

# Wyong Active River Foreshore & Baker Park



2007169 Active River Precinct/2007170 Baker Park Precinct  
Wyong Active River Foreshore and Baker Park Master Plan Report  
Issue: DD Revision: 9

Prepared by:  
Jackson Teece  
Architecture

Sydney Office  
Level 3 101 Sussex Street  
Sydney New South Wales 2000  
Telephone +61 2 9290 2722  
Facsimile +61 2 9290 1150  
Email: [sydney@jacksonteece.com](mailto:sydney@jacksonteece.com)  
[www.jacksonteece.com](http://www.jacksonteece.com)

Newcastle Office  
744 Hunter Street,  
Newcastle West NSW 2302  
Telephone +61 2 4969 5199  
Facsimile +61 2 4969 6177  
Email: [newcastle@jacksonteece.com](mailto:newcastle@jacksonteece.com)

Jackson Teece Chesterman Willis Pty Ltd trading as Jackson Teece  
ABN 15 083 837 290  
Nominated Architect Ian Brodie (4275)

CONTENTS

INTRODUCTION ..... 5

REGIONAL CONTEXT ..... 6

SUBJECT SITES ..... 7

EXISTING STRATEGIES AND CONTROLS..... 8

STAKEHOLDER CONSULTATION ..... 12

CONTEXTUAL ANALYSIS ..... 13

ECONOMIC CONSIDERATIONS ..... 25

TOURISM AND VISITOR CONSIDERATIONS..... 26

CLIMATE CHANGE CONSIDERATIONS ..... 27

TUGGERAH LAKES ESTUARY MANAGEMENT PLAN ..... 28

ISSUES AND OPPORTUNITIES ..... 30

OVERALL OBJECTIVES AND DESIGN PRINCIPLES ..... 34

VISION AND DESIRED FUTURE CHARACTER ..... 35

MASTER PLAN..... 38

LANDSCAPE ELEMENTS AND MANAGEMENT ..... 52

RECOMMENDATIONS ..... 62

PAGE LEFT INTENTIONALLY BLANK

## INTRODUCTION

### BACKGROUND

Wyong Shire Council has engaged Jackson Teece to prepare a Master Plan for land situated at Wyong generally known as the Active River Foreshore Precinct and Baker Park Precinct. The document aims to assist Council and the community with directions to sustainably manage the River Foreshore and the Recreational Open Space Area over the next 20 years.

The Master Plan has been based upon the recommendations and strategies contained within the Wyong/ Tuggerah Planning Strategy - Urban Design Vision and Master Plan prepared by Wyong Shire Council.

The involvement of the urban design, landscape and Master Plan team since the inception of the project has ensured that issues have been integrated into the planning for the project from the outset.

The Master Plan was prepared in collaboration with Terras Landscape Architects.

### PURPOSE OF THIS REPORT

The purpose of this report is to present a Master Plan Concept for the Active River Foreshore and Baker Park precincts. The Active River Foreshore Master Plan takes into consideration the following adjoining areas:

- Wyong River
- Pacific Highway
- Wyong Town Park

- Wyong Plaza and Commercial Precinct

The Active River Foreshore Master Plan takes into consideration the following adjoining areas:

- Wyong Race Club
- Wyong Rail Station
- Pacific Highway Corridor linkages
- the Regional Open Space Corridor

This report will present a preferred Master Plan concept for the Foreshore and Baker Park in light of the governing legislation and policy, current user requirements and the aspirations of the community, private stakeholders as well as the Foreshore landowners - the NSW Government. Recommendations will be made for the revision of these controls in order to allow the development of the preferred concept.

The Study recognises the existing urban structure of the Precincts and identifies opportunities for cultural and economic growth while appropriately addressing significant historical, social and environmental considerations. It identifies opportunities to improve key elements in the urban structure of the Precincts. These include: access and movement, land use and built form, open space and cultural heritage. All of these factors have the potential to contribute to robust, vibrant and sustainable Precincts that provide retail, recreational and transport facilities to the community to make a good place to live with

strong linkages to Wyong Town Centre and the wider region.

### STUDY OBJECTIVES

The following are the study objectives:

- To provide for the holistic planning of the Active River Foreshore and Baker Park Precinct
- To provide strategies for existing and proposed recreational opportunities within the Baker Park Precinct linked into the regional open space strategy
- To propose recommendations from the Wyong Planning Strategy and Vision Statement that can be implemented
- To improve connections between Wyong Town Centre with the Wyong River Foreshore Reserve
- To ensure that the physical and economic linkages between Wyong River and Town Centre are developed and maintained
- To create opportunities for a variety of facilities including the development of Wyong River Foreshore Reserve for leases and licenses
- To create a distinct character for identified zones/nodes that create a sense of place whilst still recognising the foreshore as a part of the greater Wyong region

### STRUCTURE OF THIS REPORT

This report is set out into three parts:

- The first part describes the existing context for the study with regards to the Wyong/ Tuggerah Planning Strategy and the current governing legislation. Issues and opportunities for development will also be identified.
- The second part establishes the overall objectives for the development of the two precincts, followed by a series of management options. A preferred option will be recommended, with further detail of the preferred option explained through key design principles.
- The final part will test the preferred option against the current Planning Strategy. Detail of possible landscape treatments and material selections will be offered.

## REGIONAL CONTEXT

The Wyong/ Tuggerah Area comprises of components: Wyong, Tuggerah Straight and Tuggerah. Each offers a distinct function.

The Active River Foreshore and Baker Park precincts are located in the Wyong Town Centre.

The key strategies identified for the Wyong Town Centre are:

- Need for a River Waterfront.
- Access to rural and coastal communities.
- Wyong/ Tuggerah Centre performing as significant social, cultural, sporting, recreation and community service for Wyong Shire.
- The natural environment of the Wyong River with wooded hillside backdrop.
- Wyong Town Centre Gateway locations.
- Provision of a variety of Transit Oriented and community based housing, accommodation and lifestyle choices.
- Provision of a Cultural Focus for Wyong Shire.
- Supply of a Regional Transport Node that integrates all Transport functions.
- Provision for concentration of activity and urban renewal around the town centre.
- existing public open spaces can be improved to provide high quality pedestrian and recreation social and cultural spaces.

## DEFERRED DEVELOPMENT AREAS

The Central Coast Regional Strategy has projected a lower growth rate for the Wyong Tuggerah Area (ie: 2200 dwellings), the reason provided by the Department of Planning is that the lower growth rate is required until a sustainable water supply can be identified.

It is also noted that within the Wyong/ Tuggerah Planning Strategy that all land to the east of the railway line, including the Baker Park Precinct has been deferred for development until improved road and pedestrian access across the railway line is identified. Wyong Shire Council will endeavour to work together with the RTA to implement the required improvements.

A Community Update issued by the RTA in July 2008 indicated the preferred option for these improvements would:

- Allow two through lanes in each direction.
- Retain parking in the town centre generally on the western side of the highway between Church Street and North Road.
- Remove parking on the eastern side of the Pacific Highway.
- Provide convenient pedestrian crossings across the Pacific Highway between Church Street and Anzac Avenue.

It is assumed that the rezoning and necessary LEP amendments will not occur before work on the access to the eastern side of the railway is completed.



Figure 1: Aerial Map of Wyong & Tuggerah Precinct showing subject study areas

**SUBJECT SITES**

**ACTIVE RIVER FORESHORE**

Wyong Active River Foreshore is located within the Wyong Shire Council LGA, approximately 100km north of Sydney, 20km north of Gosford and 80km south of Newcastle. It lies east of the Sydney to Newcastle freeway and west of the Northern Railway line, with the nearest station being Wyong Station.

The foreshore precinct is bound by Wyong River along the south with the length of the area of consideration being terminated west of Hope Street, Church Street and Hargrave Street to the north and Pacific Highway to the east. The precinct also includes parcels of land on the southern side of Jennings Road.

River Road divides the Foreshore reserve from the Town Centre located on the northern side. Residential and environmental estuary areas are located at the ends of the Foreshore reserve.

The Town Centre core is well located adjacent to the foreshore and is focused between the Pacific Highway and Hope Street, which forms the core retail area for the town centre. Alison Road and Anzac Road provide good east west connections between the Sydney to Newcastle Freeway and the Wyong Station.

Residential areas are located to the north linking into the Town Centre Core along Church Street and Hargrave Street, whilst the residential areas to the north are separated from the Town Centre due to the location of open space and community facilities adjacent to the Foreshore land parcel being Wyong Town Park.

**BAKER PARK**

Wyong Baker Park Precinct is east of the Sydney to Newcastle freeway and east of the Northern Railway line.

Connection to the site from the Pacific Highway is via a bridge railway overpass and a smaller less accessible underpass adjacent to Wyong River at the end of River Road. The Baker Park precinct is bound by Warner Avenue to the south, Howarth Street to the west, Wyong Race Course and Club to the north and Pollock Avenue to the east. The precinct also includes part of Wyong Race Course and Club.

The Northern Railway divides the Baker Park Precinct from the Town Centre located on the western side. Wyong Shire Council have identified within the Regional Strategy that development to the Baker Park precinct be deferred until the railway bridge overpass connecting Baker Park to the Pacific Highway undergoes upgrading to improve traffic flows and sight lines.

Residential areas are located along the southern portion of Howarth Street and along Warner Avenue.



Figure 2: Active Foreshore and Baker Park precinct boundaries

## EXISTING STRATEGIES AND CONTROLS

### WYONG/TUGGERAH PLANNING STRATEGY & VISION STATEMENT

The Planning Strategy and Urban Design Vision and Master Plan proposes a series of Study Areas which comprise Wyong Town Centre, The Business/ Administration Precinct, Active River Foreshore, Medium Density Foot slopes, Open Woodland Hillside, Mixed Density Precinct, Baker Park Precinct, Parkland Cottages and River Foreshore.

The report identifies the key physical and cultural features and existing character of the Wyong/ Tuggerah area and establishes opportunities and objectives for the direction of future development.

The vision of the Strategy for Wyong and Tuggerah is to respect and respond to the range of opportunities presented by different precincts that comprise the study area and by their context. The strategy also seeks to ensure that growth and development retains the unique qualities and sense of place of Wyong/ Tuggerah while accommodating growth, providing a choice of housing type and catering to a diversity of future resident and lifestyle choices.

#### Wyong Vision Statement

The Planning Strategy identifies that the Wyong Area will become:

- The cultural and heritage focus for the Shire and a culturally based tourist destination for people visiting and living on the Central Coast.
- Have strong links, physical, visual and cultural between Town Centre, Wyong River and the surrounding districts.
- Creation of a new system of pedestrian and bicycle paths to link existing and new residential areas as well as cultural and tourism facilities.
- Be a living centre with a range of accommodation types.
- Provide high quality public domain.
- Concentrate higher density development around the Town Centre and key public areas including the Wyong River Foreshore, Baker Park and Wyong Town Park.
- Maintain the existing backdrop to development and selected view corridors and vistas.
- Develop a standard of urban and building design.
- Enjoy a strong District retail component.

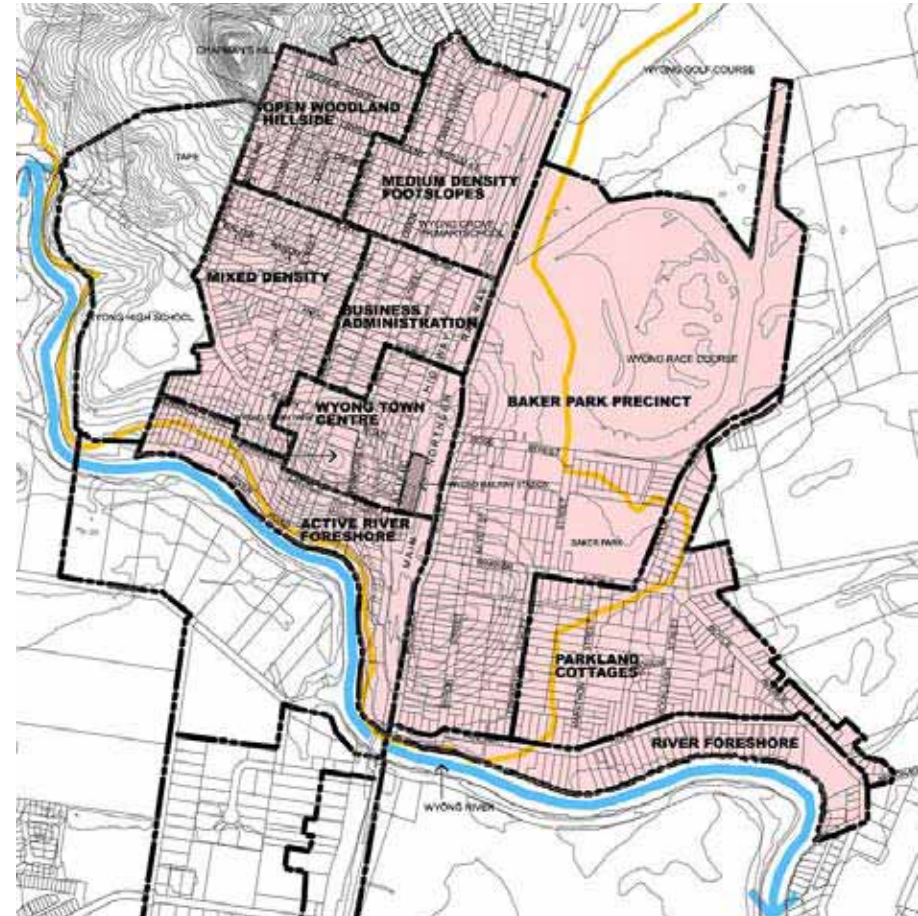


Figure 3: Wyong Character Area (Source: DEM)



**Traffic, Transport and Carparking**

Wyong Shire has a high dependency on the motor vehicle. This results in major traffic management issues and impacts on the functionality of Wyong Centre as people move through it. The Wyong/ Tuggerah Strategy has identified that Traffic needs to be addressed across the whole area to create a centre that is attractive to business, commerce, residents and visitors.

