstructing traffic, in particular when they are located too close to an intersection with a neighbourhood collector, integrator arterial or primary distributor road.



*Boundaries & Retaining Walls*



Whilst the area is predominantly open frontages, low permeable fences such as 900mm high timber picket fences delineate the private and public domains, maintaining an open street frontage and passive street surveillance. The instances of fenced in corner properties is always higher than mid street, as the yard often forms private open space to the property, and enclosure is sought for the keeping of pets or as a form of privacy and security.

Retaining walls have an immense impact on the streetscape, in particular, where the secondary boundaries of a corner property is adjoining the primary frontage of its neighbour and the land has been built up. Where possible, corner properties should address both frontages in a manner that complements both streetscapes.



*Gardens & Landscaping*



An agreeable front garden might consist of a single natural feature, such as a mature tree providing shade and visual interest in the streetscape. Elements that define the private property line such as a letter box or garden bed are sufficient indicators of a property boundary line, in the absence of fencing.

With water restrictions, expansive lawns are not a desirable outcome as the lawn requires a great deal of maintenance and watering, especially to establish. Alternative ground covers, mulched garden beds, native plants and shrubs have low maintenance requirements, and provide greater visual interest in the streetscape.



*Building Setback & Orientation*



Along access roads building setbacks are regular, which creates a sense of consistency and enclosure in the street.

The growth of the neighbourhood occurred in 'pockets' over different time frames which are reflected in the gradual changes in streetscapes from the 1980's to present.

Modern family units do not require extensive front yards, and with larger dwelling footprints and garaging for multiple cars, the front setback area of the street has crept forward somewhat over the years.

Towards the north western edge of the suburb, the land is undulating and creates some steep level changes in the street.

One way of developing on land that is below street level is to build at natural ground level and create a steep accessway. This method is preferable in reducing building materials and interruption of the landscape with cut and fill; however, the view from street level is of the roof of the dwelling, which is inconsistent in the streetscape.

Solar access can also be compromised by overshadowing of the dwelling at this level if the dwelling is not orientated to maximise solar access.



*Building Style & Character*



Contemporary housing styles of present day generally feature colourful elements across the façade, and variations in material finishes that create visual interest.

Irregular lines and forms are a recognisable feature of this era that will make housing stock from the early twenty first century recognisable in years to come.

Dwelling additions and structures added to a building subsequent to construction should be compatible in style to the original dwelling.

Attempts to replicate a past period or to modernise an aging dwelling are not always achievable for all dwelling types.

Housing stock built within the 1970's -1980's reflects a style that differs from previous eras, that is difficult to convert, for its simple lines and tendency to be symmetrical.



*Building Materials & Construction*



A section of Usher known as Brookwood Estate that was developed in the mid nineties, is a small development of typical contemporary housing styles on lots with an average size of 620m<sup>2</sup>.

The dominant housing type is brick construction with tiled roofs predominantly single storey in scale.

The development has the potential to be expanded upon to connect with the future residential development of Tuart Brook.

North and west facing windows/ openings that receive direct afternoon solar access should incorporate eaves/ awnings that provide adequate sunlight and shading to living areas.

"The ideal overhang required for eaves, is calculated by multiplying the distance from the eaves line to the base of the window by 0.4 for shading from February to October and 0.7 for shade from September to March". (<http://www.rise.org.au/info/Tech/house/index.html>)



# Character Mapping

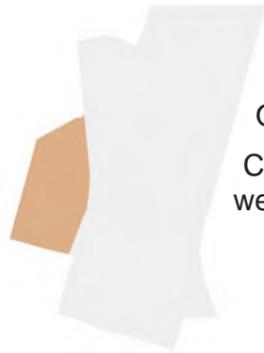
## Local Area Character

Glen Padden is entirely single residential and medium density housing. The general condition of housing stock is good. The first subdivisions occurred in the late 1970's, and then a gap in development occurred until the late 1980's to early 1990's. The final subdivisions began in the early 2000's and are still under construction at present. There are no dwellings on the MI.

Access to the beach is exclusively linked to the neighbourhood via walking trails linked to the forest that runs around the south west perimeter.

The neighbourhood is isolated from the lower suburbs of Withers and Usher because the land that Glen Padden is built on is nestled within the dunes and features some dramatic landform changes at both the north and south ends of the development and across the ridgeline central to the neighbourhood. The resulting lots are staggered quite severely through their rear yards with major retaining wall systems. It is also separated by Ocean Drive having an additional local access road on either side with a screen of vegetation either side.

## Boundaries



Maiden Park Reserve to the north,  
Ocean Drive to the east,  
Crown land to the south and west (Tuart Forest).

## Activity Centres

The closest Neighbourhood Centre is Minninup Forum;

The Future Local Centres of Parade Road and Tuart Brook will service this locality.



## City Vision Strategy

Southern Suburbs Vision Focus Area; and  
Withers / Minninup Investigation Area.

### Objectives and Strategies relevant to the Southern Suburbs

**SS7:** That current public bus services be progressively improved to provide a more efficient, convenient and safe transport option for regional residents.

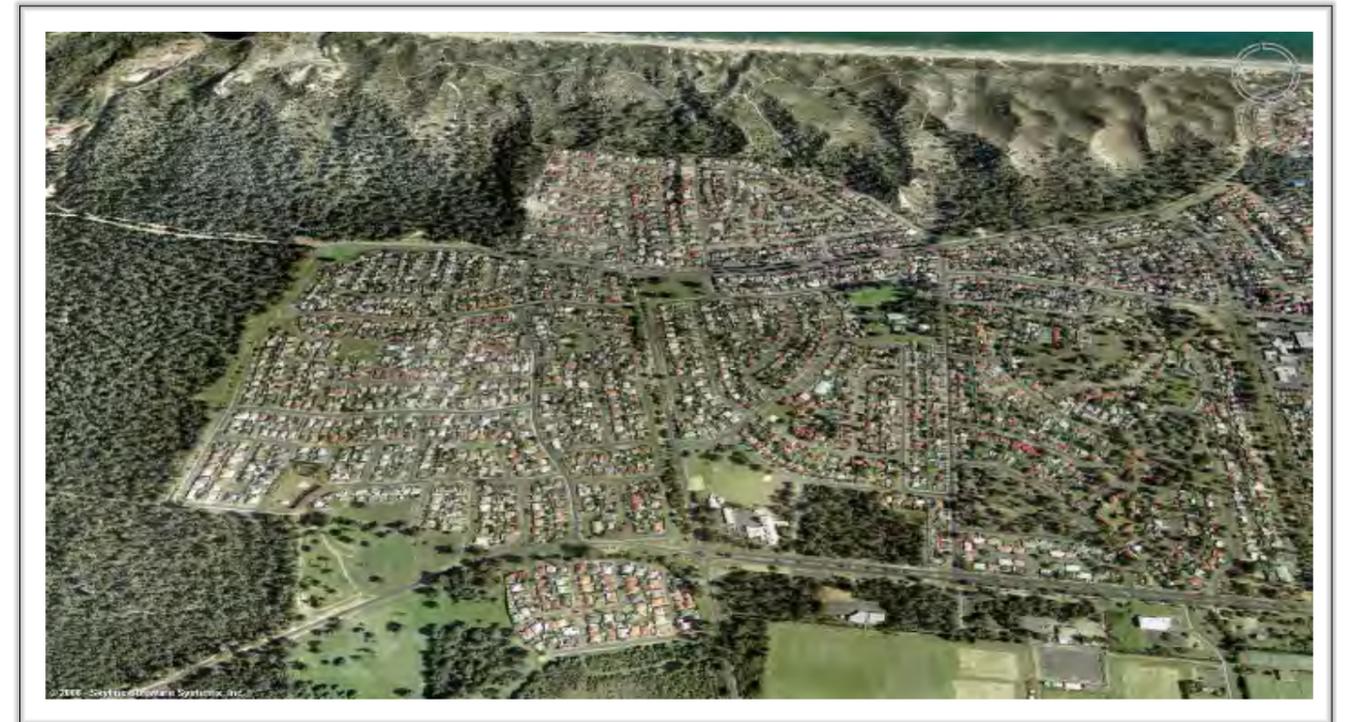
**SS8:** That the suburbs of the City be surveyed to establish their key defining elements and a plan be developed to enhance and improve those elements.

**SS16:** That the Withers/ Minninup area be planned and redeveloped to facilitate a greater sense of community through improvements in urban design, housing choice, commercial and community purpose facilities and pedestrian, cycle, public transport and vehicle facilities and systems.

**SS17:** That proposals for the expansion of the Minninup Forum Shopping Centre be consistent with the commercial centres strategy endorsed by Council and the WA Planning Commission.

Glen Padden

Aerial View



## Landmarks & Features

Maidens Reserve



## Public Art Works

There are no notable works of art in the neighbourhood at this stage. Given the size and relatively internal nature of the neighbourhood, it is not likely that there will be any opportunities to implement artworks in the future.

Topography, Views & Vistas



Glen Padden has been developed on undulating land behind the coastal dunes, there are two high points running east-west with low lying land between. The topography has created some extreme vertical slopes on allotments which require extensive tiered retaining systems up to the rear boundary. The views from varying points within the neighbourhood are open to the east, looking towards the neighbouring suburbs of Withers, Usher and the tree canopy of Hay Park in the foreground and the Collie hills in the background. To the south and west is a backdrop of dense vegetation.



Road Layout



The road layout is predominantly north-south and east-west orientated roads, and most roads ending in cul-de-sacs. The cul-de-sacs are long and have high visibility with only slight bends occurring to accommodate the topography. This area is predominantly local traffic only and traffic is generally light at all times.