The following key Actions/ Objectives were identified:

- Development around Wyong Rail Station should recognise and support their regional transport status within the Shire.
- Establish car parking across the Wyong Centre that is sufficient to support business, retail, recreational and residential development. It must be well located, safe and convenient for users.
- Investigate Joint Venture Development to improve public car parking in a number of key locations.
- Work with the RTA to complete a strategic evaluation of movement in the Centre to:
  - Estimate the impacts of traffic generated by additional development.
  - Identify and prioritise traffic management strategies and capital

works.

- Identify opportunities to improve accessibility between the eastern and western side of the rail corridor.

Land development to the east of the railway line will be deferred until improved access across the railway line can be identified.

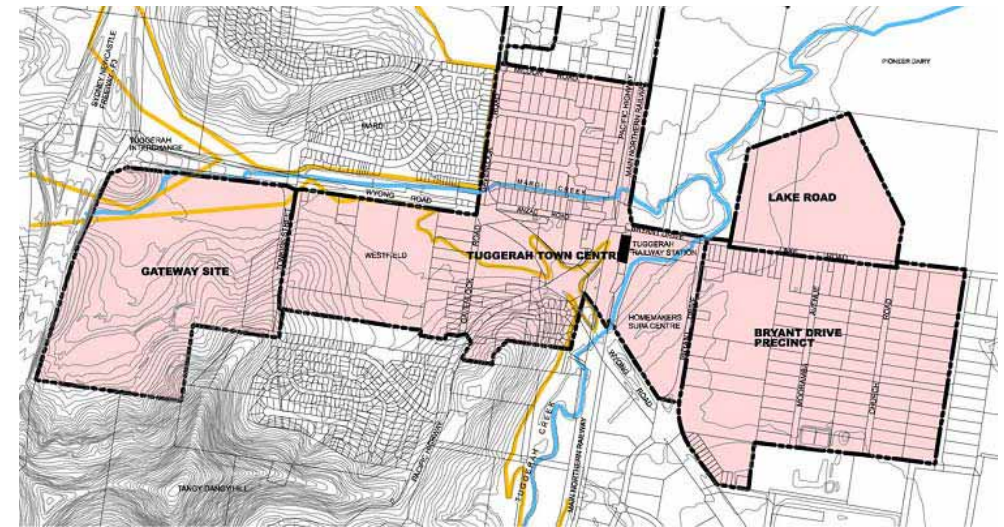


Figure 4: Tuggerah Character Areas (Source: DEM)

## DRAFT WYONG TOWN CENTRE REPORT TOWN CHARACTER AND CULTURAL SIGNIFICANCE

This report was prepared in October of 1997. The aims of the study were to provide an assessment of the defined character and significance of Wyong Town Centre.

A summary of the objectives and outcomes of the report are as follows:

- The report highlights topography as playing a significant role in the siting of the Township, which have afforded the town vistas to the south and east.
- The cuttings and embankments of the rail line formed a physical and visual barrier to the town, which has restricted and concentrated activity into a town frontage opposite and up the slope from Wyong Station.

The report addresses contextual issues such as streetscape, existing building fabric and character, physical, social and historical significance.

A summary of the identification of opportunities are as follows:

- The river embankment is identified as a zone of definition for the town possessing landscape potential which is largely obscured by signage on approach from the Pacific Highway.

Development of the southern river bank to the town and extending recreational facility

incorporating a walking/ jogging trail back to the town centre. The river frontage would be given more pronounced address from the highway westwards as a result.

A summary of the urban objectives that were identified are as follows:

- Maintenance of the traditional image of Wyong a town responding to natural topography and visually contained within the natural and manmade landscape features
- Acknowledgement of the 'hill town' appearance surmounted by the remnants of the original coastal eucalypt forests
- Definition of the Town Centre as a point of arrival
- Recognition of the aesthetic worth of existing buildings both as stylistic statements and as a response to the hillside environment and the strong linear influence of highway and rail line

Identification and enhancement of significant view corridors and removal of elements conflicting with vistas from the town centre.

## WYONG SHIRE COUNCIL DEVELOPMENT CONTROL PLAN 2005: CHAPTER 7 - WYONG TOWN CENTRE

The plan was adopted by Council on 27 June 2001. The aim of the plan is to encourage and facilitate the development of Wyong Town as a district centre of retailing and administration by providing development criteria which focus on achieving complimentary built forms, quality urban design solutions and the enhancement of the character of the area.

This plan expands the provisions of Wyong Council's Local Environment Plan 1991 in relation to development within Wyong Town Centre.

A summary of the objectives of the plan are as follows:

- To ensure that the conservation value of heritage buildings within the town centre is recognised through preservation and restoration
- To provide a focus for the future development of Wyong Town Centre that will maintain its cultural identity and unique character
- To encourage energy efficient designs that are consistent with the principles of ecological sustainability

The DCP highlights that Wyong LEP 1991 lists twenty heritage items within the area that need to be considered.

The DCP highlights significant gateway sites that signify the entrances to the town. The main bridge over Pacific Highway entering Wyong Town Centre is identified as a Gateway to the Town Centre.

The DCP outlines the general provisions for heights to the Town Centre. These are as follows:

- 2 (a) and 2(b) to be limited to a maximum of two storeys
- 2 (c) to be limited to a maximum of three storeys
- For development in excess of the above reference to DCP No. 64 Wyong Multiple Dwelling Residential Development Control Plan
- 3 (a) General business to be generally limited to two storeys- four storeys

The majority of the Town Centre is designated suitable for only low scale developments within the above maximum building heights. The DCP does not provide specific detailed controls to cater for Development within the Active River Precinct or the Baker Park Precinct. The planning controls guiding elements for the Wyong Town Centre Public Realm such as urban structure, heritage character, provision for pavement treatments, lighting, street furniture, bollards, bin enclosures and street trees are generalised and are applicable to all land within the Wyong Town Centre.

The DCP does not have specific heritage conservation strategies and controls which

address heritage items located within the Active River Precinct. Rather, the DCP development controls regarding heritage items are broad and provide only proposed town centre colour scheme. There are no specific provisions of heritage controls to ensure the enhancement and conservation of heritage significance in the Precinct.

A detailed review of DCP 2005 Chapter 7 is being undertaken.

#### WYONG SHIRE COUNCIL DEVELOPMENT CONTROL PLAN NO. 64 MULTIPLE DWELLING RESIDENTIAL DEVELOPMENT CONTROL PLAN

Wyang Shire Council adopted the Multiple Residential Development Control Plan in November 2005 to complement and reinforce the objectives of Wyong LEP 1991. The plan identifies Additional Provisions for Specific Areas, however, excludes any outline for The Active River Foreshore area and the Baker Park Precinct.

The objectives of the DCP include:

- Encouraging the provision of a variety of dwelling types and allowing for innovation in individual design.
- Promoting standards of design which achieve functional and aesthetic quality in development.
- Encouraging designs of a high architectural quality.
- Encouraging residential development

appropriate to the local area context.

- Promoting sustainable development which is energy and water efficient.

The DCP outlines planning controls for elements such as context, scale, built form, density, sustainability, landscape amenity, safety and security, social dimensions and aesthetics.

The building heights distinguish between the setback requirements of low-rise residential flat buildings (up to four storeys) and high-rise residential flat buildings nine storeys and taller. There are no overall town studies attached to the DCP to determine where the above height controls apply within the Town Centre or detail of impacts upon surrounding existing context.

#### WYONG SHIRE COUNCIL PLAN OF MANAGEMENT NO.3 BAKER PARK & SURROUNDS

Wyang Shire Council adopted the Plan of Management in June 1999.

A summary of the key objectives of the Plan of Management are as follows:

##### Natural Area

- To conserve biodiversity and maintain ecosystem function in respect of the land, or the feature or habitat in respect of which the land is categorised as a natural area
- Maintain the land in its natural setting
- To provide for the restoration and regeneration of the land
- To provide for community use and access to

the land in such a manner as will minimise or mitigate any disturbance caused by human intrusion

##### Sportsground

- To encourage, promote and facilitate recreational pursuits in the community involving organised and informal sporting activities and games
- To ensure that such activities are managed and have regard to adverse impact on nearby residences

##### Park

- To encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities
- To progressively improve the values of the land and to minimise the long term cost of maintenance to Council
- To make provision for leases, licences and agreements in respect of the land

## STAKEHOLDER CONSULTATION

Wyang Shire Council is due to meet with a number of community groups and individuals, government departments, Council departmental managers and Council committees.

The following is an outline of the key agenda of this consultation:

- Provide opportunity for consultation with the public including both the Aboriginal and wider community
- Encourage opportunity for the Wyong Chamber of Commerce to provide a focus for discussion on possible linkages with the existing retail and commercial centre as well as organisation of cultural and tourism based events for the subject precincts
- Establish Existing Wyong River Foreshore and Baker Park Positives
- Identify Existing River Foreshore and Baker Park Negatives
- Opportunities for Interpretive Signage along Pedestrian Cycle Areas. The signage could incorporate both Aboriginal and European cultural and historical aspects of Wyong and surrounds

## CONTEXTUAL ANALYSIS

### TOPOGRAPHY, VEGETATION AND FLOOD

#### Topography

The topography to the Active River Precinct is undulating rising approximately 36m AHD to Wyong Hill Top Park (outside precinct) with views looking predominantly south. The hillside to the precinct offers views over Wyong River to the south, east and west. The concept proposes a series of buildings that respond to the topography as well as to orientation, views, light and prevailing breezes.

The topography to Baker Park is predominantly flat with gentle undulations towards high points at the intersection of Howarth and Warner Avenue, and, Howarth and Rose Street. Much of the northern area of the Baker Park Precinct is low lying land subject to flooding which limits any potential future development but promotes the existing open space recreational character of the Precinct.

#### Vegetation

Active River Precinct contains part of the Northern Edge of Wyong River that provides a significant vegetation corridor. This area has been the subject of recent storm damage and maintenance of the river edge is an ongoing Council concern. Stands of Casuarinas and Eucalypts sit alongside Wyong River whilst the backdrop of the Active River Precinct includes remnant stands of Coastal Eucalypt Forest.

The Baker Park Precinct is characterised by largely unvegetated expanses of turf. An area to