The suburb is divided into two sections by the natural topography. There are two main access points, and it is from Geographe Way that higher ground is reached, where the topography is more undulating. A disadvantage to having residential development across a steep ridge is the obstructed view along streets, in particular for safe access/ egress of private accessways at the peak, or at intersections close to either side.



Street Trees & Verge Treatments



The Native Peppermint tree (*Agonis flexuosa*) is a popular choice for a street tree across the City given that it is an appropriate species for a street or park tree, as it has a high canopy to provide shade and has an aesthetically pleasing form.

The tree screen across the verge between the residential area and Ocean Drive is more naturally spreading and appears somewhat untidy. This is possibly a result of self-sowing species, or an attempt to retain natural vegetation as a noise/ visual buffer. Where landscaping is required as a buffer from a main road; species that can be trained in an upright formation or hedged are low maintenance and are more appropriate.



*Public Open Space*



There is only one local park sized pos area (Whiteman Park) in Glen Padden approximately 2500m<sup>2</sup> in size and consisting of a pedestrian path, a playground, bench seating and an active recreation area with intermittent trees at the boundary.

Whilst there is only one park in Glen Padden designated for passive and active recreational use, the perimeter of the neighbourhood is surrounded by land reserved for Regional Open Space reserve under the Greater Bunbury Region Scheme.

The dunes are an important natural element and scenic backdrop behind the residential development, however they are not integrated into the design of the neighbourhood with property boundaries backing onto the ROS land.



*Pedestrian & Bicycle Pathways*



This pedestrian accessway gives pedestrians and cyclists access across Ocean Drive. The path is between residential lots and is only approximately 50 metres in length.

Signage at each end distinctly warns users of the steep incline and for cyclist to dismount their bicycle.

The accessway that leads to the beach via walking trails across Crown land is only visible from the street until the rear boundary edge of the properties adjoining the crown reserve.

The landform is steep and forms part of the dune system. The walking trails that provide access to the ridge and across to the foreshore are steep and perilous, and without any surveillance or lighting; and are not appropriate for night use.

There is a general lack of footpaths within the neighbourhood. The only linkage provided to the external pedestrian and bicycle network is located at the intersection of Washington Avenue.



*Lighting, Signage & Furniture*



Being a residential suburb, the incidence of signage is minimal; however, the City has erected several directional signs where accessways occur to warn pedestrians and cyclists of hazards and restrictions.

Long sections of Murray Drive have minimal street lighting; in some instances there are gaps spanning almost 200 metres without any light posts. However, the necessary power poles are in place to increase coverage within the existing system should it be deemed necessary in the future.

The rest of Glen Padden has ample street lighting allocated, generally to one side of the street only, given that the width of the local streets is not great, and the traffic volumes are not high this is sufficient.



*Access & Crossovers*



Well-spaced, single width crossovers consistently positioned to one side of the allotment, create an orderly pattern of openings on the street allowing on street parking to occur in between and improving the quality of verge treatments.

Crossovers located in close proximity to one another on a sloping road layout should have unobstructed sightlines between driveways and the street to ensure that there is a safe distance for reversing out of a drive way without obstructing traffic, in particular when they are located too close to an intersection.

Given Glen Padden's topography, there are a lot of steep driveways which have been landscaped and/ or have solid fencing which decreases the ease in which ingress and egress are carried out.



*Boundaries & Retaining Walls*



Fence design should maximise natural surveillance between the street and buildings, in order to minimise opportunities for intruders to hide (Designing Out Crime 2006: 24).

Open tubular steel fencing is popular for front fencing and provides the perfect level of safety and surveillance to the property.

Solid fences reduce visual permeability and offer no interaction between the street and private property.

Where solid fencing is used to enclose private property, incorporation of design features and variation, vegetation, etc should be used to soften streetscapes and provide interest and colours should be harmonious with the existing built form.



*Gardens & Landscaping*



A maintained and landscaped front garden offers privacy, demonstrates neighbourhood character and identity and positively contributes to the amenity of the area.

There is a consistent level of well maintained front gardens that is common to open fronted streetscapes.

Front setbacks without vegetation or that are poorly maintained create a negative impact on neighbourhood character, identity and sense of ownership.

Corner properties that have no fencing or landscaping provide little visual differentiation between public and private domains, which would otherwise form the point of reference for the rest of the street.

Front gardens that provide natural surveillance of the street promote a sense of defended space and signals territorial reinforcement by demarcation of the public from the private.



*Building Setback & Orientation*



North and west facing major openings (e.g. windows) that receive direct afternoon solar access should incorporate eaves/ awnings that provide adequate sunlight and shading to living areas.

The ideal overhang required for eaves, can be achieved by multiplying the distance from the eaves line to the base of the window by 0.4 for shading from October to February and 0.7 for shade from September to March.  
(<http://www.rise.org.au/info/Tech/house/index.html> accessed 25.02.08)



*Building Style & Character*



This house represents the charm of regional Australian neighbourhood character. With a mature and healthy native Eucalypt as the focal point on the property, providing shade to a typical Australian vernacular design dating approximately 20 years.

The red brick walls and tiled roof being a popular Australian building choice, and the double garage is a standard feature of many homes built over the past couple of decades.

Strongly themed front gardens can be discordant with the predominant character of the neighbourhood.

While these elements are not a part of the house and the character is only artificially compromised, the impact on the streetscape can be significant when personal tastes are conveyed in the streetscape.

Such elements come and go with time, new owners and personal tastes, and such displays are usually not a permanent addition to the streetscape.



*Building Materials & Construction*



Reconstituted limestone blocks are a popular building material in current Australian vernacular architecture, which is available locally from Western Australian quarries.

The material is suited well with timber offsets, as the natural earthy colours complement one another.

Where street frontages require retaining walls, there are several different examples of how this may be achieved. Depending on the age of the structure and the quality of the structural design, some are more successful and have greater longevity than others.

Land slope varies along the streets, as does the level of retaining required, creating uneven finished ground levels between lots.

Given the differing slopes of each lot, this constraint is better managed if the lots are developed at the same time, however it is not impossible to use this advantage to achieve staggered views where possible.



# Strategic Planning

## A Vision for the Future

- Minninup - Usher will retain its strong residential character and may experience a slight increase in density in Withers (Similar to Parks local area). Housing stock will continue to diversify to provide for a range of demographics, as well as maintaining the well established presence of family homes.
- The establishment of the Parade Road neighbourhood centre may start to occur as the population increases with the development of Tuart Brook. Activity near the intersection of Washington Road and Parade Road will gradually increase in significance as an activity centre, with the incoming traffic from Dalyellup also on this route, and having St Joseph's Primary School in proximity.

## Valuable Landscape Character Elements to Promote & Enhance

- The Maidens Reserve is a significant landscape to the local community, but also forms a highly significant feature on the skyline of the city. Promoting the folk story of the Maidens and the origins of the name should be considered as part of an interpretive public art installation in the reserve itself.
- High amenity of public open space in Usher should be maintained and promoted for activity and social recreation.

## Important Views & Vistas to Retain

- Views of the Maidens Reserve are visible from many aspects within the local area as the proximity and scale give it high visibility. It is views to the Maiden's from other locations that are integral to the landscape character of Bunbury. Maintaining vistas from other location in the city, from along the coast and inland are priority goals.

## Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Minninup - Usher Local Area Plan.



# 2.11 Glen Iris - Moorlands



# Character Mapping

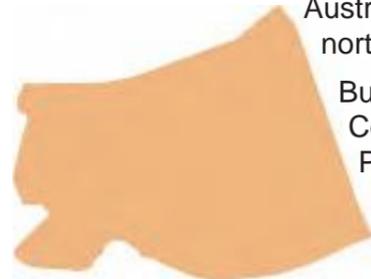
## Local Area Character

Formerly Precincts 17 and 18 of the Housing Strategy (2003), which were Glen Iris and Moorlands respectively. The development is predominantly low density residential with the addition land uses including: two schools, a church, child care centre and a bulky goods retailer, and surrounding rural land uses. Surrounding local areas include Pelican Point and Parks (and also Picton to the south, and the Bunbury Inner Harbour [Vittoria] to the north which are not a part of this Landscape Character Study).

Glen Iris comprises several residential estates principally developed since 1997 up to the present day including Picton Waters, Vittoria Heights and Moorlands all located between Australind By-pass, South West Highway and the Preston River. The area has been developed largely for single residence and elsewhere remains rural lifestyle blocks, with housing condition is good. Whilst the area does not contain any dwellings that are listed on the MI, however, the Picton School and Picton Agricultural Hall located along the southern boundary of South West Highway (formerly Picton Road) are both listed on the State's Heritage Register.

Moorlands is a rural area that will become a residential area. It is bound by the Australind By-pass and the Preston River and floodway. It is flat, low lying and flood prone. Moorlands supports the original homestead and has some dwellings to the west of Vittoria Road, overlooking the Preston River that are on the MI (Housing Strategy 2003:101).

### Boundaries



Australind Bypass to the north,  
Bunbury Port Railway Corridor to the east, the Preston River to the west, South Western Highway to the south.

### City Vision Strategy

#### Eastern Suburbs Vision Focus Area

**ES1:** That the principles and objectives of urban water management as contained in Liveable Neighbourhoods be applied to all future subdivision in Glen Iris/Moorlands.

**ES2:** That the Preston River and Woodley Road wetland be assessed as part of a study aimed at restoring the natural values of these features.

**ES3:** That the redesign and construction of the Preston River improve the interface with Moorlands, in particular an improvement in the visual amenity of the river levees, opportunities for walk and cycle paths and the development of viewing areas.

**ES6:** That structure planning for the Glen Iris/Moorlands area gives a high priority to a pedestrian and cycle network.

**ES8:** That structure planning for the Glen Iris/Moorlands area ensures that adequate provision is made for active and passive recreation facilities and that development of those facilities be aligned with the growth of the Eastern Suburbs.

**ES10:** That structure planning for the Glen Iris Moorlands area ensures limited, safe and efficient access to major arterial roads, uses that can buffer the impact of the major roads from residences and community purposes and adequate provision for public transport and pedestrian and cycle networks.

**ES11:** That a Neighbourhood Centre be planned to service the developing residential areas of Glen Iris/Moorlands.

### Activity Centres

Top: The Shell Gateway on Australind Bypass.

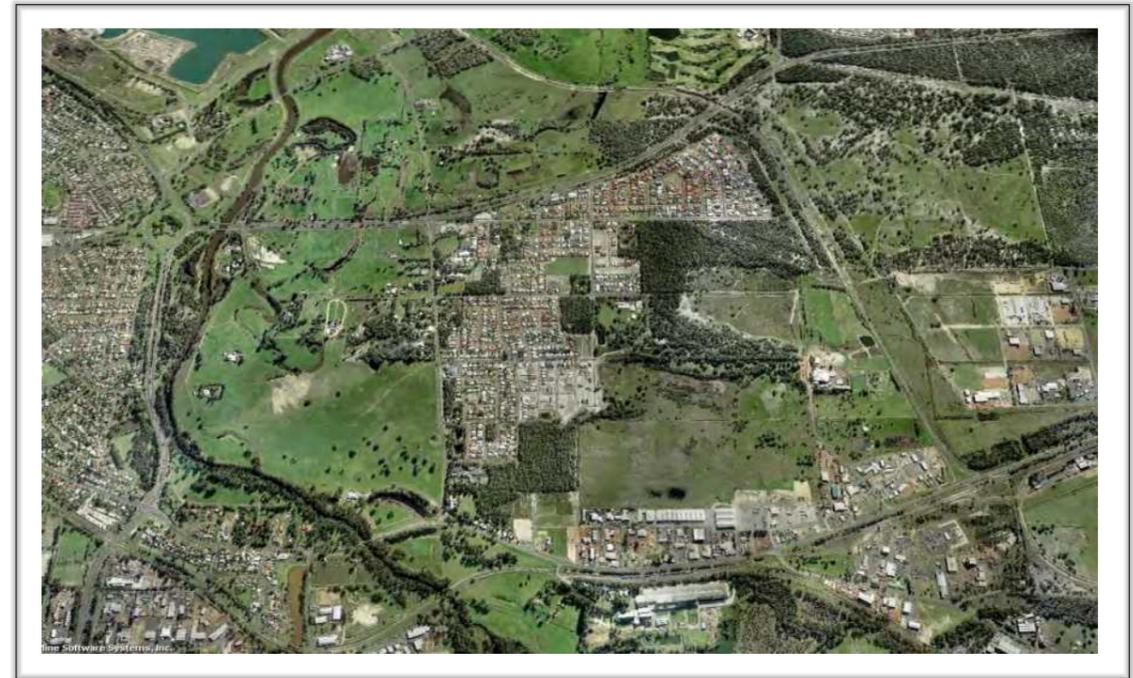


Bottom: The intersection of Jeffrey Street and Vittoria Road (image) is the site of the future Glen Iris North Neighbourhood Centre.



## Glen Iris - Moorlands

### Aerial View



### Public Art Works

Top to bottom: Pilot by Louise Morrisson & Matt Dickman and Interplay by Lorena Grant



### Landmarks / Features

Left to right: High amenity parks, Djidi Djidi Primary School



*Topography, Views & Vistas*



Glen Iris is a reasonably flat in landscape, with only slight undulation occurring in the north east of the neighbourhood. Towards the Moorlands side in the east, the landform is particularly low lying and forms part of the Preston River Floodplain.

The CBD is a recognisable feature in the distance from Glen Iris, with the Bunbury Tower and Boulter's Heights forming landmarks on the horizon.

Views within the neighbourhood are of immediate surroundings, with a back drop of vegetation to the east and south.



*Road Layout*



The road network is predominantly a modified grid layout. Vittoria Road is the main north-south axis (primary distributor), forming a natural hub for vehicle movement at the intersection with Geoffrey Road which is the main east-west neighbourhood connector.

The road layout in parts of the neighbourhood reflects the disjointed staging of subdivisions, the designs of which have not remained consistent across the local area. A consistent approach to road layout is desirable, as it structurally determines not only efficiency of traffic circulation and pedestrian connectivity, it also underpins streetscape character.



*Street Trees & Verge Treatments*



Street trees should enhance the natural environment and create attractive streetscapes. Tree selection should preferably be native, drought tolerant, provide shade and aesthetic value to the streetscape. Endemic species are encouraged, as they also make a biodiversity contribution to the neighbourhood's urban footprint.

Current practices for establishing street trees require that the developer plant verge trees prior to selling new allotments.

Common problems arising from this method are that the tree is damaged by soil compaction, crushed by building activity, or is later removed to permit construction of a crossover.

When no one takes responsibility for establishing the first seasons growth, trees do not establish a healthy start to continue thriving.



Public Open Space



Whilst public open space should provide a high level of public amenity, it should also be functional as an active and/or passive place of recreation for the community. POS that incorporates water detention should be designed so as to maximise its dual use functional while minimising the risk to children. The safety of public parklands is delivered through appropriate structuring and design of detention basins and play areas, e.g. Segregation of areas may be defined by a hard edge treatments, or a physical barrier around changes in ground level. The Liveable Neighbourhoods design elements for public parklands should be consulted.



Pedestrian & Bicycle Pathways



Pedestrian access should incorporate the following crime prevention features:

- Clear signage and location maps
- Lighting for safe movement at night
- Elimination of entrapment spots
- Walkable streets that encourage activity and social interaction
- Continuous accessible paths of travel for all users
- Road treatment to slow traffic speeds
- Passive surveillance from adjoining properties

(Designing Out Crime Planning Guidelines, 2006).

Glen Iris has a combination of successful pedestrian access and accessways that present problems for public safety and vandalism. Assessment of pedestrian accessways that are not functioning successfully should be done in accordance with the WAPC's *Closure of Pedestrian Accessways Planning Guidelines*, 2009.



Lighting, Signage & Furniture



Lighting should be located and designed to achieve the following:

- Select and light safe routes and spaces
- Avoid placement in areas shielded by vegetation, awnings, and other physical barriers
- Avoid unshielded lighting at eye level
- Consider light pollution
- Ensure lighting falls upon the subject matter
- Avoid lighting areas not intended for night time use
- Consider lighting in terms of vulnerable groups, elderly, people with disabilities, children, women, night staff
- Avoid creating natural ladders with light fixtures. (Designing Out Crime Planning Guidelines 2006:33)

Signage should be designed so as to not encourage vandalism. Expanses of flat, vertical and bare surface should be avoided or located out of public reach.



*Access & Crossovers*



Accessways are generally from the primary street frontage, and in the case of corner properties, the secondary frontage.

Wide blocks allow adequate on street parking between crossovers. Subdivided blocks with group dwellings that share crossovers minimise the impact on multiple crossovers on the street.

Garage and driveway width should be less than fifty percent of the site frontage. Expanses of hard surfaces should be avoided, as they dominate the streetscape, and create additional impervious surfaces, which increases water run off.



*Boundaries & Retaining Walls*



Fencing forward of the dwelling does not need to be across the front boundary. Side fencing that tapers down towards the street to maintain sight lines delineates private from public property and is not dominant in the streetscape.

Fencing on blocks that have sloping ground levels should be designed to have a consistent height from ground level. This is opposed to a consistent height across the length of the block in order to reduce the impact of the height difference at the highest point to the lowest point.

Where an adjoining fence is abutting a boundary, effort should be made to integrate consistent height and materials.



*Gardens & Landscaping*



A feature garden bed with medium sized shrubs provides privacy to the front of the dwelling, while maintaining sight lines to the street, and effectively delineating the property boundary.

The presence of mature tree frames the property and increases natural character.

Private gardens should not continue across the verge to the kerb. Where Council land is grassed to the street, landscaping should not extend beyond the private property boundary obstructing pedestrian access.

There isn't a high incidence of footpaths in the neighbourhood so this is a common occurrence where residents have developed to the kerb.



**Building Setback & Orientation**



Building setbacks are reasonably in line throughout the suburb, which creates a sense of consistency and enclosure.

Most of the housing stock has been developed in stages, and this is reflected in the consistency of setbacks on individual streets, which vary in different parts of the suburb.

Opposite sides of the street should address the same frontage to create a balanced streetscape.

Houses should be orientated towards each other to avoid secondary street fencing across from primary frontages, which can be unsightly and is often of inconsistent materials.

The overall affect is an unappealing view for the adjacent properties and for people who are using the street.



**Building Style & Character**



Single storey brick veneer dwellings with tile or "colorbond" roofs are the commonly built housing type in Glen Iris.

Housing styles vary from contemporary Australian vernacular designs to variations on the traditional Australian federation style housing.

There is a predominant trend for open carports forward of the building line. This is generally not a preference in the streetscape unless the neighbourhood is developed unanimously within the same time frame and the streetscape is created on this basis with the carports forming a part of the original roof line.



**Building Materials & Construction**



On west facing primary frontages glazed windows and wrap around front verandahs provide shade against direct sunlight.