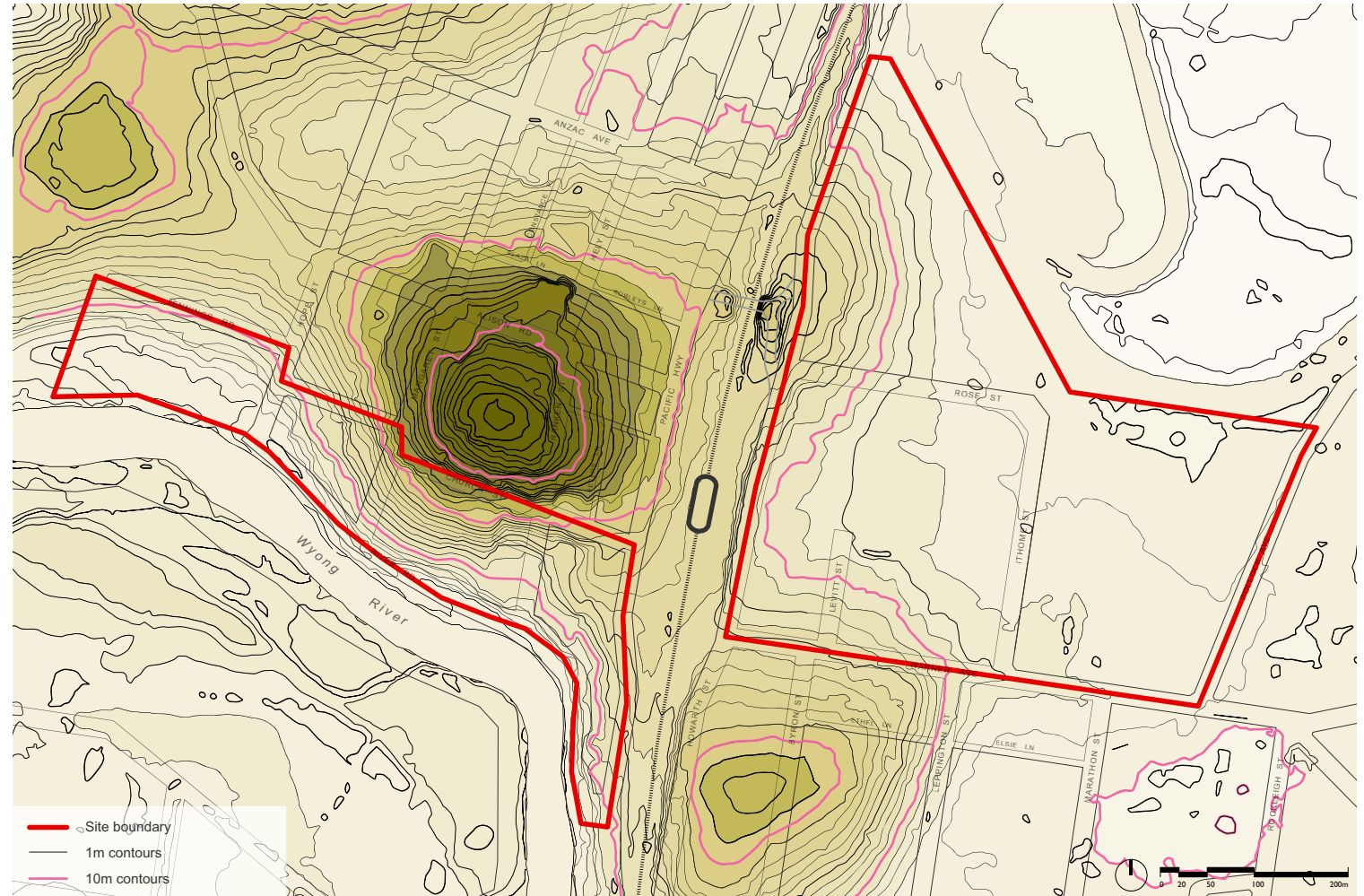


Figure 5: Topography

the south of the precinct forms a State Wetlands Regeneration Project. Wyong Race Course to the north provides small pockets low lying land ecology.

#### Flood

The 1 in 100 year flood affects the southern portion of the Active River Foreshore Precinct, encroaching onto River Road and the properties along it. The River Road is flooded 4.5m deep in 1:100yr and 2m at 1:20yr and not trafficable in the 1:1yr.

The 1 in 100 year flood affects the north eastern portion of the Baker Park Precinct.

The adjacent diagram indicates the extent of flood affected land but does not include any information for the minimum freeboard or consideration of potential affects of climate change. Additional freeboard measures to ameliorate the effects of climate change will need to be determined by Wyong Shire Council, where required.



Figure 6: Flood affected land

**STREET NETWORK ACCESS AND CIRCULATION**

Remnants of the original town grid within the Active River Precinct imposed over the landscape has produced steeply sloped streets that run north south towards the riverfront. Margaret Street remains unformed with an unclear means of access to the foreshore.

It is not possible to access River Road during storm events, alternative access is required to be provided.

Rankens Court is partially deteriorated and requires significant upgrading in order to become a significant access link between Wyong Town Centre and the riverfront.

The relationship between street network and adjoining public space will be important to provide flexible access arrangements across a steeply sloped terrain.

Baker Park Precinct has three primary access roads being Howarth Avenue north south link to the Railway bridge overpass, Warner Avenue east west link to Tacoma and beyond, and Pollock Avenue that provides an alternate access to Wadalba and the Pacific Highway.

Traffic congestion is experienced during peak flow periods during mid week Race Day meets at Wyong Race Course and netball events which mainly occur on Saturdays.

Limited access to Race Course and Baker Park during storm events requires further investigation

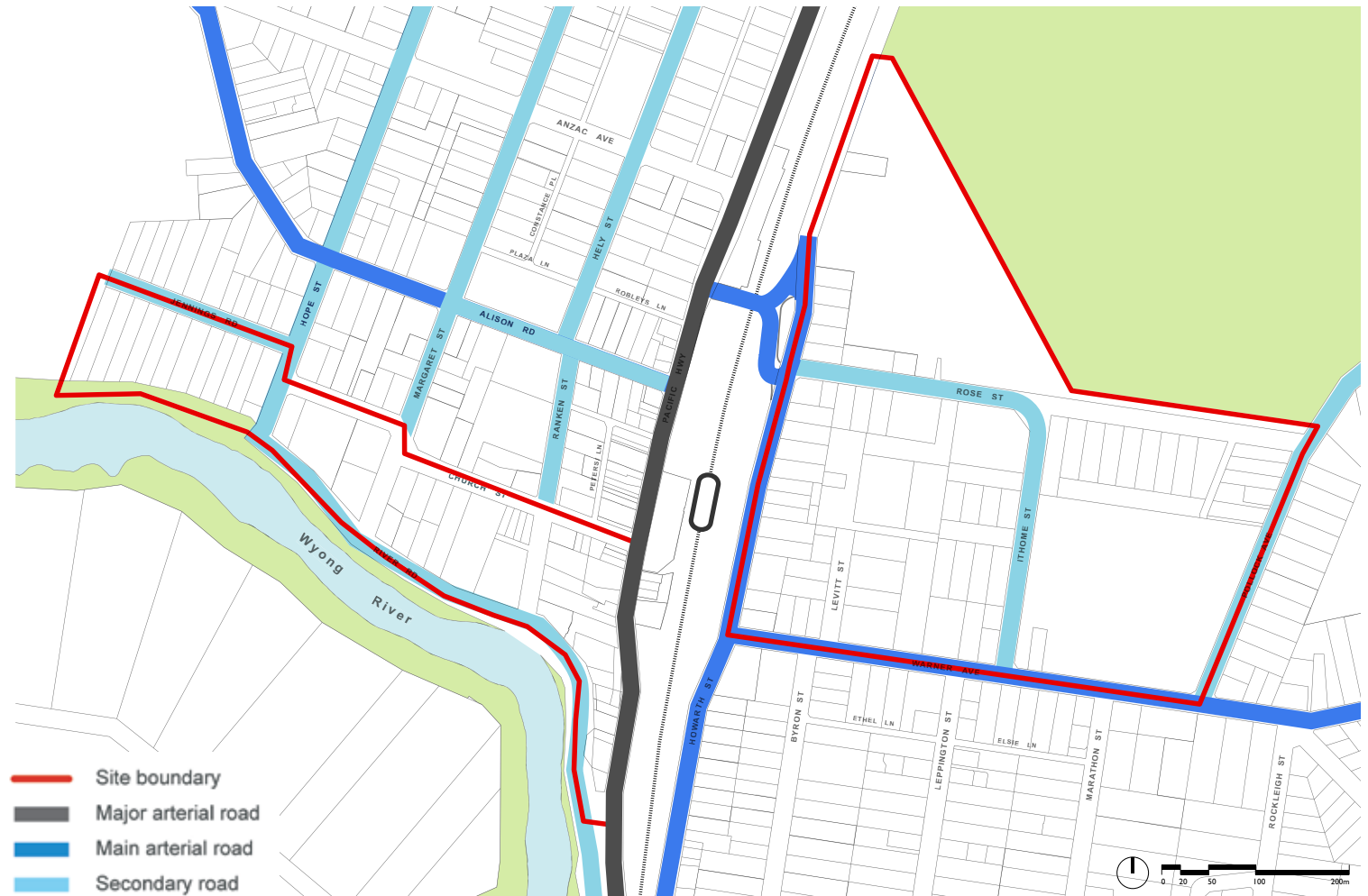


Figure 7: Street Network

## PUBLIC TRANSPORT & PUBLIC ROAD NETWORK

Both precincts are located within 800m walking distance from Wyong Station. The station is considered a significant asset to the potential vitality and activation of both Precincts. It is a major public transport conduit.

Public bus services run along Pacific Highway carrying passengers south to Tuggerah and north to Lake Haven.

An east west link service also connects Baker Park with Wyong Town Centre.

The Roads and Traffic Authority released a community update dated July 2008 outlining the preferred option for the future upgrade of the Pacific Highway at Wyong. The following is a summary of the preferred option alignment:

- Allow two lanes in each direction
- Retain business exposure to passing traffic
- Retain parking in the town centre generally on the western side of Pacific Highway between Church Street and North Road
- Remove parking on the eastern side of the Pacific Highway
- Retain the transport interchange in its current configuration with the loss of some parking in the commuter car park (which is proposed to be replaced with more parking on the eastern side of the railway station)

- Provide convenient pedestrian crossing across the Pacific Highway between Church Street and Anzac Avenue
- Allow Church Street and Anzac Avenue traffic to circulate into and out of the township
- Integrate the existing palm trees into the future town centre design
- Incorporate the Wyong heritage theme into the future town centre design

A press release issued by the NSW State Government dated 3 November 2008 outlined proposals for a new multi-storey car park to be constructed adjacent to Wyong Station to promote more commuter park and ride facilities and recognising the need for additional parking at the Station.

The construction of any new multi-storey car park will assist to facilitate additional parking for sporting events occurring at Baker Park and Wyong Race Course.



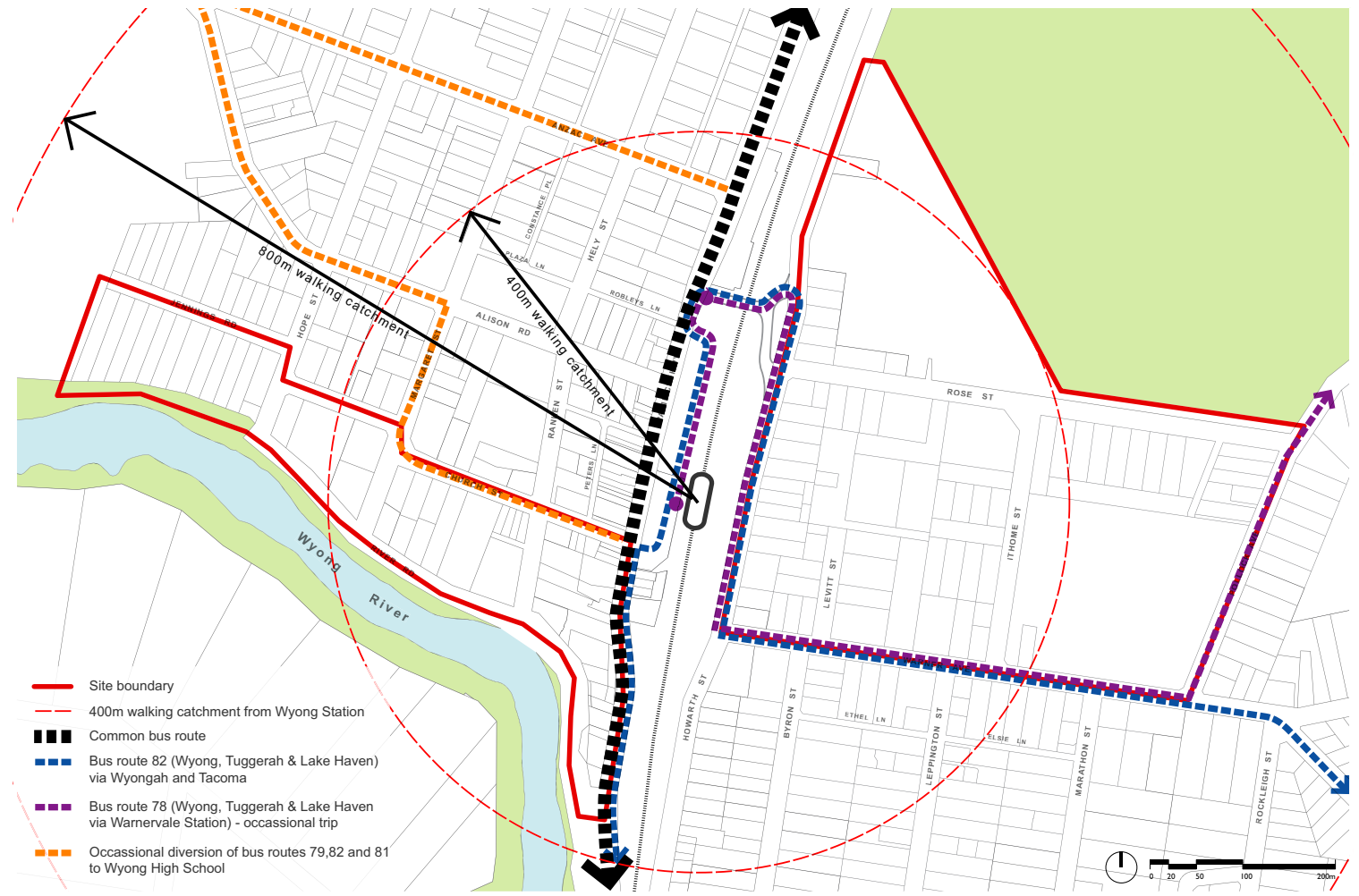


Figure 9: Public Transport

## CYCLEWAY NETWORK

Wyong Shire Council has prepared a District Cycleway Strategy provides a network of on street cycleways throughout both the Active River and Baker Park precincts.

The implementation of the Cycleway Strategy will provide the following benefits:

- Improve active connectivity throughout Wyong Centre
- Provide primary recreational routes for existing and new residential areas
- Improve links to cultural and tourism facilities
- Improve links to existing cycle network throughout region
- Provision of a cycleway associated with the widening of Pacific Highway as proposed by RTA will assist to improve north-south cycleway links

The potential constraints of the Cycleway network are:

- Inadequate signage of cycleways
- Insufficient width to existing roadways to facilitate safe designated cycleway paths leading to potential vehicle/ cycle conflict. This is particularly the case for River Road.

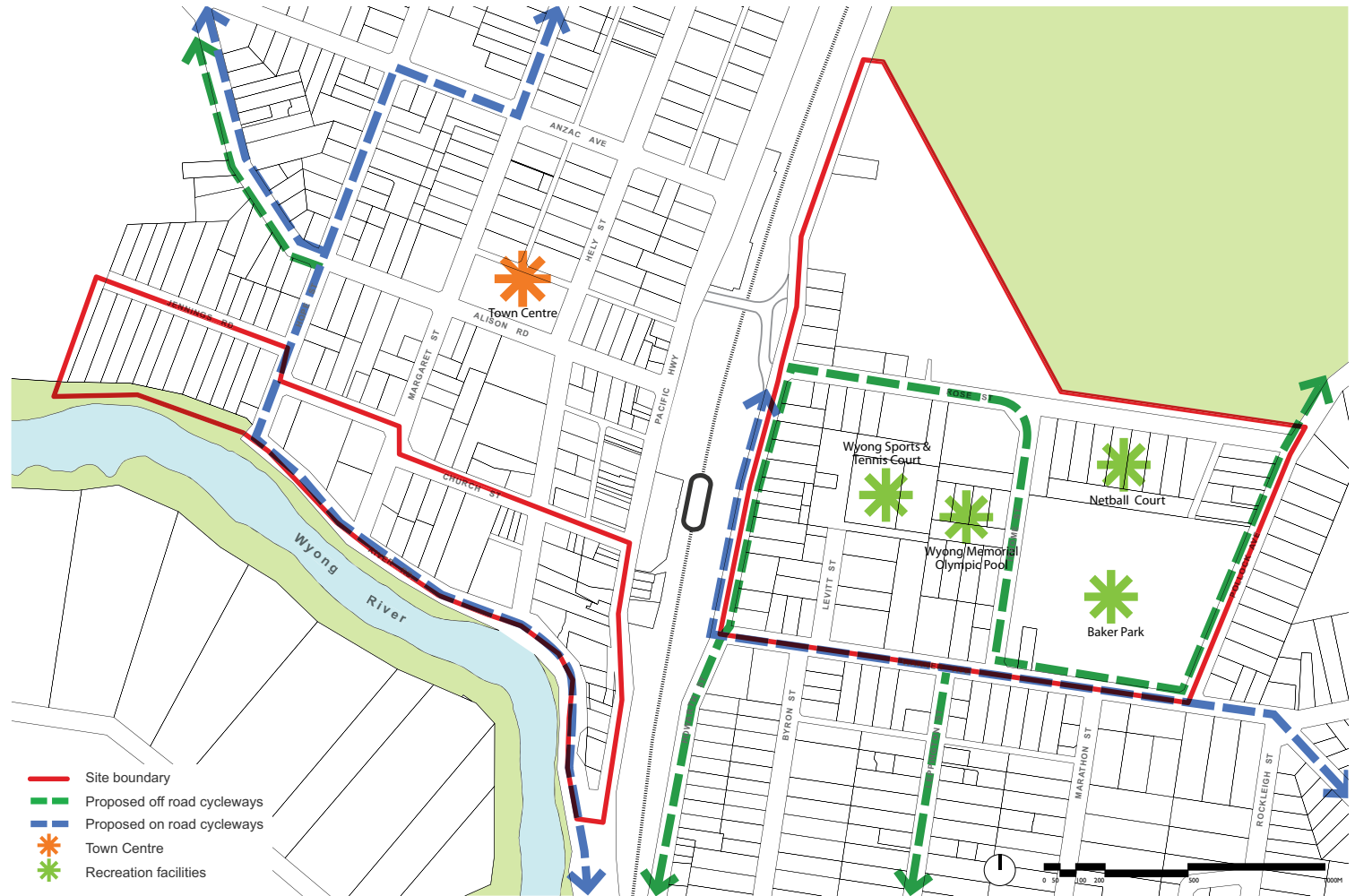


Figure 8: Wyong District Cycleway strategy

IEWS

Council has identified a number of significant views in the Active River Foreshore Precinct:

- Views to and from Town Park Hill through publicly owned land
- Views from Church and Hargrave Street across Wyong River to the western section of Tuggerah Straight and the F3 Freeway
- Views towards the bridge of the Pacific Highway as a significant gateway point to the town centre
- View corridors from River Road through Rankens Court, Margaret Street and Hope Street as well as future corridors generated by stormwater overland flow paths
- View corridors to be retained across Active River Foreshore precinct from Town Park Hill to McPhersons Road, south of Wyong River and to Mardi Wetlands to the East and Tangy Dangy Hill

In the Baker Park precinct, views to greenspace from Alison Road and open space views are important.



Figure 10: Views

## LAND USES & LEASEHOLD STRATEGY

The Wyong/ Tuggerah Strategy provides a Strategy for the Land Use and Zoning of both the Active River Foreshore and Baker Park Precincts. The key zoning/ land use items identified in the strategy are:

- Core Business Areas located between Pacific Highway and Rankens Court
- Fringe Business Area and Mixed Use located along the River Road Foreshore between Rankens Court and Margaret Street together with a larger parcel extending north from River Road to Hargrave Street
- Residential Areas are recommended for higher density oriented along River Road and Hargrave Street
- A smaller area of Fringe Business is identified along Howarth Street in the Baker Park Precinct
- Parcels of higher density Residential Development is also proposed in the Baker Park Precinct
- An area to the south of the Baker Park Precinct is identified as a deferred area subject to population projections and resolution of road/ pedestrian linkages

There is no current licensing or leasehold strategy for the Active River Precinct.

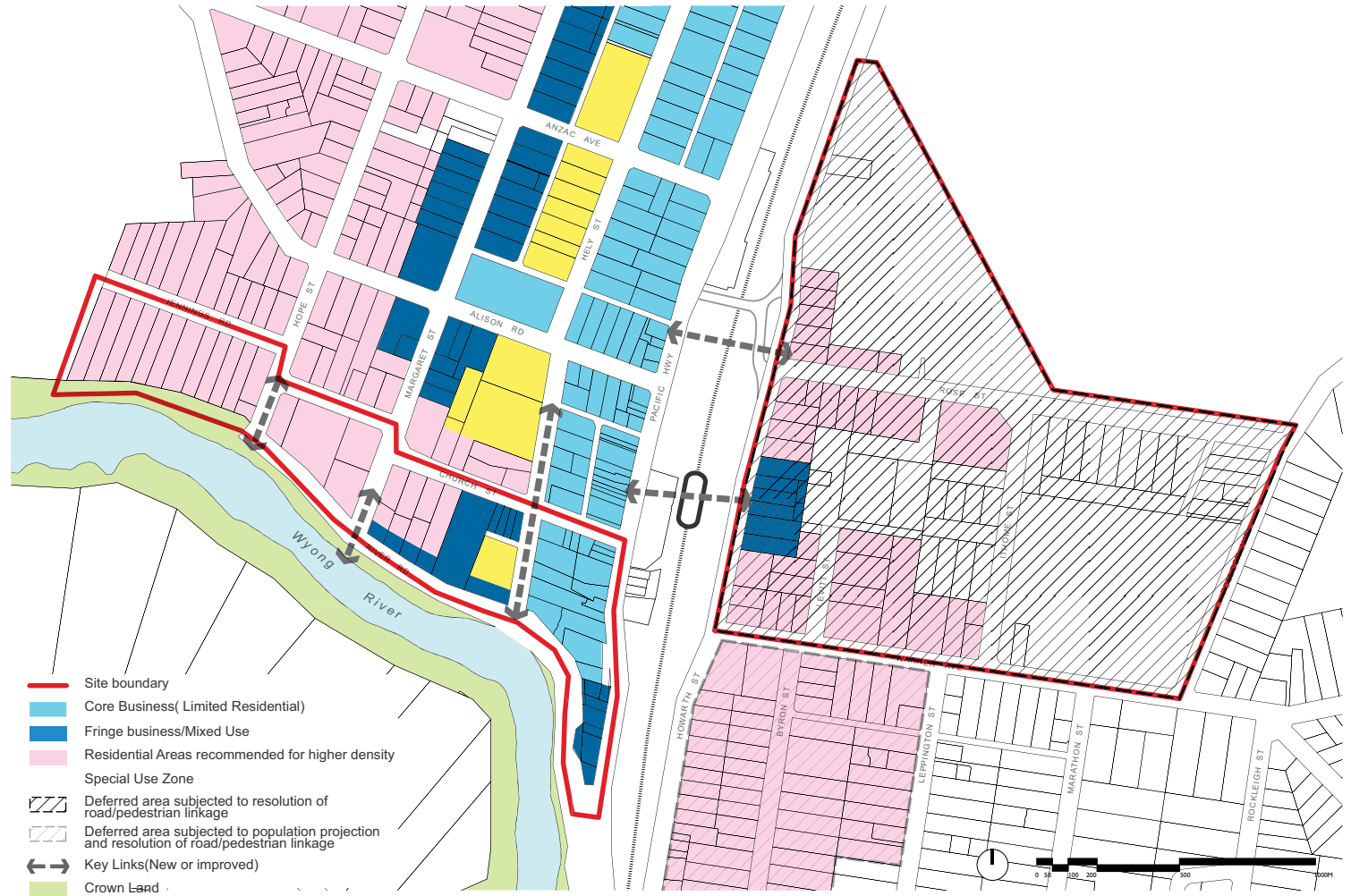


Figure 11: Land use strategy

The implementation of this type of strategy could promote the growth of commercial licensing opportunities to the River Foreshore Area with management being incorporated with Wyong Chamber of Commerce Activities.

These include the following activities:

- Events that are either community or commercial based of one or two day's duration
- Festivals of between two days and two weeks duration
- Operation of commercially based activity that can take place every day of the year
- Watercraft including non motorised equipment used as part of an aquatic based operation
- Food Vendors
- Watercraft Operations
- Pushbike/ Rollerblade Operations
- Amusement and Carnival Equipment

Wyong Shire Council Plan of Management No. 3 Baker Park and Surrounds Wyong identifies an existing table of leaseholding which principally accommodates Community Type Functions as outlined in Table 1.

7 Rose Street	Northern Womens Health Group	Managed by a 355 Committee
11 Rose Street	Wyong District Tennis Club	Road and Car parking
8 Levitt Street	Girl Guides	General Community Use
10 Levitt Street	Boy Scouts	General Community Use
7- 9 Levitt Street	Tennis Courts – Sportsground	Lease to Wyong Tennis Club

Table 1: Community type Functions

**LAND OWNERSHIP PATTERN**

Active River Precinct and Baker Park Precinct ownership can be divided into the following categories:

**Private Ownership**

Various land ownership poses the greatest difficulty presented to redevelopment within both the Active River and Baker Park Precincts. Any redevelopment is likely to be a staged project carried out over several years.

**Strata Plans**

There are seven Strata titled sites scattered within both Precincts. Strata titled buildings form the most complicated redevelopment or block amalgamation problem simply because of their multiple ownership and hence the lengthy requirement for agreement.

**Wyong Shire Council**

A large number of the sites within the Active River Foreshore Precinct are owned by Wyong Shire Council that provides a great potential for several of the key sites to be developed.

The public car park that terminates Rankens Court with River Road presents an opportunity for redevelopment into community facilities, which could be integrated into a mixed-use development in order to offset any initial capital investment required for the community based facilities.