Planting a tree that will mature rapidly, approximately 3 metres from the dwelling, will aid construction methods in increasing thermal comfort naturally in the dwelling by providing shade.

Corrugated iron and tin roofs can create glare and increase the heat reflected off of surfaces onto adjoining properties. Powder-coated finishes in darker shades reduce the affects of corrugated pitched roofing.



# Strategic Planning

## A Vision for the Future

- To provide quality of life while providing opportunities for greater diversity of housing choice that reflect local household needs through a logical pattern of residential densities that increase around walkable catchments from local activity centres.
- A self-sufficient community to live and work that satisfies a range of educational, medical, retail and social needs.
- An integrated transport network that encourages walkability within the neighbourhood and is interconnected with the CBD via a reliable and frequent public transport route and dedicated cycle paths.

## Valuable Landscape Character Elements to Promote & Enhance

- The peripheral Regional Open Space is highly valued by the community and contributes to the quality of life in the area.

## Important Views & Vistas to Retain

- Vittoria Road provides the primary access into Glen Iris, and will hold the future local centre and commercial strip. A key intersection will be formed at Vittoria and Jeffrey Roads in the hub of the local centre.
- There is Regional Open Space to the east of the subdivision (south-east of Vittoria Heights) that frames the residential area and provides a buffer between industrial and port uses.
- The Preston River foreshore remains accessible while protecting its functions of flood mitigation, riparian habitat corridor, cultural heritage and visual landscape link to the rest of the catchment and region.

## Policy Recommendations

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Implementation of the Local Planning Policy: Glen Iris - Moorlands Local Area Plan.
- Monitor and review the Local Area Plan as needed, in order to ensure that it remains a relevant and robust strategic land use planning tool.

## Glen Iris - Moorlands



# *Pelican Point*



# Character Mapping

## Local Area Character

Formerly Precinct 20 Pelican Point of the Housing Strategy (2001), Pelican Point is predominantly developed for low density large single houses that are very good in condition. The local area encompasses or adjoins an 18 hole golf course (Sanctuary Golf Resort), two pockets of commercial uses and a caravan park. The local area is divided into three housing estates defined by the golf course and canals (Sanctuary Golf Estate and Grand Canals) which are linked by a dual access path across Estuary Drive and along Old Coast Road. Surrounding local areas include Glen Iris - Moorlands, Vittoria (Bunbury Inner Harbour) and the City boundary.

Development of the three estates occurred between 1993-1997, with the exception of a small land release in 2003 and the proposed shopping centre approved in 2007, yet to be constructed.

A recently developed (2009) car wash on the corner of Estuary Drive and Old Coast Road has altered the residential amenity on the north-eastern corner of the estate which has always been zoned for a Neighbourhood Centre, but never acted upon, a possible service station and / or fast food outlet may ensue.

The estate houses a boat launch ramp and extensive car parking and public toilets to the north to accommodate recreational boating facilities as the canals open onto the mouth of the Collie River.

Views over the Leschenault Estuary extend to the Inner Harbour, Turkey Point, and the CBD as well as to coastal reserves including Belvedere Beach and surrounding dunes.



## Boundaries

**Grand Canals** – The Collie River mouth to the north, Old Coast Road to the east, Venezia Boulevard to the south and Vittoria Bay to the west.

**Sanctuary Lake Estate** - Botanical wetlands to the north, Estuary Drive to the east, Vittoria Bay foreshore to the south-west.

**Sanctuary Golf Estate** - Old Coast Road to the east, Estuary Drive to the west, Sanctuary Golf course around the perimeter.

## City Vision Strategy

Eastern Suburbs Vision Focus Area

**Strategies and Objectives relevant to this area;**

**ES4:** Public transport connection from Pelican Point, Moorlands and Glen Iris to key activity centres be reviewed to ensure that these areas are adequately serviced.

## Activity Centres

Pelican Point Local Centre

Corner of Estuary Drive and Old Coast Road



## Landmarks / Features

Top Right: Grand Canals, Bottom left: Wetlands, Bottom Right: Sanctuary Gold Course



## Public Art Works

There are no notable public artworks in the area at present.

Topography, Views & Vistas



The three estates that make up Pelican Point all have reasonably flat topography. Due to the level of engineering that has gone into the construction of both the canal estate and the golf course, the landform is not in its natural state; however, particular consideration has been given to drainage, with floodway overflow going into the Collie River.

The wetlands between Grand Canals and Sanctuary Lake retain a certain amount of water over the majority of the year as well.

The views from Pelican Point are orientated both inwards, at the canals, and outward across the Leschenault Estuary and Vittoria Bay in the foreground, the Inner Harbour Port operations and Turkey Point in the mid ground and the CBD in the background.

Within the Golf Estate, homes with rear frontages onto the golf course have views of the course where they have open style fencing or no fencing at all.



Road Layout



The roads of the three Pelican Point Estates: Grand Canals, Sanctuary Lake Estate and Sanctuary Golf Course, are all curvilinear in layout, and accessed primarily off of Estuary Drive and Old Coast Road.

Grand Canals and Sanctuary Golf Estate have entrance boulevards with tree lined medians and single lane access leading into the estate.

Sanctuary Golf Course has many cul-de-sac endings and long speed humps to slow speed along the more narrow access roads.

The kerb lines in short sections of streets in the Sanctuary Golf Estate have snaking curves in the road creating a race track effect which forms a complete circuit.

Narrow roads constrain on-street parking as it only allows only one vehicle to pass at any time.



Street Trees & Verge Treatments



Pelican Point is well landscaped throughout; established native trees are in the park areas and along the median strips which creates a natural linkage between the streetscapes and open spaces.

The main boulevard of the Grand Canals Estate consists of an avenue of Norfolk Island Pines which provides an entrance statement and sense of place upon entering into the neighbourhood.

The tree clearance zone required for urban streets for frangible trees [the ability to shear off at the base] is measured from the edge of the vehicle travel lane to the near edge of a mature tree trunk. *Liveable Neighbourhoods Edition 3, 2004 (2003:59)*

Using this method the clearance zone in Pelican Point should be 0.75 metres from the edge of the carriage way to the tree trunk.

These requirements differ from those of Main Roads Western Australia (MRWA) in that the factors of consideration are for the design environment of urban streets for traffic calming benefits.



*Public Open Space*



Within the three estates there are two sets of private tennis courts for residents only, and a spread of pocket parks. The periphery of the estates is linked with foreshore reserves and lineal parks.

The canals are considered a community asset for recreational sea crafts, residents have access to private jetties and therefore the canals form a part of the allocated public open space.

The land between Grand Canals and Sanctuary Lake Estate is designated as a botanical wetland and public open space.

The wetlands have a dual use path around the perimeter; however, due to the ecologically sensitive nature of the land the lot itself is not appropriate for active recreation and as the land acts as a floodway to the Collie River it is frequently inundated.



*Pedestrian & Bicycle Pathways*



The estates are linked with a system of dual use paths that link the public parks and the foreshore. The paths are wide enough for cyclists and pedestrians to pass and vehicle access is restricted with central bollards.

Curvilinear paths should have direct sight lines along the length, which can be achieved with low vegetation or taller trees with no under storey, so that the destination is visible from the starting point.



*Lighting, Signage & Furniture*



Small understated signage incorporated into the side of the closest boundary wall of the estate to the entrance, is a simple and effective means of communication. Landscaping and secure flood lighting at the base of the wall frame and illuminate the installation which also serves as directional signage.

Signage, lighting and furniture should be well maintained; in particular, signage should be repaired as soon as damage is reported to avoid unsightliness and to ensure that the information portrayed is accurate.



*Access & Crossovers*



In lower density neighbourhoods the on street parking and crossover arrangements are generally better executed than in higher density infill areas. There is room for ample on-site parking, visitor parking and bays for parallel parking at intervals along the street. The overall effect is a less cluttered streetscape and easier manoeuvrability for traffic.

Private accessways should be located away from traffic junctions to ensure the safety of motorists, pedestrians and cyclists on the road as well as the motorist exiting the private property.

Where extenuating circumstances occur and access is conducted from within the intersection clear sight lines should be available to all parties on the intersection. In particular the reversing vehicle; fencing and landscaping should be at a minimal height to accommodate this.



*Boundaries & Retaining Walls*



A corner fence may be solid up to a metre in height without obstructing sight lines around the intersection. With a corner cut-off and wide verge between the property boundary and the kerb, the effect is aesthetically pleasing and provides informal privacy and low-level security.

Front boundary fencing that is consistently solid and tall along a streetscape creates a negative neighbourhood environment, all of the dwellings are closed off from one another and do not interact with the street.



*Gardens & Landscaping*



A visually permeable, colourful front garden offers privacy, demonstrates neighbourhood character and identity, encloses the streetscape and positively contributes to the amenity of the area. Bright colours, variation in species, low ground covers maintaining sight lines and unobstructed pedestrian access, are acceptable forms of private gardens.

Whilst a good private garden can assist in diminishing the affect of a solid wall from dominating the streetscape, landscaping must be planted and maintained to an adequate standard that enhances the public domain and that pedestrian access is maintained.

Where solid walls dominate the streetscape attempts to create a front garden are accentuated and become a focal point, giving all the more reason to maintain a high standard.



*Building Setback & Orientation*



Housing along the Inlet foreshore is orientated to the west, and many of the dwellings are designed to maximise the views. The road itself runs along a north-south axis giving east-west allotments. Building designs predominantly show responsive measures of design for direct western solar access to their frontages.

North and west facing windows/ openings that receive direct afternoon solar access should incorporate eaves/ awnings that provide adequate sunlight in winter and shading to living areas during summer.