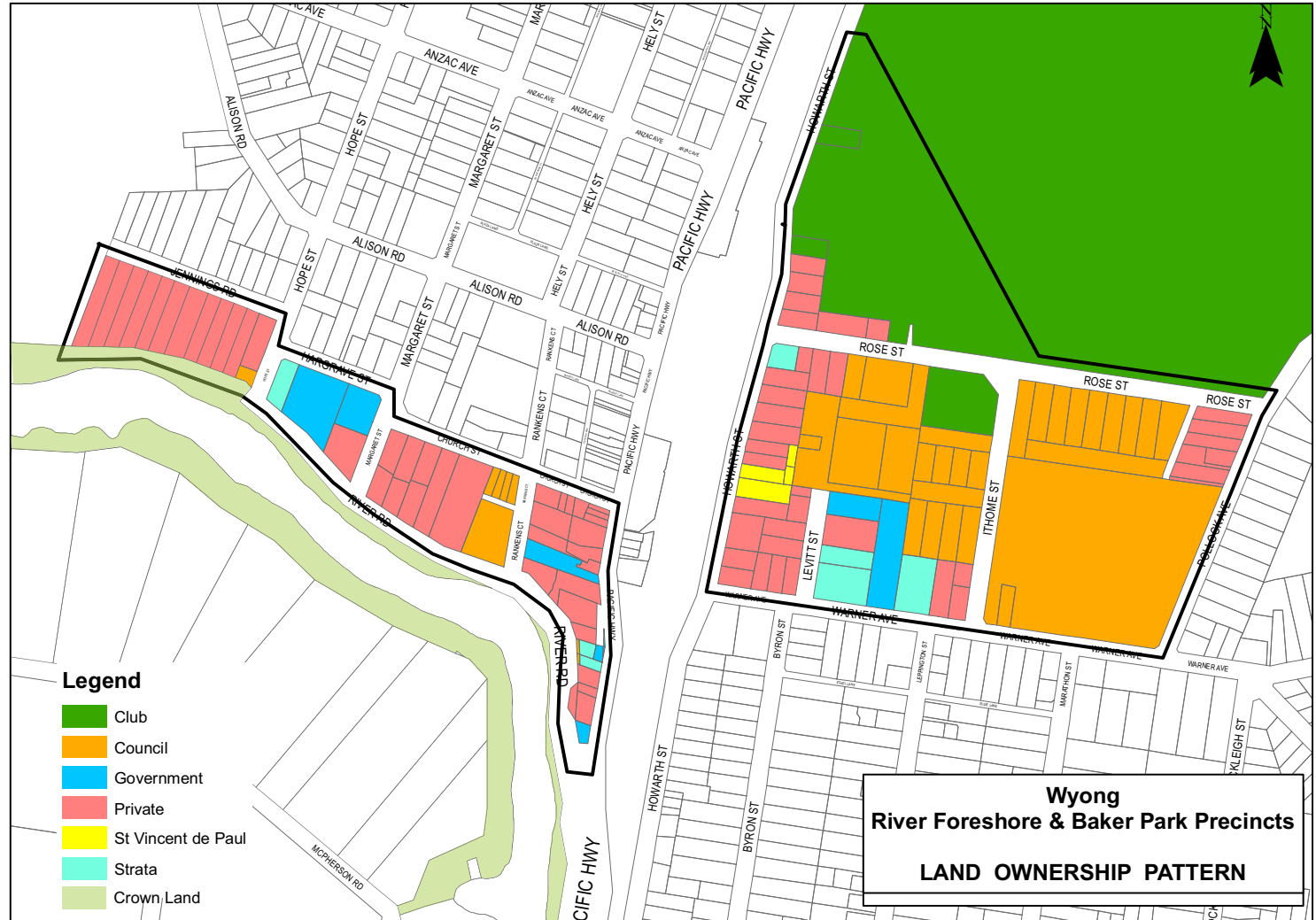


Figure 12: Land Ownership types (Source: Wyong Council)

#### Government

The government owns five parcels in the Active River Precinct, the most significant of those is located between Margaret and Hargrave Street that lead down to River Road.

Two parcels in Baker Park Precinct fronting Warner Avenue and Levitt Street also form part of the Master Plan Proposal.

#### Other Institutions

St Vincent de Paul have ownership over four lots at Howarth Street. The potential for these sites are good as it is located adjacent to the existing pedestrian overpass to Wyong Station. Promotion of amalgamation of the site with adjoining private lots would improve the potential building footprint and surrounding space.

#### Potential Development Sites

Developable sites have been determined by an analysis of the various sites in the Precincts and exclude properties that are more difficult to develop because they are strata titled.

#### Ownership issues (multiple ownerships of strata title)

Housing sites in the Active River Precinct contain strata title development which restricts potential for short term redevelopment opportunities. Therefore, from the issues raised above, potential building envelopes were generated from sites that lent themselves to development. Specifically, these may have one owner, or, if there are multiple owners, have the potential to be consolidated with neighbouring sites into a

suitably sized parcel.

## CAR PARKING

The following recommendations are outlined for both Precincts:

### Active River Precinct

Available on-street parking will be insufficient to meet future requirements.

Additional public carparking capacity of 200-250 should be provided south of Alison Road.

All development should provide all its own parking on-site. Where this is not possible for retail/commercial/special-use developments, any section 94 contributions should be limited to 10% of the development's parking requirements.

Parking associated with residential developments will not be permitted access off River Road. Due to limited available public parking on River Road, consideration of disability access must be investigated as a separate study.

### Baker Park Precinct

Parking within the Baker Park Precinct is adequate for current requirements, albeit heavily reliant on on-street parking.

All development east of the railway line shall comply with Council's parking requirements on-site.

Proposals for improving the parking arrangements include negotiations between Council & Wyong Race Club for shared use

of parking facilities with the Wyong Netball Association, as well as the provision of angle parking along Ithome Street (to be modified to a one-way road, southbound to improve circulation through Baker Park), and formalising angle-parking arrangements on Pollock Avenue.

As outlined earlier, proposals for a new multistorey car park to be constructed adjacent to Wyong Station provide opportunity for additional parking adjacent to recreational facilities.



Figure 13: Car parking



## ECONOMIC CONSIDERATIONS

The following is an outline of economic considerations for Active River and Baker Park Precincts.

### RECREATIONAL NEEDS

Recreational facilities aimed at young children, sporting groups, families and individuals should figure prominently within Baker Park. This could be via the development of a recreational based pool in place of the existing Wyong Pool facility. Implementation of increased numbers of netball fields from 24 to 30 courts will compliment the existing facilities and assist in the growth of Wyong's competitive Sporting Arenas. The Active River Foreshore Precinct should promote a more regular daily recreation activities program such as walking & jogging tracks, bicycle connectivity through the precinct to & from Wyong Town Centre as well as interactive exercise facilities which could also serve as public art along the river front.

Population trends support the development of recreational facilities in Wyong. Predicted population growth in Wyong and the greater Central Coast is higher than the State average as is the concentration of children and older people who tend to engage in more recreational activities than the rest of the population.

Retaining and improving the recreation opportunities is considered critical for the Baker Park Precinct and must ensure that facilities such as the netball courts and aquatic facilities are adequate in size, is matched by adequate car parking and other facilities to support

local and regional competitions. Residential development should be sympathetic to the existing sporting uses including the Tennis Facilities and not lead to long term land use conflicts such as noise, lighting and traffic generation.

Implementation of recreational areas needs to be multi-use and accessible seven days a week.

### DEVELOPMENT ISSUES

The lack of longer term tenure on leases in the Baker Park Precinct is likely to be a significant impediment to stability of the area to be promoted as an area of Public Recreation containing contemporary competition facilities. The ownership structure of parcels of land in Baker Park should assist to provide Council with valuable developable sites which, together with private partnerships, could be consolidated into suitably sized parcels. Improved vehicle access to Baker Park including the bridge link to the Pacific Highway is a prerequisite for successful development.

Improved pedestrian access to the Riverfront is important to fulfill the potential for a vibrant and diverse collection of riverside activities. Due to flood constraints, limited vehicle access and parking must be considered. An option explored within the report includes the potential to realign River Road and the foreshore reserve area to provide the potential for more depth to the riverfront.

Improved pedestrian connectivity across the

site from Wyong Town centre could occur via the integration of public lifts that are publicly accessed but are provided as part of any private development proposal at Rankens Court and Margaret Street where gradients for disabled access ramps are greater than 1:14 and stairs to both Rankens Court and Margaret Street to provide access for the community.

### SERVICES & ESSENTIAL INFRASTRUCTURE

Investigation of existing services and capability of increased demand will need to be undertaken to ensure adequate capacity prior to implementation of development within both Precincts.

### ACTIVE RIVER AND WYONG TOWN CENTRE

Implementation of a Licencing/ Leasehold Strategy to the Active River Foreshore Precinct to promote commercial licencing opportunities and provide for minor revenue from the hire of sections of the foreshore reserve for community and commercial events.

It is noted that the river foreshore is Crown Land and further negotiations with State Government should take place before relying on a plan to promote commercial licensing opportunities and lease of sections of the River Foreshore.

### BAKER PARK PRECINCT

Promote the development of a flexible publicly accessible car parking facility at Wyong Race Course and Club through improved development

strategies for the site including consideration of increased development height and development use mix. It is noted that Wyong Race Club has identified that their race day program rarely coincides with the weekend uses of Baker Park and therefore a co-use of the car park may be possible. Details of the deeds of use of any proposed car parking facility at Wyong Race Course and Club require clarification with Wyong Shire Council prior to implementation.

Provide alternative additional car parking facility along Pollock Avenue to complement proposed increase in netball courts.

## TOURISM AND VISITOR CONSIDERATIONS

A preliminary review of existing site conditions, previous studies and regional context has been carried out to provide recommendations relating to potential tourism and visitation initiatives as part of the Wyong Active River Precinct and Baker Park Precinct Master Plan. A summary of recommendations is listed below.

### CONSIDERATION OF A PROPOSED CULTURAL PRECINCT AND RELATIONSHIP TO ACTIVE RIVER FORESHORE

Experiences activities and facilities provided at the Active River Precinct must be authentic, they must be relevant to the amenity of the rivers edge location in terms of scale and design and must be relevant to the needs primarily of the local community.

Wyong Shire Council has adopted a Cultural Plan. The actions that the plan identifies as high priority are relevant to Wyong Town Centre as well as the subject precincts.

The principles of the Cultural Plan include the following:

- Develop a place making and Public Art Policy/ Strategy
- Connect the existing cultural and heritage assets to the pedestrian/ bicycle network
- The actions of the Plan include the establishment and resourcing of a Performing Arts Centre to provide a focus for community and cultural activity and to nurture youth performing arts. Council has committed to Stage 2 of the Performing Arts Centre to be located at Anzac Avenue.

- Develop Wyong Town Centre township as a focus for Cultural Activity for the Shire by building on its natural features, its heritage, its cultural organisations and events
- Establish a network of local art centres including the possibility of one being located at either the Active River or Baker Park Precincts to cater for the needs of the visual arts and crafts community
- Passive tourism activities focused on the natural and built environment
- Active tourism focused on sports, recreation opportunities and events
- Cultural tourism based on cultural events and activities
- Regional tourism accommodation and smaller accommodation opportunities
- Multi purpose, hospitality tourism facilities to compliment the surrounding precinct areas to improve day tourism and visitors travelling further north
- Expansion of existing built and environmental heritage items
- Liaising with key stakeholder groups including tourist groups and cultural organisations such as the Darkinjung Local Area Land Council

The optimum width of the Active River Promenade for the development of required recreational and other infrastructure is to be 6.0m. Improved access is to be provided across River Road to key activity nodes where private

sector infrastructure/community facilities can benefit most.

Key nodes to be created along the Rivers edge and Baker Park Recreational facilities linked by walking and cycling tracks with key areas being accessed across River Road.

These include areas for:

- Boating Activities including watercraft and kayak/ canoe activity
- Children's playground – an all abilities playground adjacent to existing Baker Park netball courts
- Picnic and viewing activities
- Small event activities possibly terminating Rankens Court
- Cultural activities
- Restaurants, Kiosk, Cafes and Bars providing opportunity for informal meeting, gathering and relaxation in quality public and private spaces and places. Such facilities will need to be located away from Active River Foreshore river edge due to flood constraints.
- Enjoyment of café and restaurant dining throughout the week
- Improvement of Regional Open Space network and relationship to Baker Park
- Improvement of relationship between Baker Park and Wyong Race Course and Club
- Improvement of existing Netball Facilities and surrounding activities
- Improvement of linkages across to Town



## CLIMATE CHANGE CONSIDERATIONS

Local councils have a duty of care to consider projected sea level rise and associated climate change impacts in regulating their planning activities. However the degree to which lakes and estuaries will respond to projected sea level rise is not yet well understood. Council acknowledges this uncertainty and will respond appropriately as new information is provided.

Wyong Council is currently developing a Climate Change Policy but in the absence of such, and for the purpose of this Masterplan, Council recommends any planning and investment decision should consider the range of sea level rise projections over the life of an asset in line with the NSW Department of Environment and Climate Change Draft Sea Level Rise Policy Statement (DECC March 2009).

The draft Policy Statement provides for an increase above 1990 mean sea level of 40 cm by 2050 and 90 cm by 2100. These planning benchmarks are based on the sea level rise projections developed by Australian and international experts and are considered most appropriate for NSW, while acknowledging the uncertainty associated with these projections. The following Table indicates how the sea level rise planning benchmarks were derived:

Component	Year 2050	Year 2100
Sea level rise	30 cm	59 cm
Accelerated ice melt	(included in above value)	20 cm
Regional sea level rise variation	10 cm	14 cm
Rounding*	-	-3 cm
Total	40 cm	90 cm

\*Rounding was adopted as the projections have a degree of uncertainty, and adopting values to the nearest centimetre would imply a high degree of accuracy in the projections (Source NSW DECC 2009)

Other relevant climate change information is available in the Floodplain Risk Management Guideline entitled Practical Considerations of Climate Change prepared by the NSW Department of Environment and Climate Change (DECC October 2008).

In the context of this Masterplan, any development or implementation should be undertaken with due consideration to the latest available climate change information.