Windows that are exposed to direct sunlight can increase the heating and cooling costs of the home, cause sun damage to furniture and require additional roller shutters or external blinds to counteract the inadequacy.



*Building Style & Character*



Grouped and multiple dwellings should aim to address the street as a single development. Symmetrical lines and balanced features such as windows and doors create the semblance of a single house on the lot. This technique reduced the impact of higher density development on the streetscape.

Strong inconsistency between the character of houses in the street provides no fluency in the streetscape. When there is also great differences in the bulk and setback of dwellings that adjoin each other, it interrupts the harmony of the street and encourages future dwellings to create further inconsistencies.

Setback should be consistent between neighbouring properties to maintain the rhythm of the street, even if the designs are not complimentary to each other, a pattern will form in the overall streetscape.



*Building Materials & Construction*



The uniformity of building materials which is carried through the built environment also carries into the public domain. The canal edges are a consistent wall of quarry stone, and heavy timber posts, these elements are mirrored throughout the parks and pedestrian accessways.

The housing stock is predominantly brick dwellings with tiled roofs, the style and use of these materials varies over the years as well as the scale of the dwellings being built. Grand Canals: the newest of the three estates, graduates into quarry stone construction with tiled roofs, and intermittent colorbond roofs.

Sunlight reflected off of materials that are highly reflective or metallic surfaces can have a negative effect on neighbouring properties, gardens and people in close proximity. It can also be a source of visual discomfort for people who have a direct view of these materials in sunlight.



# Strategic Planning

## A Vision for the Future

- A strong residential character with high quality amenity, including the canals and waterways, and the golf course. The residential density will remain low density for the most part, with allowances for larger homes and grander housing designs. The canal estate allows access to private docks and boat moorings adjoining private property which creates valuable waterfront properties that evidently show pride in being a part of the community which is reflected in the quality of housing stock.
- The development of a local centre to service the local residents will make Pelican Point more self sufficient, and convenient given that the development is a further distance from the conveniences of the city.
- The upgrade and expansion of the Sanctuary Golf Course and associated facilities will provide the opportunity for modern short stay accommodation, dining and entertainment facilities.



## Valuable Landscape Character Elements to Promote & Enhance

- The canal waterways are a valuable landscape feature to promote waterfront lifestyle, with private moorings, and vast views of the Estuary.
- The natural wetlands that are between the estates should be retained and promoted as part of a walkable recreation route, there is public access all through the estates, including the golf course and access to the foreshore of the estuary.

## Important Views & Vistas to Retain

- Views from private residences across the Estuary, with vistas overlooking the CBD beyond the Inner Port.

## Policy Recommendations

- Commencement of the local area planning process and subsequent Local Planning Policy: Pelican Point Local Area Plan.



# 2.13 College Grove - Tuart Brook



Tuart Brook



# Character Mapping

## Local Area Character

Formerly Precinct19 which was Rifle Range/ College Grove of the Housing Strategy (2001). Surrounding local areas include Parks and Minninup - Usher.

College Grove has a north south ridge line that provides views of the coast and inland areas. The neighbourhood is partly developed as a residential area and the remainder is rural bushland. The subdivision has been developed in stages since 1999 and one further stage is expected before the completion of the suburb. There has been much debate about the retention of the bushland, which has put a hold on any further development at present.

Adjoining College Grove is the Edith Cowan University Campus, the Bunbury Regional Hospital and other medical facilities.

Tuart Brook is the area referred to between Bussell Highway, Washington Avenue and Centenary Drive. There is a local centre planned for Tuart Brook that will service the College Grove catchment.



## Boundaries



College Grove is accessible from the Bussell Highway via Somerville Drive. A series of streets and cul-de-sacs form the outer boundary of the neighbourhood which

is densely surrounded by bushland and abutting the rear of the health and education campuses.

## City Vision Strategy

Southern Suburbs Vision Focus Area; and College Grove Tuart Brook & Super Campus Investigation Area.

### Strategies and Objectives relevant to the area:

**SS15:** That College Grove be planned in conjunction with the adjoining areas of Tuart Brook, Carey Park and the health and education campuses with particular reference to:

- The location and timing of the development of a new primary school,
- the location, scale and design of a local commercial centre,
- the development of improved pedestrian, cycle and vehicle connectivity between Tuart Brook and College Grove and; Carey Park and the health and education campuses,
- a review of public transport services to the new residential estates and the health and education campuses,
- the potential to establish supported accommodation facilities for people with disabilities,
- subdivision design that is water sensitive and solar orientated,
- the preparation of a management plan for the Ocean to Preston River Regional Park
- the urban design for College Grove, Tuart Brook and planning for the health and education campuses needs to give a strong emphasis to pedestrianisation and cycleways and adequate parking provision,
- The connection of Somerville Drive to Robertson Drive, and
- that proposals for development on the health and education campuses not compromise the expansion of Edith Cowan University, TAFE or the health campus.

## Landmarks / Features

Top: Remnant Bushland, Bottom: Observatory

## Public Art Works

Edith Cowan College, Unknown Artist



## Activity Centres

Bottom: College Grove Campus Local Centre, and

(Future) Tuart Brook Local Centre



Topography, Views & Vistas



College Grove is located on a ridge at the southern edge of the city's urban area. The land was formerly rural and is still surrounded by bushland. The residential development was designed to fit the natural contours (in the range of 12 AHD to 44 AHD) of the land, and take advantage of significant views across South Bunbury to the coast.

The vista from College Grove is over South Bunbury and Minninup - Usher. The backdrop being the coast looking towards the Maidens. Similar open views are visible from many of the vantage points in College Grove. The immediate views in the foreground are of the undeveloped land of Tuart Brook, the caravan park and the Regional Open Space of Hay Park.

These immediate views will change from being of wetlands and rural properties to residential development, as Tuart Brook develops for residential use.



Road Layout



The road layout of College Grove is a modified grid that reasonably follows the existing contours of the land, with streets orientated predominantly northeast and northwest.

The entrance boulevard consists of double turning lanes, which reduce to single access carriage ways with a landscaped median down the centre. Roundabouts control intersections along Somerville Drive. Access roads are in place to connect to the next stage of College Grove, which is yet to be constructed.

Local roads branching off the main street terminating in cul-de-sacs, some of which are connected by laneway access where the heads of the street are end to end. Due to the steep nature of the land, many of the roads are not suitable for walking, and therefore a connection of pedestrian accessways cut through the development in a north-south direction, intersection pockets of public open space and connections between streets.



Street Trees & Verge Treatments



Somerville Drive is a feature tree lined boulevard with mature plantings of *Plantanus acerfolia* (Plane Trees) and *Liquidambar styraciflua* (Liquid Amber) both deciduous, European species.

The green appearance of the entry is achieved through dense medium sized shrubs in raised garden beds and lawn all the way to the kerb. The trees continue down Somerville Drive along the median strip with strappy ground covers, and low shrubs.

Unsuccessfully established trees do not offer any contribution to the amenity of the streetscape. Some of the reasons that a tree may not successfully adapt to their environment may include:

- Planting at the wrong time of year
- Inappropriate climate
- Compaction around the base
- No irrigation during the first two summers
- No staking.



*Public Open Space*



Public open space is designed predominantly for passive recreation, and with a high level of built form. The landscaping of POS consists of retaining walls, and built up garden beds, due to the sloping nature of the land, the parks feature limestone steps and ramps for access. A high level of amenity is achieved through mature trees and high quality landscaped areas, with plenty of shade and park benches.

Peripheral scrubland gives the appearance that public open space is plentiful; however, the land is not suitable for active recreation, and only one area for ball games exists, in a portion (71000m<sup>2</sup>) of the neighbourhood sized parkland of St Peters Green. Other designated parks are also utilised for dual use drainage basins, and are graded too steep for recreation purposes.



*Pedestrian & Bicycle Pathways*



Somerville Drive has pedestrian paths on both sides of the road, and the median strip has pedestrian islands at crossing points in the centre of the road for additional pedestrian safety crossing the main road of the estate. Pathways that wind through the adjoining pocket parks of Somerville Drive and Possum Way create a linkage between the open space areas for passive creation.

Pedestrian and bicycle traffic between the suburbs of College Grove and Tuart Brook must cross the Bussell Highway. Whilst the network of footpaths within College Grove is well connected, the pedestrian link from the highway is not of a high standard. The only dual access path that leads to the highway is between dense shrubs that form a canopy over the path. There is a street light at one end of the path, however light would be obstructed by the tree canopies for a length of the path.



*Lighting, Signage & Furniture*



There are two forms of street lights in College Grove, one for the manicured entrance boulevard and one for the access roads. Both of which are adequately spaced and provided in all of the streets and public parks.

Bus shelters should be designed for disabled access, provide shade, shelter and natural surveillance, and should be constructed of durable materials. College Grove is on an active public transport network, and shelters require upgrading to meet current Australian Standards.



*Access & Crossovers*



The outer perimeter of housing which faces the remaining shrubland has a wider access road for on street parking and public transport. The crossovers are well spaced and predominantly single access along the street which has mountable kerbs.

Crossovers located in close proximity to one another on a curvilinear road layout should have maximum visual surveillance of the street to ensure that there is a safe distance for reversing out of a drive way without obstructing traffic, in particular when they are located too close to an intersection. Steep driveways and solid fencing decrease the ease in which ingress and egress are carried out.



*Boundaries & Retaining Walls*



There is minimal front fencing in the neighbourhood as the design guidelines have specific restrictions for height and materials. Where the land is flat, and front fencing is not required, many properties are just landscaped. In locations where fencing does exist it is predominantly tubular steel and brick pillars with a one metre maximum height.

Extensive cut and fill to produce a flat surface for private open space can require significant sized retaining walls, upon which fencing is often added to the top. The effect from the street is an expanse of wall on the boundary which is particularly dominant on a corner property.



*Gardens & Landscaping*



Formalised garden beds defining property boundaries planted with drought tolerant varieties encloses the streetscape and positively contributes to the character and amenity of the area.

A raised and enclosed front garden creates little interaction with the street: however if the slope of the property requires retaining to provide usable open space, the area in front of the wall should be landscaped to provide some softer visual relief.



*Building Setback & Orientation*



Consistent front setbacks create a sense of uniformity and achieve a harmonious rhythm in an intimate streetscape.

The Design Guidelines for Woodcrest Rise specify consistency with the WAPC's criteria for R20 under the R-Codes for setback requirements. College Grove's 'rural residential' component specifies much greater setbacks in keeping with a rural setting.

Lots should be orientated with their long axes within the range N20W to N30E, or E20N to E30S to maximise winter solar access and summer sun deflection (Liveable Neighbourhoods 2004:73). While there are a lot of well orientated north-east lots in College Grove, there is also a predominance of lots that face the bushland to the south-east.

Solar access would be achieved for the private open space however living areas are likely to be missing out on ample natural light.



*Building Style & Character*



College Grove is built in a bush surrounding, on land that is steep around the perimeter, and therefore many of the allotments have changes in ground level which are significant.

Pole housing design is an appropriate solution for allotments that are not flat. Car parking below street level enhances the streetscape as the front façade is not dominated by garaging, and the overall effect is appealing within a natural bush setting.

Character may be defined by a number of contributing design factors such as: the time period that the house was built; a style or typical vernacular of an area; and specific components such as height, bulk, roof line, materials, size, colours and construction methods.

What is considered appropriate to the character of an area differs with the physical surroundings, density and setting. For example what may be considered appropriate in a rural setting may not be fitting in a suburban setting and vice-a-versa.



*Building Materials & Construction*



Weatherboard is a durable, moisture, termite and weather resistant material that has many construction applications.

As a cladding, weatherboard is particularly good for coastal areas, and is more accommodating in achieving architectural design features such as cladding angular walls and tight corners.

Weatherboard can be finished in any colour and is commonly applied in feature colours for contemporary architectural effect.

Although it is specified in the Design Guidelines that zincalume and white colorbond metal roof cladding is not permitted in College Grove due to potential problems with glare, and a preference for materials that reflect the natural vegetation of the area, there are still a number of houses that have used either material for roofing.



# Character Mapping

## Local Area Character

Tuart Brook is a future urban development site that is contained between the Bussell Highway, Washington Avenue, Parade Road and Centenary Drive.

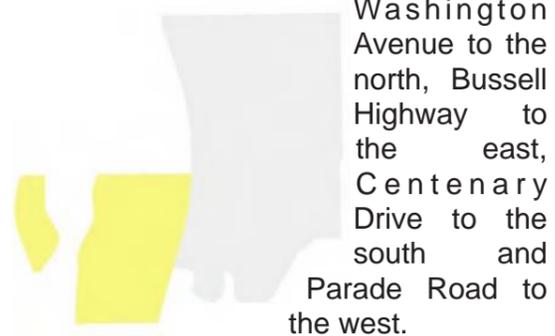
At present, the site is mostly rural residential, consisting of paddocks, used for the keeping of horses and cattle, etc.

There is a caravan park to the north-east corner of the site and the existing residential development of Brookwood Estate to the north-west. A large area of wetlands runs through the middle of the site and bushland to the south.

The future development will contain its own local centre, education facilities, aged care, and a range of R-Code densities to support a combination of housing types. This is the final parcel of land to be developed in Bunbury and it is anticipated that it will accommodate an additional 900 home sites for the city.

Fluency between College Grove and Tuart Brook will be improved with the construction of a light controlled intersection at Somerville Drive that will align with Washington Avenue, making it safer for vehicles to cross the busy Highway, and for the residents of College Grove to have greater access to the future facilities within Tuart Brook.

## Boundaries



Washington Avenue to the north, Bussell Highway to the east, Centenary Drive to the south and Parade Road to the west.

## City Vision Strategy

Southern Suburbs Vision Focus Area; and College Grove Tuart Brook & Super Campus Investigation Area.

Strategies and Objectives relevant to the area:

SS15: That College Grove be planned in conjunction with the adjoining areas of Tuart Brook, Carey Park and the health and education campuses with particular reference to:

- The location and timing of the development of a new primary school,
- the location, scale and design of a local commercial centre,
- the development of improved pedestrian, cycle and vehicle connectivity between Tuart Brook and College Grove and; Carey Park and the health and education campuses,
- a review of public transport services to the new residential estates and the health and education campuses,
- the potential to establish supported accommodation facilities for people with disabilities,
- subdivision design that is water sensitive and solar orientated,
- the preparation of a management plan for the Ocean to Preston River Regional Park
- the urban design for College Grove, Tuart Brook and planning for the health and education campuses needs to give a strong emphasis to pedestrianisation and cycleways and adequate parking provision,
- The connection of Somerville Drive to Robertson Drive, and
- that proposals for development on the health and education campuses not compromise the expansion of Edith Cowan University, TAFE or the health campus.

## Activity Centres

Proposed Tuart Brook Local Centre



Aerial Image

## Landmarks/ Features

At this Point in time there are no landmark features in the landscape as it is predominantly rural pastures, with some dwellings and small businesses to the Bussell Highway frontage.



# Strategic Planning

## A Vision for the Future

- College Grove is linked to the hub of activity that provides major medical and educational facilities in Bunbury. This relationship should be strengthened with greater connectivity internally to allow College Grove to provide housing needs for user groups of these facilities.
- Tuart Brook will become Bunbury's final greenfield site with a neighbourhood development that will provide for a range of housing types suitable to the growing demographic needs of the city and provide a cohesive range of activities and facilities where people will work and live.

## Valuable Landscape Character Elements to Promote & Enhance

- The remnant bushland surrounding College Grove has long been a point of contention between developers, community groups and government agencies alike. If the remaining bushland is retained for its ecological value, efforts should be made to educate people on the value of conservation of vegetation and its habitat.

## Important Views & Vistas to Retain

- Vistas from around the College Grove development have vast views over the south of Bunbury, in particular across the Maidens Reserve. The topography of this part of the coastline is translated better from this angle than anywhere else in the city.

## Policy Recommendations

- Commencement of the local area planning process and subsequent Local Planning Policy: College Grove - Tuart Brook Local Area Plan.
- Adopt a Structure Plan for Tuart Brook.

## College Grove - Tuart Brook



# *Part 3: Strategic Direction*

## **3.0 Strategic Direction**

**3.1 Visual Management Objectives for enhancing the Landscape Character of Bunbury**

**3.2 Composite Recommendations from Chapter 2: Visual Diary**

**3.3 Monitor & Review**

### 3.1 Visual Management Objectives for enhancing the Landscape Character of Bunbury

- Recognition of the LCS into the local planning policy framework as a reference tool for future strategic planning decisions, specifically ensuring that the zonings of the future revised Scheme take account of the identified landscape character at all levels of perspective (macro - micro scales).
- Incorporate Landscape Design Guidelines within the local area planning process that regulates the management of identified significant viewsheds and corridors and that sets out the criteria for proponents to provide a Visual Impact Assessment as a part of a development assessment that will impact on the viewshed from identified viewpoints.

### 3.2 Composite Recommendations for enhancing the Landscape Character of Local Areas Derived from Chapter 2: Visual Diary

#### A Vision for the Future

##### Central Business District

- The CBD will experience commercial and residential growth predominantly to the north, including the CBD Core and Marlston Waterfront precincts.
- High rise buildings may be incorporated along Victoria Street and some potential increases to the height of buildings along Prinsep and Stephen Streets, and between Victoria Street and Blair Street to the north.
- Increased residential density to reflect inner city living household needs.
- Improved pedestrianisation of linkages between the CBD Core and the Marlston Waterfront
- Improved vehicle circulation and availability of car parking within the city centre and periphery.
- The commencement of the Bunbury Waterfront Project.

##### Outer Business District

- A more sophisticated approach to car parking and access for individual businesses, addressing site constraints and intensity of land use.
- An interconnected dual use path system for cyclists, pedestrians and linkages to public transport, with stronger connections to the CBD.
- Higher aesthetic value placed on the streetscapes of mixed business areas, including coordinated landscaping and street furniture.
- Active mixed use corridors of compatible land uses that are suitable for mixed use and of an intensity not suited to the CBD,
- Medium density residential, designed for adaptation for ground floor mixed use development.

##### Ocean Beach

- The formalisation of the 'Tree Street Area' as a precinct for regulation of future residential development in order to sustain the existing character.
- Recognising the 'Ocean Beach North' tourism corridor, as depicted in the Local Planning Strategy

for Tourism (2008).

- High quality medium density infill development throughout the suburb where higher R-coding is applied.
- The development of the 'Punchbowl' site as a mixed use tourism/residential development with a high quality sub-division and building design that accentuates its coastal locality and serves the local population.