### LIVING SUSTAINABLY

1. We successfully integrate ecological, social and economic sustainability.
  - The master plan ensures the retention of ecological environments within both Active River Foreshore and Baker Park precincts.
  - The proposed development will assist to activate areas of the Wyong town centre that are currently underutilised. The mix of development types will ensure access of a diverse range of the community to the precincts.
  - The master plan allows for an increase residential densities in a mix of building types that will can promote a viable development. Sustainable transport options

such as provision of Cycleway networks are considered.

2. We support our long-term vision, focusing locally in a global context.
  - The strategy of the master plan incorporates a variety of medium density housing directly adjacent to Wyong Railway Station. The plan puts in place a set of controls to ensure a sustainable balance of open space and built environment.
3. We protect the environment to maintain healthy ecological system.
  - The master plan makes recommendations to maintain and repair the Wyong River bank, promote revegetation along the foreshore and increase vegetation in the Baker Park Streets.
4. We apply good governance, striving to improve our processes and outcomes.
  - Wyong Shire Council has implemented the Wyong Tuggerah Regional Strategy guidelines to ensure measures to protect the value and character of Wyong town in particular the subject precincts.
5. We build partnerships by engaging with and listening to the community.
  - The master plan will go on exhibition for public review. Council will review and assess submissions and will meet with community groups, stakeholders and government departments if required to ensure a

transparent process of engaging with the community.

6. We lead by example and support actions for sustainability.

Key examples of sustainability as mentioned above are:

- Increasing residential development alongside main public transport nodes to reduce private vehicle usage and promote a healthy environment
- Ensuring a balance between development and high quality open space
- Incorporating measures to ensure that access to natural light and ventilation in residential buildings to reduce dependence on the consumption of natural resources





#### TUGGERAH LAKES ESTUARY MANAGEMENT PLAN

The Estuary Management Plan is the platform for managing the Tuggerah Lakes Estuary for the next 5 years. The Management Plan includes Action Plans that provide the flexibility to redirect effort and funding each financial year and call for significant involvement from a host of stakeholders including the community of Wyong Shire and State Agencies. It is a plan for managing one of the most unique estuaries in Australia, and one of Wyong Shire's most valued natural assets.

#### TUGGERAH LAKES ESTUARY MANAGEMENT STUDY

##### Background

The Tuggerah Lakes Estuary Management Study identifies four main catchment areas – Ourimbah Creek, Tumbi Creek, Wallarah Creek and Wyong River that drain into Tuggerah Lakes. The flows from these creeks are a double edged sword for the estuary. These catchment areas are critical in flushing the lake system and also

provide freshwater to the system. Management of the lake catchment is very important for a healthy lake system.

The Active River Foreshore precinct is identified in both the Estuary Management Study and also the Estuary Management Plan. In order to ensure that a consistent and integrated planning approach is adopted, the masterplans have considered the importance of the six primary objectives mentioned below and incorporated them into the final masterplan option.

The Estuary Management Plan identifies six primary objectives for the management of Tuggerah Lakes:

1. Ensure that the quality and quantity of water meet the needs of the community and lakes and rivers.
  - The master plan identifies the need for a Vegetation Management Plan that provides guidelines to the retention and replanting of vegetation species along the foreshore.
  - Reduce water runoff including compliance with the revised WSUD guidelines. Overland flow paths have been allocated within the scheme at four different points across the site, adjacent to Hope Street, Margaret Street and Rankens Court leading down to the River foreshore.

2. Ensure that the plants along the banks of rivers, lakes and in wetlands are protected because they are essential to a healthy ecosystem.

- The master plan makes recommendations to maintain and repair the Wyong River Bank and promote revegetation along the foreshore.
- Ensure any future development is consistent with the objectives and requirements established in the Streambank Rehabilitation Program.
- The masterplan identifies that any future development should be relevant to the amenity of the rivers edge location in terms of scale and design.

3. Ensure that biodiversity and ecological integrity of the lakes ecosystem are maintained or enhanced.

- The masterplans reiterate that the protection of the existing vegetation on the river bank is essential for stream health. Riparian zones require soft planted edges for bank stabilisation and healthy habitat. The development of the River foreshore will require an integrated approach comprising of relevant landowners and key stakeholders within the Tuggerah Lakes Coast, Estuary and Floodplain Management Committee.

4. Ensure that human activities can take place while protecting cultural heritage and enhancing soil and water.

- The masterplans ensure that development along the foreshore is consistent with the Streambank Rehabilitation Program.

5. Ensure that the social and economic needs of the community are met while protecting the environment of the coast.

- The masterplans provide a framework for future residential and commercial growth within the Active River foreshore precinct. The plans have been developed to emphasize the importance of the existing foreshore and encourage reactivation through improved pedestrian and vehicle access.
- Explore options associated with encouraging sustainable tourist opportunities near Rankens Court.
- Provide for retail and commercial functions to address the River.

6. Ensure that we continue to improve our understanding of how the estuary works and incorporate this knowledge into management.

- The masterplans provide for the reactivation of Wyong River and encourage opportunities for school and community groups to utilise the river for educational purposes.

As part of the implementation program, The Tuggerah Lakes Estuary Management Plan provides specific action plans that include key target initiatives to be adopted. These have been considered in the formulation of the masterplan options. The following key targets are relevant to the masterplan:

#### WATER QUALITY ACTION PLAN SUMMARY

##### Target

- Maintain natural nutrient and sediment loads and water flows after new development.
- Reduce nutrient and sediment loads from existing development.
- Help landowners and business to limit pollution at the source.
- Educate people in the catchment (including residents, tourists and industry) about reducing pollution.
- Stabilise foreshores and stream bank erosion.

- Reduce demand for river water that flows to the lake, by encouraging sustainable use of water in the community.

#### ECOLOGY ACTION PLAN SUMMARY

##### Target

- Improve and protect natural foreshore areas.
- Maintain the rehabilitated natural foreshore areas.

#### SOCIO – ECONOMIC ACTION PLAN SUMMARY

##### Target

- Provide better facilities in foreshore recreation areas.
- Maintain foreshore recreation areas and beaches.
- Development partnerships with businesses to solve common problems and improve economic opportunities.
- Ensure development is based on sustainable catchment and estuary management principles.

#### KNOWLEDGE AND MANAGEMENT ACTION PLAN SUMMARY

- Identify and assist the organisation who will manage and implement the estuary management plan.

## ISSUES AND OPPORTUNITIES

### ISSUES

#### ACTIVE RIVER FORESHORE PRECINCT

##### Public Domain and Open Space

- The public domain is currently characterised by dull or no street frontages, poor pedestrian amenities and a lack of linkages between the Town Centre and the open spaces. The public domain is informal with pedestrians able to traverse open parking lots, pathways adjacent to storm water drainage channels and the like.
- The foreshore is characterised by limited parallel parking, an unformed pedestrian access way shared by River Road with limited signage and poor vehicle visibility. The western end of the Precinct has access to associated bush.

##### Social and Recreational

- A significant number of Foreshore uses with different values and requirements occupying a relatively small stretch of land
- The impact of large events on the Foreshore Reserve such as damage to grassed areas, garbage collection and inadequate location of amenities
- No existing commercial enterprises on site such as a kiosk or cafe
- Improve poor visual connection from Active River Foreshore precinct to Public Transport including Wyong Station
- Limited passive surveillance to Foreshore Areas

- Lack of adequate lighting to walkways and gathering areas along Foreshore Reserve

##### Access and Circulation

- Concentration of car parking in open space adjacent to Rankens Court at River Road intersection which could be used as more highly valued public open space and landscape leading down to the river foreshore
- Existing pedestrian cycleway access is not readily identifiable and is too narrow which creates confusion and danger amongst users
- Inadequate infrastructure for loading and unloading vehicles for utilising and areas along the river's edge for significant events
- Disabled access will be an issue in areas where the gradient is greater than 1:14

##### Environmental

- Lack of established tree stands in certain zones of River Foreshore Reserve exacerbating wind
- Lack of depth in recreational areas taken up by road reserve, which has a detrimental effect on potential flexible use of open space

##### Landscape

- Views to landscape features are obstructed by poor quality development in middle distance.
- Screen of Canary Island palms to Pacific Highway – poor pruning and palms that are interspersed with other species has detracted from the character of the species.

#### BAKER PARK PRECINCT

##### Social and Recreational

- A significant number of uses with different values and requirements occupying a relatively small stretch of land
- The impact of large events on the Baker Park Precinct such as damage to grassed areas, garbage collection and inadequate location of amenities. This is of particular concern in relation to proposed application for increased number of Netball Courts from 24 to 30 to enable the Wyong Netball Association and Wyong Shire to attract State competition rounds
- No existing commercial enterprises on site such as a kiosks or cafes within the precinct
- Lack of a high quality pedestrian link to/ from Wyong Train Station that is a significant public transport system
- An emphasis on vehicle use to access The Baker Park Precinct. Poor amenity to existing Car parking Facilities and limited access in getting in and out of Precinct to surrounds

- Lack of adequate lighting to existing walkways for activities to occur at different times of the day including at end of working day

##### Access and Circulation

- Interface between car park entries and pedestrian/ cycleway currently confusing where vehicles have right of way

##### Environmental

- Lack of established tree stands in certain zones of Baker Park area exacerbates wind and glare on fields

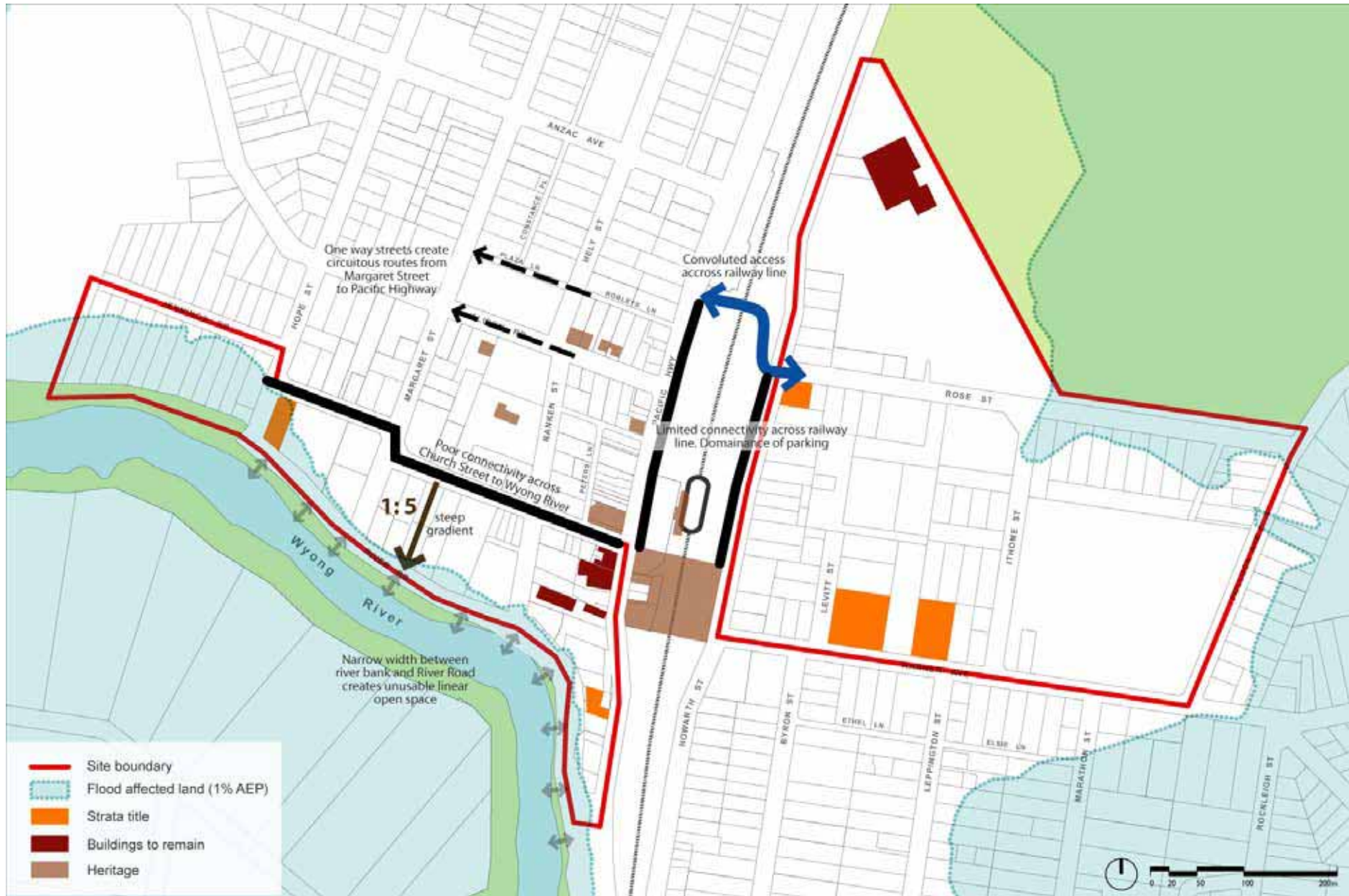


Figure 14: Issues

## OPPORTUNITIES

### ACTIVE RIVER FORESHORE PRECINCT

- Create strong interaction between Wyong River and the Town Centre through physical and visual linkages
- Provide for retail and commercial functions to address the River
- Open space focus along the riverfront creating a linear parkland
- Linkages focus with emphasis on connectivity to Town Centre
- Residential component with emphasis on open space predominantly public owned land
- Improve Town Centre approach along Pacific Highway northbound
- Encourage new developments in proximity to Wyong River that enhance the civic and cultural focus of the precinct

#### Public Domain and Open Space

- A quality public domain would increase the range of activities and other uses within and around the edges of the key open spaces including a proposed open space terminating Rankens Court and at the entry of River Road from Pacific Highway
- Enhance the use of the public domain promoting social interaction for all members of society
- Reduce the dominance of vehicles and encourage pedestrian activity, treatment of traffic along River Road is a precursor to a

viable commercial environment adjacent to River Road.