##### East Bunbury

- Given the age of housing stock and its proximity to the CBD and waterfront it is subject to redevelopment pressures, accounting for the need to have flood mitigation measures in place. As such, redevelopment should seek to achieve a coordinated approach with the well established character of the area, whilst exploring innovative means of integrating the necessary finished floor levels, that will have an obvious impact on the rhythm of the street.
- Increased R-Code densities around activity centres, e.g. Leschenault Quays local centre, will draw more residents into the neighbourhood and provide housing types suitable to high density living in a walkable catchment. This will graduate to lower densities that will preserve the established character and housing stock of Rathmines. This re-coding of the neighbourhood will ensure that infill development is conducted in a logical manner and is based on sustainable planning principles in accordance with the WAPC's Liveable Neighbourhoods.

##### South Bunbury - Mangles

- To retain the strong sense of identity of South Bunbury as a traditional family neighbourhood that possesses all the necessary local centres, schools and parks that makes it a self-contained and liveable neighbourhood.
- To maintain the quality of life while providing opportunities for greater diversity of housing choice that reflect local household needs through a logical pattern of residential densities that increase around walkable catchments from local activity centres, and retain the strong traditional lot layout of South Bunbury and Mangles for family sized lots.

##### Parks

- The Parks Local Area represents a diverse collection of neighbourhoods each with distinctive character. Consideration of future changes in residential density coding must take account of the established character, and be reflective of the full range of household types.
- Carey Park will have a range of housing types as a result of the increase in R-Coding around activity centres. A range of one bedroom units, aged accommodation and group or multiple dwellings will be established around key facilities such as the hospital, university and local shopping centres to promote walkability and suitable accommodation types for students, seniors and single person households.
- The historical association with horse stables and training yards that are between the Bunbury Racecourse and the Trotting Track shall remain in the 'Special Residential' R5 density coding to accommodate the needs of the industry.
- Sandridge Park - Wollaston will remain largely unchanged, as the well established residential character is strong. Some increase in residential density may continue to occur in the peripheral areas adjacent to the Wollaston Shopping Centre.

- The greatest changes will occur in the Kinkella Park south of Brittain Road and north of Robertson Drive, where it is envisioned that a range of student housing will be appropriate between the Crosslands Shopping Centre and the University Campus.

### Minninup - Usher

- Minninup - Usher will retain its strong residential character and may experience a slight increase in density in Withers. Housing stock will continue to diversify to provide for a range of demographics, as well as maintaining the well established presence of family homes.
- The establishment of the Parade Road neighbourhood centre may start to occur as the population increases with the development of Tuart Brook. Activity near the intersection of Washington Road and Parade Road will gradually increase in significance as an activity centre, with the incoming traffic from Dalyellup also on this route, and having St Joseph's Primary School in proximity.

### Glen Iris - Moorlands

- To provide quality of life while providing opportunities for greater diversity of housing choice that reflect local household needs through a logical pattern of residential densities that increase around walkable catchments from local activity centres.
- A self-sufficient community to live and work that satisfies a range of educational, medical, retail and social needs.
- An integrated transport network that encourages walkability within the neighbourhood and is interconnected with the CBD via a reliable and frequent public transport route and dedicated cycle paths.

### Pelican Point

- A strong residential character with high quality amenity, including the canals and waterways, and the golf course. The residential density will remain low density for the most part, with allowances for larger homes and grander housing designs. The canal estate allows access to private docks and boat moorings adjoining private property which creates valuable waterfront properties that evidently show pride in being a part of the community which is reflected in the quality of housing stock.
- The development of a local centre to service the local residents will make Pelican Point more self sufficient, and convenient given that the development is a further distance from the conveniences of the city.
- The upgrade and expansion of the Sanctuary Golf Course and associated facilities will provide the opportunity for modern short stay accommodation, dining and entertainment facilities.

### College Grove - Tuart Brook

- College Grove is linked to the hub of activity that provides major medical and educational facilities in Bunbury. This relationship should be strengthened with greater connectivity internally to allow College Grove to provide housing needs for user groups of these facilities.
- Tuart Brook will become Bunbury's final greenfield site with a neighbourhood development that will provide for a range of housing types suitable to the growing demographic needs of the city and provide a cohesive range of activities and facilities where people will work and live.

## Valuable Landscape Character Elements to Promote & Enhance

### Central Business District

- The 'Three Waters' are the city's most valuable landscapes, and together should be promoted as the city's greatest asset to lifestyle and amenity.
- The Bunbury Tower is a valuable asset to the identity of Bunbury, being the 'Milk Carton' on the skyline, it is a point of reference within the city, and has been used as an icon for logos, slogans, and advertising campaigns across the southwest.
- The White Mangroves are a significant natural landscape that has high ecological and historical value in the landscape. Accessibility should be maintained for public access and educational programs should continue.

### Outer Business District

- Maintain the level of public open space that exists at present and enhance public facilities within the public realm to accommodate a larger residential population.
- Promote pedestrianisation.
- Enhance the local amenity of commercial and residential areas by creating high quality streetscapes and promoting crime prevention and community safety.

### Ocean Beach

- Residential character and amenity of the Tree Street Area.
- Ocean views from significant public view points, and across peaks in the topography where ocean views are revealed.
- The high quality foreshore pedestrian accessways and public facilities.
- Public art work and interpretive signage to continue along the foreshore that are engaging and interactive for pedestrians.
- Promote tourism sites and supporting businesses/ accommodation to establish a thriving tourism corridor.

### East Bunbury

- The East Bunbury Heritage Area should be promoted and acknowledged for its contribution to historical character in Bunbury.

### South Bunbury - Mangles

- Maintain and improve upon the high quality of interconnected public open space reserves and promote the use of local parks.
- Promote walkability/ cyclability through enhancement of interconnected pedestrian and bicycle pathways linked to public transport facilities.
- Implementation of a street tree planting program to retention, replacement and expansion with desirable tree species.

### Parks

- There is a high level of amenity associated with public parks and reserves throughout Carey Park. It is essential to maintain this level of aesthetics in the public realm, so that the community embrace ownership of their open space as a part of their identity.
- A strong sequence of public artwork moves through the suburb depicting local community activity such as football and horse racing. Interpretive art works are located in roundabouts, on verges and in the parks that reflect local history and evoke pride in the residents. These elements are a valuable addition to the streetscapes and they also lead people in the general direction of both Carey Park Football Club and the Bunbury Racecourse.
- The St Marks Anglican Church and Churchyard in Sandridge Park is a beautiful old church and historic grave yard that sits in a park, creating a natural ambience appropriate to its historic heritage significance. This church was completed in 1842 is the second oldest surviving Church in Western Australia.

### Minninup - Usher

- The Maidens Reserve is a significant landscape to the local community, but also forms a highly significant feature on the skyline of the city. Promoting the folk story of the Maidens and the origins of the name should be considered as part of an interpretive public art installation in the reserve itself.
- High amenity of public open space in Usher should be maintained and promoted for activity and social recreation.

### Glen Iris - Moorlands

- The peripheral Regional Open Space is highly valued by the community and contributes to the quality of life in the area.

### Pelican Point

- The canal waterways are a valuable landscape feature to promote waterfront lifestyle, with private moorings, and vast views of the Estuary.
- The natural wetlands that are between the estates should be retained and promoted as part of a walkable recreation route, there is public access all through the estates, including the golf course and access to the foreshore of the estuary.

### College Grove - Tuart Brook

- The remnant bushland surrounding College Grove has long been a point of contention between developers, community groups and government agencies alike. If the remaining bushland is retained for its ecological value, efforts should be made to educate people on the value of conservation of vegetation and its habitat.

## Important Views & Vistas to Retain

### Central Business District

- The Marlston Lookout has significant view for 360 degrees from the top platform.

- The Bunbury Tower is an identifiable feature on the Bunbury skyline and viewsheds should be retained to the Tower from key viewpoints across the CBD.
- The Silos redevelopment is a dominant feature in the landscape and viewsheds should be retained from key viewpoints across the CBD, in particular the 'Gateway' bridge, and from the Marlston Lookout.
- Pedestrian views down Symmons Street that connect Back Beach with the Leschenault Inlet.

### Outer Business District

- Sandridge Road is the arrival point of many of the major intersections into Bunbury from the linkages to outer suburbs and other shires and is recognisable by the nature of businesses and landmarks as a mixed business area, which is typically the lead up to the outer suburbs of a CBD. Once the road swings into Blair Street the CBD is visible in the distance.
- The Blair Street Mixed Use Corridor is an important linkage to the CBD and is a major commercial hub within the City. The road width is much wider, and the lot sizes are larger with greater building bulk. This corridor is essential to commercial traffic, public transport and residential traffic of both the City and other Shires.
- Spencer Street is a tighter corridor with an enclosed view shed, but provides a straight and unobstructed business corridor which allows easier navigability beneficial in a more intimate streetscape than Blair Street, with smaller lots and a greater number of businesses to digest. The corridor is a major transitory route and is shared by local residents and commercial traffic alike.

### Ocean Beach

- Ocean Drive vistas, north and south, including views of landmark features in the landscape, such as the light house.
- The vista from the peak height of Stockley Road over South Bunbury and Big Swamp, and west towards the Indian Ocean over the top of Upper Esplanade and Ocean Drive.
- The views from Irwin Street Reserve that span over South Bunbury and the ocean.

### East Bunbury

- The Leschenault Inlet vista from Stirling Street / Austral Parade is a valuable asset to the community from both private and public realms. Views to the CBD are afforded and should be retained.
- It would be beneficial to decrease the views across the Inlet to the Inner Harbor operations and stock piles, however the mass scale of the shipping operations makes screening difficult.

### South Bunbury - Mangles

- Private dwellings located on the secondary dune are afforded vast views of South Bunbury to the east and of the ocean to the west.
- As the majority of the suburban area is on lower ground, the views are predominantly internal and contain no major landmarks or view points of significance. Wide straight roads and open space areas are important from an intimate street level to the place's landscape character.