- Provide appropriate pedestrian crossings along pathways to align with existing town road form
- Encourage ground floor activities in particular along River Road at eastern end where Flood Management is not a limiting factor. This will contribute to vitality and vibrancy of the streets
- Consider solar access to key areas within the public domain during mid winter that will promote higher use of the street daytime activities such as outdoor eating
- Improve surveillance of the street and fringe areas such as the western end of the precinct (this would be partially facilitated by the increase in residential use)
- Retain significant view corridors along key north south streets such as Rankens Court, Margaret Street and Hope Street
- The introduction of a family of durable neutrally designed street furniture should be

used in the precinct

### BAKER PARK PRECINCT

- Create strong interaction between Baker Park and the Town Centre through physical and visual linkages
- Open space focus
- Linkages focus with emphasis on connectivity to Town Centre
- Concentration of higher density Residential component with emphasis on open space predominantly public owned land
- Improve Town Centre connectivity especially across Pacific Highway and the Railway to key recreational areas such as the Baker Park and Wyong Race Club
- Examine future use and adaptation of Wyong Pool in consideration of proposed Warnervale Aquatic Centre
- Establish uniform tree plantings along either (or on one side where both sides of street is difficult in short term) and along the median strip where applicable to improve the streetscape and soften the hard expanses of bitumen and future urban forms. (Street trees also have the functional benefits of providing shelter and slow the speed of passing traffic because the repeating vertical forms make drivers more aware of the speed at which they are travelling)
- The introduction of durable neutrally designed street furniture should be used

in the precinct, this furniture should be consistent with the rest of Street Furniture selections for Wyong Township.

- Promote gateway building typologies at intersection of Rose Street and Howarth Street as well as Warner Avenue and Ithome Street. Examples of these are indicated in the illustrations of potential building



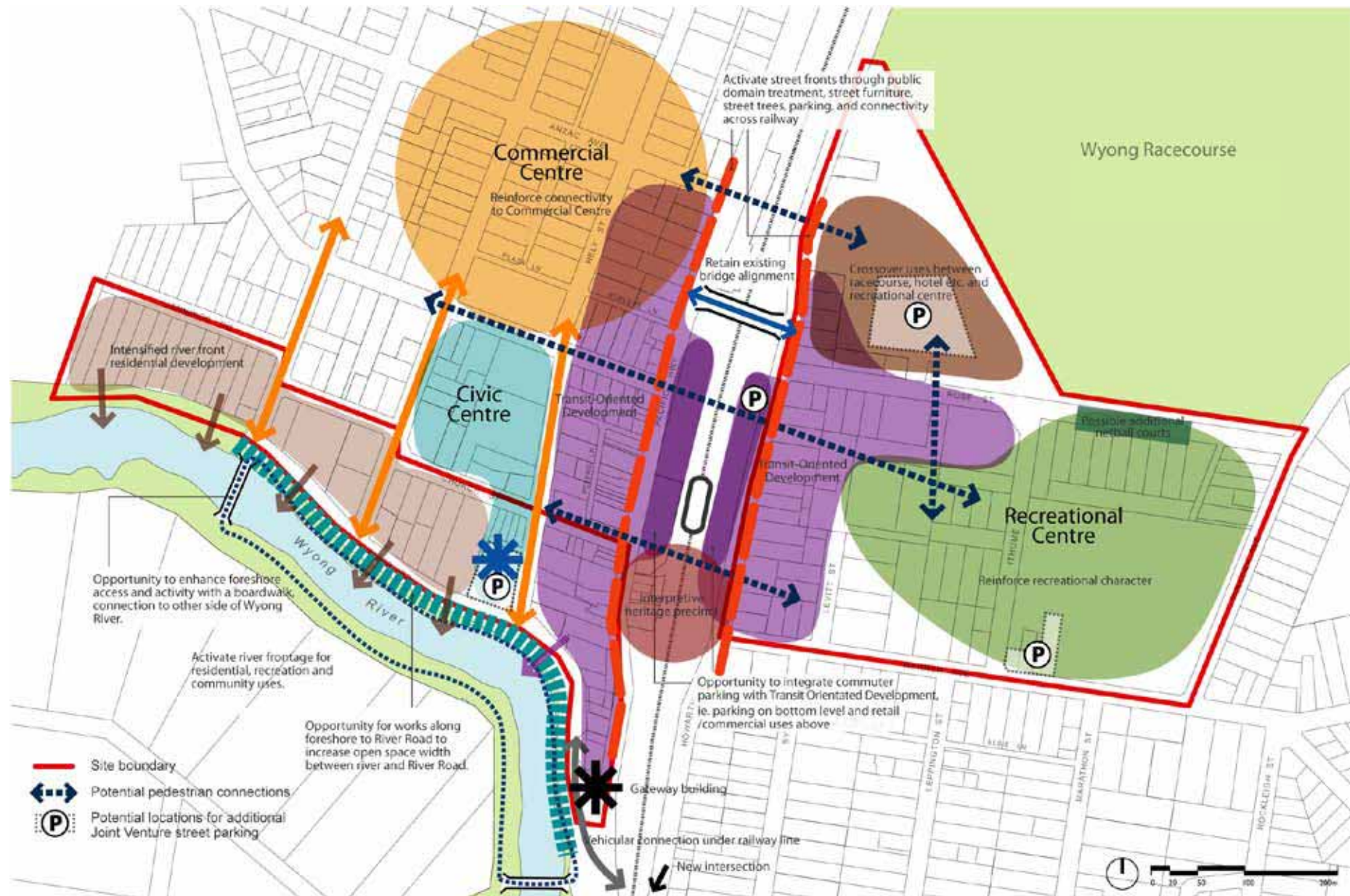


Figure 15: Opportunities

## OVERALL DESIGN OBJECTIVES

typologies within the report

- To provide for the provision of a friendly, inviting and safe recreation area for the Wyong Community

The objectives of the Active River Foreshore and Baker Park Precinct Master Plan are the following:

- To ensure block and building orientation maximise solar access and prevailing breezes whilst responding to the natural and topographical features of both sites
- To create strong connections with Wyong Town Centre and surrounding precincts
- To create the opportunities for the development of a variety of residential living types and densities as well as providing for vibrant civic and cultural functions in a mixed use typology
- To create a distinctive character for each precinct
- To provide economically viable development options
- To maximise development opportunities within Council owned land
- To respond to the natural and localised topographical features, such as the natural amphitheatre alongside Rankens Court
- To ensure any buildings on the site are integrated and respond to the natural characteristics of the landform as well as respecting the existing commercial and business activities of the Wyong Town Centre
- Concentrate activity zones and gathering spaces within easy walking distance of the Town Centre and existing car parking facilities
- To retain existing tree stands along the Wyong River Foreshore Reserve to establish and emphasise 'upfront' character that make the overall landscaping treatment to the Reserve more attractive
- To provide clearly defined pedestrian and cycle routes that meander through the existing landscape and links to gathering places along the Wyong River Foreshore Reserve
- To promote the creation of an identifiable southern gateway into the Active River Precinct and Wyong Town Centre
- To provide a clear entry over the Railway overpass into Rose and Howarth Street in the Baker Park Precinct
- To create landmark open spaces and key buildings

## VISION AND DESIRED FUTURE CHARACTER

### ACTIVE RIVER FORESHORE PRECINCT

#### Land Uses

The Active Rivers Foreshore Precinct will accommodate a diverse range of uses including:

- Local level community facilities, with the potential for development of local arts, increased participation by Wyong residents in the arts and an adjacent area for local market stalls
- District level kiosk and amenities facilities
- Local level community facilities such as barbeques, shelters, walking paths, benches, exercise facilities and children’s play areas
- New residential development is proposed along the river foreshore

#### Accessibility

The Active River Foreshore Precinct will improve links between the Foreshore reserve and the Town Centre Core to promote connectivity and activity in the central zone of the Foreshore Reserve.

The implementation of a formal pedestrian walkway and cycleway to link Active River Precinct to Wyong Town Centre and surrounds will be a significant contribution to the common user infrastructure and alternative means of circulation throughout the Township.

#### Public Transport

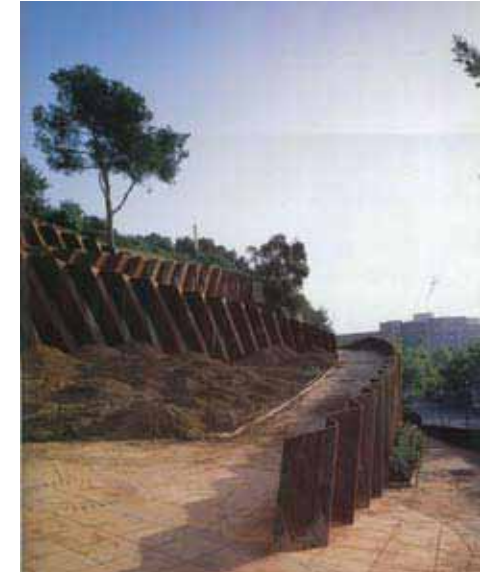
The presence of a good transport network provides opportunity for a less car reliant precinct.

Increased residential and retail uses will increase patronage and demand for bus services.

#### Public Domain

Public Spaces in the Active River Foreshore will :

- create spaces that engage with its context and offer new ways of experiencing water and the waters edge
- integrate with the surrounding area and be an integral component of the wider Wyong Region
- allow the location of buildings within the public domain so that they enrich public infrastructure and enhance the public domain
- express community pride, values and aspirations so that they are and leave positive, long lasting impressions
- maximise casual surveillance at all times of the day, increasing perceived safety for users and integrate the key principles of Crime Prevention Through Environmental Design (CPTED)
- encourage an active public domain along River Road through the provision of access to public transport, retail and commercial facilities



*Top right: Apartments with undercroft spaces to activate river front. Top left: Landscape terraces for accessibility down steep slopes. Bottom right: Active water front Bottom right: Cycle access on boardwalk.*

### Landscape Character

The landscape character for the Active River Foreshore will include:

- A formal walkway along Wyong River
- High quality hard paved surfaces to Jogging Cycleway Track connected to Wyong Town Centre
- Clusters of Trees set back from River Front to provide more contemplative spaces for reflection
- Opportunities for public art and interpretive sculptural walks along the foreshore
- Formalise tree planting along River Road and to Church Street and Hargrave Street
- Primary landscaped links from the Town Centre to the Riverfront along - Rankens Court and Margaret Street and a secondary link along Hope Street

### BAKER PARK PRECINCT

#### Land Uses

The Baker Park Precinct will accommodate a diverse range of potential uses including:

- Regional level community recreational facilities, such as increased numbers of netball courts and a recreational pool
- District level amenities facilities
- Local level community facilities such as shelters, benches, exercise facilities and an all abilities children's play area
- Increased residential uses along the southern portion of Howarth Street, along Warner Avenue, Ithome Street and along Rose Street

### Accessibility

The Baker Park Precinct will:

- Improve connectivity between the Town Centre and the Precinct
- Implement the use of Rose Street in a part two way/ one way arrangement with the two way segment at the western end of Rose Street and the one way segment midway down Rose Street leading into Ithome Street
- Implement the use of Ithome Street as a one way street southbound to Warner Avenue to promote improved access and circulation during race day events and sporting events
- Provide carparking facilities to cater for the planned upgrade of existing netball facilities and ongoing park and ride facilities at Wyong Station

### Public Domain

The Public Spaces in the Baker Park precinct should generally encapsulate the same principles as listed for the Active Foreshore Precinct.

### Landscape Character

Baker Park improvements will include:

- Asymmetrical street tree planting to Howarth Street
- Symmetrical planting features along Rose Street and Ithome Street
- Increased planting to Warner Avenue and Pollock Avenue provide pedestrian shade and amenity and streetscape value



Above: Game of netball Below: Apartment heights stepping down.