### Parks

- Maintaining views of the local area's significant parks and the racecourse are intrinsic to preserving the local identity.

### Minninup - Usher

- Views of the Maidens Reserve are visible from many aspects within the local area as the proximity and scale give it high visibility. Its views to the Maiden's from other locations that are integral to the landscape character of Bunbury. Maintaining vistas from other locations in the city, from along the coast and inland are priority goals.

### Glen Iris - Moorlands

- Vittoria Road provides the primary access into Glen Iris, and will hold the future local centre and commercial strip. A key intersection will be formed at Vittoria and Jeffrey Roads in the hub of the local centre.
- There is Regional Open Space to the east of the subdivision (south-east of Vittoria Heights) that frames the residential area and provides a buffer between industrial and port uses.
- The Preston River foreshore remains accessible while protecting its functions of flood mitigation, riparian habitat corridor, cultural heritage and visual landscape link to the rest of the catchment and region.

### Pelican Point

- Views from private residences across the Estuary, with vistas overlooking the CBD beyond the Inner Port.

### College Grove - Tuart Brook

- Vistas from around the College Grove development have vast views over the south of Bunbury, in particular across the Maidens Reserve. The topography of this part of the coastline is translated better from this angle than anywhere else in the city.

## Policy Recommendations

### Central Business District

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Central Business District Local Area Plan.
- Review of the existing local planning policies in effect that regulate development, consolidation and updating of current regulations in preparation for integration with the LAP.
- Initiation of Scheme Amendments to comply with GBRS zoning for the purpose of the Bunbury Waterfront Project Stage 1 commencement.
- Introduction of CPTED principles into local planning policy guidelines.

### Outer Business District

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Outer Business District Local Area Plan.
- A Town Planning Scheme Amendment to introduce a true mixed use zoning with a high residential amenity that encompassing living and working within the local area.
- Review of the Local Planning Policy: Non-Residential Development within or adjoining Residential Areas, to update frame areas, local activity centres and corridors.
- Introduction of CPTED principles into local planning policy guidelines.

### Ocean Beach

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the Ocean Beach local area planning process and subsequent Local Planning Policy documents that will inform development within the LAP.
- Propose a Local Planning Policy: Tree Street Area Design Guidelines
- Conduct a review of the Local Planning Policy: Building Height for Ocean Beach.

### East Bunbury

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the East Bunbury local area planning process and subsequent Local Planning Policy documents that will inform development within the LAP.
- Review of the Stirling Street Heritage Area Design Guidelines, including the renaming of the precinct to encompass the true boundary of the Heritage Area beyond the extent of Stirling Street.

### South Bunbury - Mangles

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of Local Area Planning process and subsequent Local Planning Policy: South Bunbury - Mangles Local Area Plan.

### Parks

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Parks Local Area Plan.

### Minninup - Usher

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Minninup - Usher Local Area Plan.

### Glen Iris - Moorlands

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Implementation of the Local Planning Policy: Glen Iris - Moorlands Local Area Plan.
- Monitor and review the Local Area Plan as needed, in order to ensure that it remains a relevant and robust strategic land use planning tool.

### Pelican Point

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: Pelican Point Local Area Plan.

### College Grove - Tuart Brook

- Informing the preparation of the Local Planning Strategy for Activity Centres & Neighbourhoods.
- Implementation of the R-Codes Omnibus Amendment.
- Commencement of the local area planning process and subsequent Local Planning Policy: College Grove - Tuart Brook Local Area Plan.
- Adopt a Structure Plan for Tuart Brook.

## 3.3 Monitor & Review

The LCS should be reviewed in conjunction with the Local Planning Strategy (The City of Bunbury does not have an adopted Local Planning Strategy at the time of production of this document, as the completion of this Study will inform the drafting of LPS) and the City Vision Strategy (adopted September 2007). The dynamic nature of the document ensures that changes to character and amenity are recorded and archived and may be monitored as such. The document should be revisited in conjunction with the LPPF review (e.g. Local Planning Strategy and Town Planning Scheme Reviews).

Future editions of the LCS will highlight changes across the City's landscape, and redefine the established character of each local area as it evolves, or in some cases, as it is preserved.

# *Part 4: References & Appendices*

**4.1 Reference Material**

**4.2 Appendices**

### 4.1 Reference Material

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**Appendix 1: Regional Landform and Soils**

**Appendix 2: Regional Vegetation Complexes**

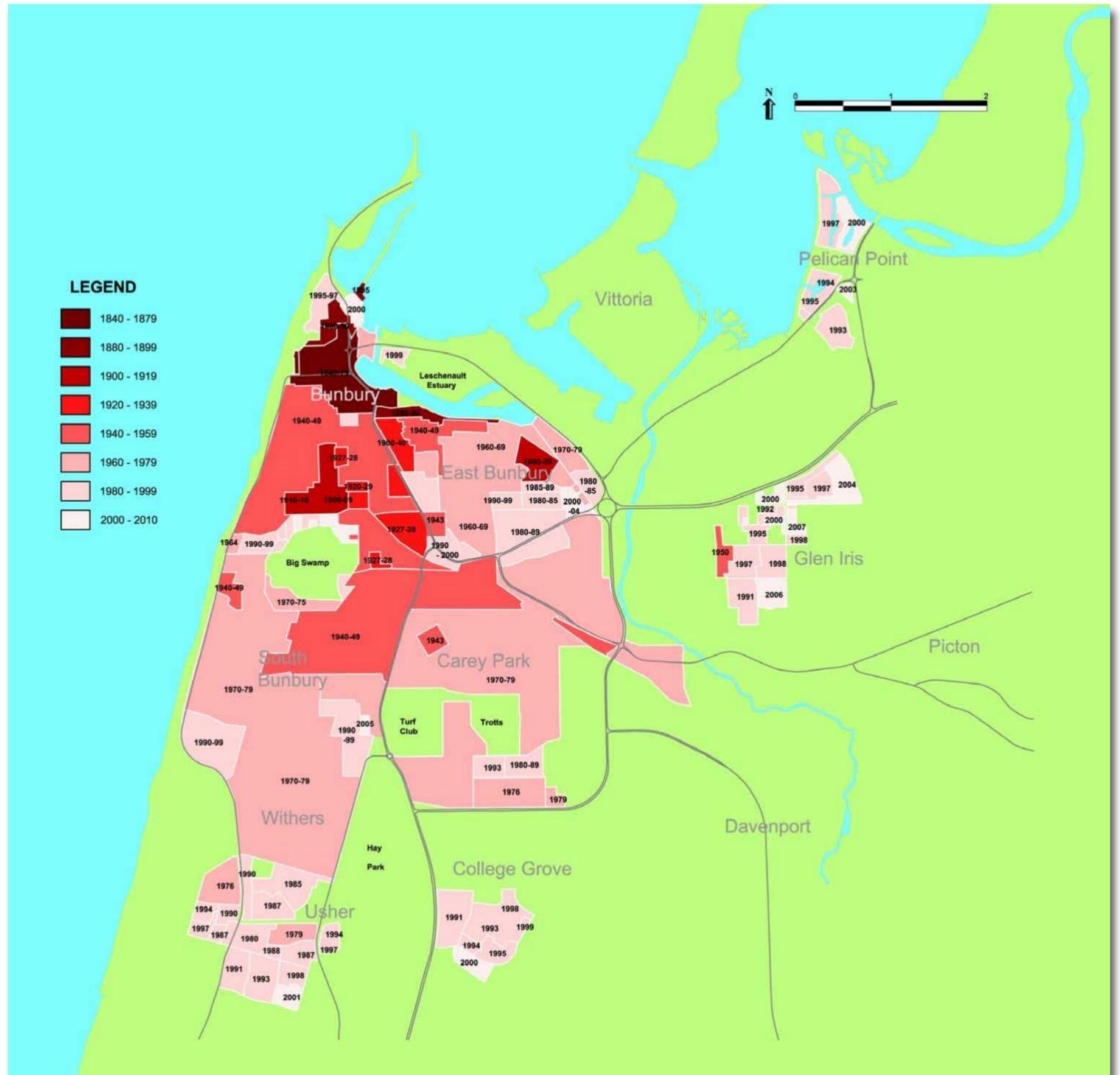
**Appendix 3: Bunbury Settlement Pattern Map**

**Appendix 4: Table 3 Examples of Elements**





Appendix 3: Bunbury Settlement Pattern Map



**Table 3: Examples of elements (natural, rural, built) that may be described at each scale of application: regional, local and site**

<b>Regional</b>	<p>Describe the natural character of national parks, state forest, coastal reserves and areas of partially cleared or little used lands.</p> <p>Describe rural character in terms of broad patterns of land use, tenure and settlement.</p> <p>For built landscapes, focus on broad aspects, such as large-scale natural features including hills, escarpments, rivers and large water bodies; and related large-scale patterns of urban form, regional parkland, transport corridors and ranges of development densities.</p>
<b>Local</b>	<p>Describe the natural character of large uncleared reserves, or unique landform.</p> <p>Describe rural character using more detail about types of buildings or stands of remnant vegetation.</p> <p>For built landscapes, focus on smaller scale patterns and features as listed above.</p>
<b>Site</b>	<p>Describe the natural character of areas of remnant vegetation, individual trees or rock outcrops.</p> <p>Describe rural character using even more specific detail, such as type of fencing or species of wind break vegetation.</p> <p>Focus on detailed streetscapes, site specific built elements and small-scale open space.</p>

**Landscape Character Study: A Visual Assessment of Bunbury's Built and Natural Environs**

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