## PRECINCT DESIGN OBJECTIVES

## ACTIVE RIVER FORESHORE PRECINCT

- To encourage amalgamation of smaller sites while retaining and promoting fine grain frontage to Hargrave Street and River Road as well as encouraging address to side access down to riverfront areas
- To activate a retail precinct to Church Street and Hargrave Street
- To allow an increase in residential uses and height in key sites where additional height can be demonstrated to have an overall positive effect upon the built form of the Precinct
- To ensure a consistent contemporary and modern architectural form and treatment
- To encourage a degree of unity in the built form through adherence to a typology that encourages a cohesive pattern with which buildings occupy the block and address the street
- Create an active frontage and definition of public domain

## BAKER PARK PRECINCT

- To create improved carparking opportunities that do not detract from the streetscape and quality of built form in the Precinct
- To promote the integration of basement carparking for all developable sites in particular residential apartment buildings
- To strengthen open space linkages to Wyong Town Centre by integration of open corridor extension from Alison Road over Railway Corridor through existing Tennis Courts and Wyong Pool
- To improve connectivity to Wyong Race Course at intersection with Rose Street and south to Warner Avenue
- To provide improved Open Space recreational facilities to Baker Park
- To increase recreational open space to Baker Park
- To promote the acquisition of private lots along Pollock Avenue
- To create a stronger identity through built form differentiation and diversity
- To create residential opportunities through the provision of more floor space with higher density residential development ranging between 4 and 6 storeys

## MASTER PLAN

Two concept master plans have been prepared to incorporate the objectives, vision and desired character, outlined above, for the two precincts. Option 1 takes a broad approach towards the design of buildings to maximise views and solar access to apartments. Option 2 considers the design of building following the land ownership pattern.

### CONCEPT MASTER PLAN OPTION 1

This concept master plan responds to the issues and opportunities of the site regardless of the current land ownership pattern, thus maximising the sites' potential (particularly from an architectural perspective).

#### ACTIVE RIVER FORESHORE PRECINCT

The key design features of this option include:

- Adopts the existing street layout as an extension of Wyong Town Centre.
- Medium to High Density Residential development is proposed along Church and Hargrave Street.
- Lower density residential development is proposed along Jennings Street.
- The apartment buildings will be raised above natural ground level with some stepping down to River Road.
- They are all modulated and shaped in order to take best advantage of views to the south overlooking Wyong River.

The proposed plan does not integrate the existing land ownership structure as an investigation into ideal building typology for the site.

#### BAKER PARK PRECINCT

The key design feature of this option includes:

- Adopts the existing street layout within the Baker Park Precinct.
- Medium to High Density Residential

development is proposed along Howarth Street and Rose Street including an area along Warner Avenue terminating at Levitt Street.

- The apartment buildings have been oriented to maximise northern aspect for sunlight into living areas.
- View corridors are maintained through to Baker Park Sports Fields and Wyong Pool.
- Continuous ground floor podium is proposed along Howarth Street and Rose Street to reinforce existing urban block form.
- Building forms are proposed to be integrated with Wyong Race Club lands as well as land at the northern corner of Rose Street and Howarth Street to reinforce street edge to both sides of Rose Street.
- A transit oriented development building that incorporates commercial, retail and parking is along Howarth Street.
- Ithome Street to be one-way with angle parking to provide more parking availability for events in Baker Park as well as assisting with large traffic flows during race days.
- The proposed plan does not integrate the existing land ownership structure as an investigation into ideal building typology for the site.

### CONCEPT MASTER PLAN 2

This concept master plan incorporates the key elements of the concept master plan, observing existing lot boundaries and the current land ownership pattern.



Figure 16: Master plan Option 1

### ACTIVE RIVER FORESHORE PRECINCT

The key design feature of this option includes:

- This option also adopts the existing street layout as an extension of Wyong Town Centre.
- Medium to High Density Residential development is proposed along Church Street and Hargrave Street.
- A continuous podium extends along Church Street from Pacific Highway to Rankens Court.
- Lower density residential development is proposed along Jennings Street.
- The apartment buildings will be raised above natural ground level with some stepping down to River Road.
- Overland flow paths have been allocated within the scheme at four different points across the site, adjacent to Hope Street, Margaret Street, mid way between Margaret Street and Rankens Court and at the end of Ranken Street leading down to the River Foreshore.
- All residential flat buildings are shaped in order to take advantage of views to the south overlooking Wyong River whilst accommodating the existing land ownership structure.
- The entry to River Road from Pacific Highway is proposed to be realigned to provide more open space and potential for a significant

gateway building form at the junction of these two important roadways.

- River Road is proposed to be realigned retaining two way access leading from Pacific Highway around to Hope Street providing greater scope for Open Space along the river front.

### BAKER PARK PRECINCT

The Preferred Option adopts the existing street layout within the Baker Park Precinct as well as considering the existing Land Ownership structure in the Precinct.

The key design feature of this option includes:

- Medium to High Density Residential development is proposed along Howarth Street and Rose Street including an area along Warner Avenue terminating at Levitt Street.
- The apartment buildings have been oriented to maximise northern aspect for sunlight into living areas but respect existing urban block form.
- View corridors are maintained through to Baker Park Sports Fields and Wyong Pool.
- A broken ground floor podium is proposed along Howarth Street and Rose Street to provide integration of north south axis into Wyong Race Course from Levitt Street and adjacent to Wyong Tennis Club.
- Building forms are proposed to be integrated with Wyong Race Club and is informed by

the early sketch proposals provided by the owners of the Club.

- Ithome Street to become a one-way with angle parking to provide more parking availability for events in Baker Park as well as assisting with large traffic flows during race days.
- A transit oriented development building that incorporates commercial, retail and parking is proposed along Howarth Street.



*Above: Gateway building with active uses on ground floor. Below: Community building/library with plaza forecourt.*



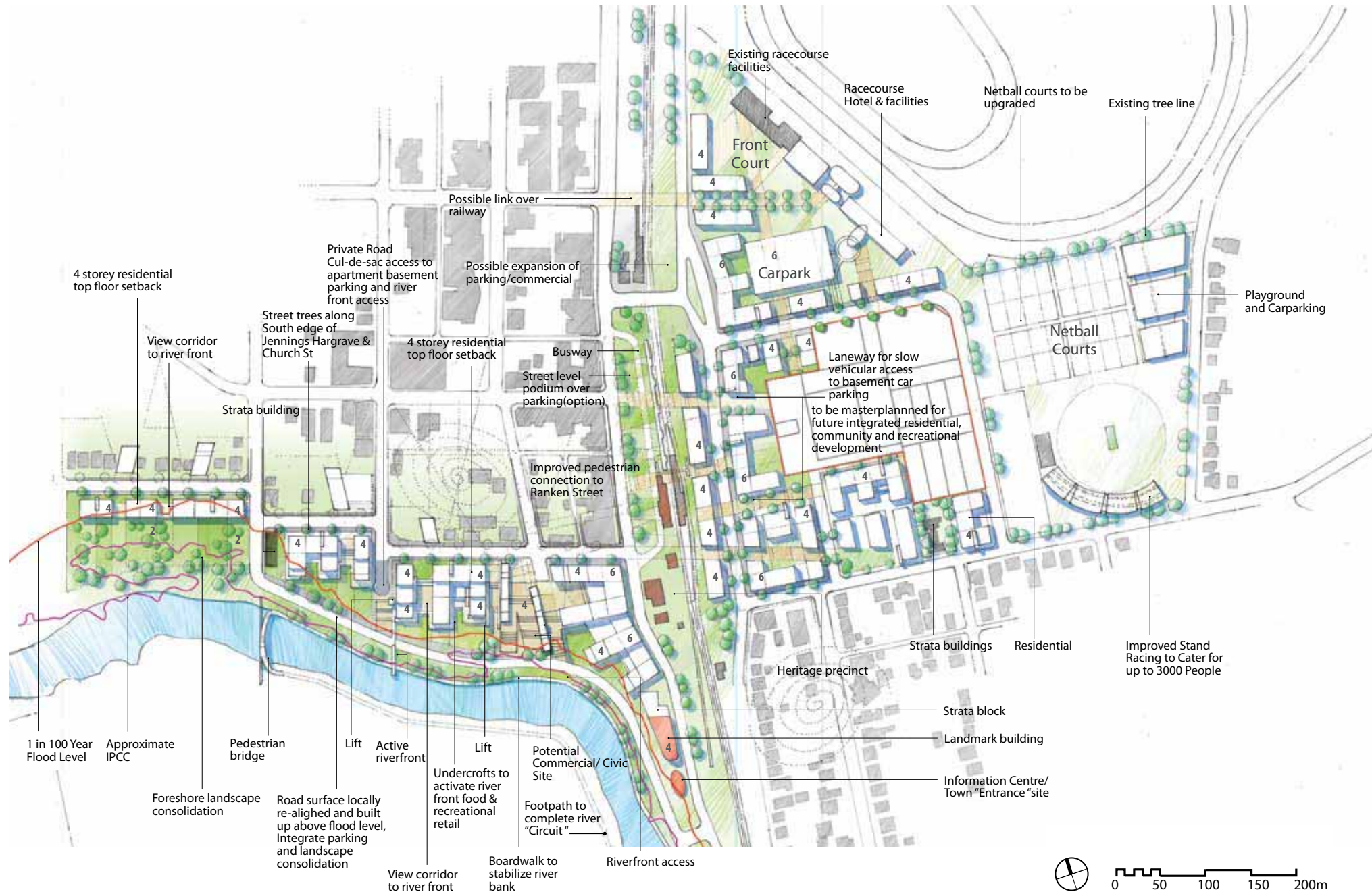


Figure 17: Preferred Master Plan Option

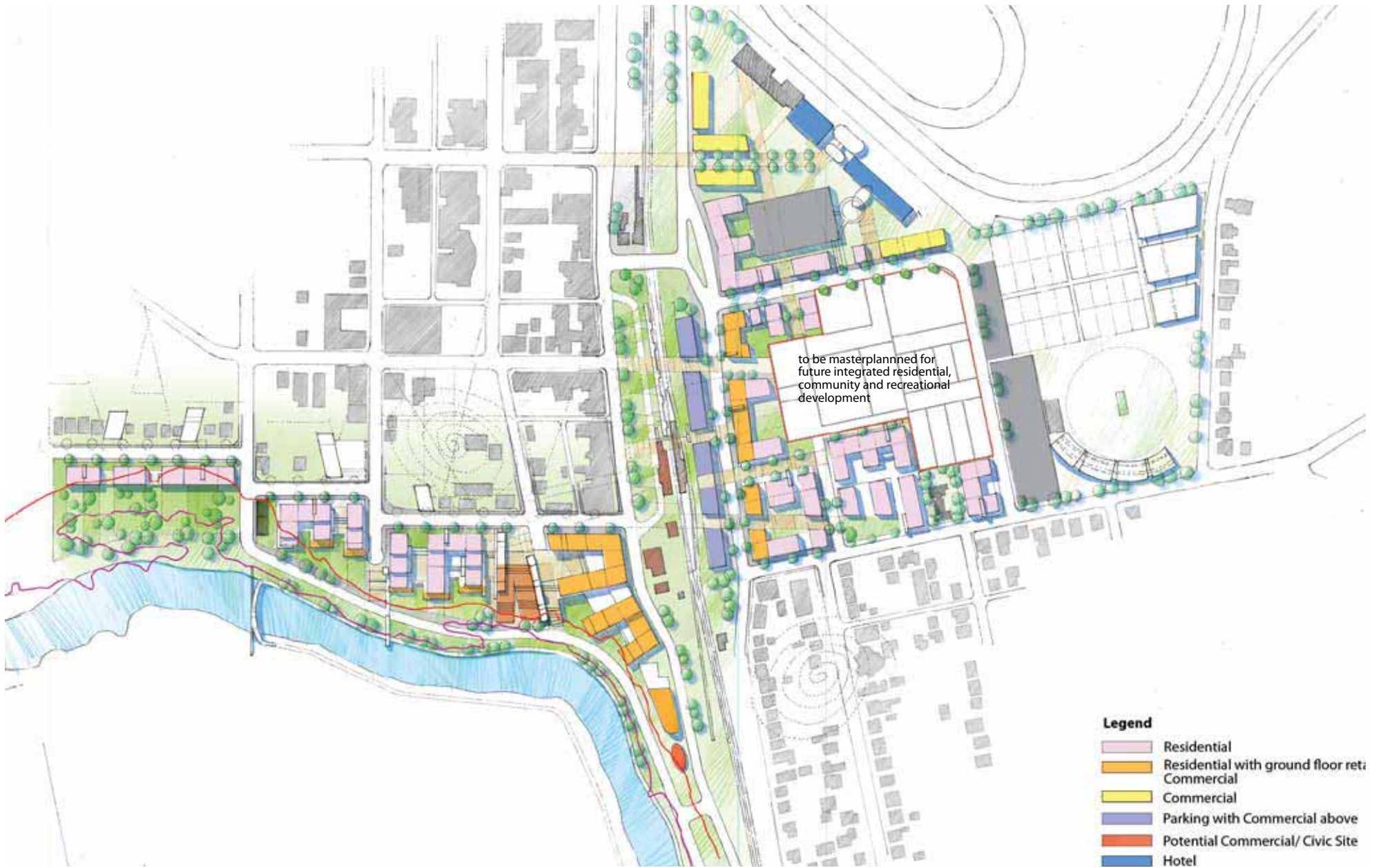


Figure 18: Building Uses



Figure 19: Section Plan

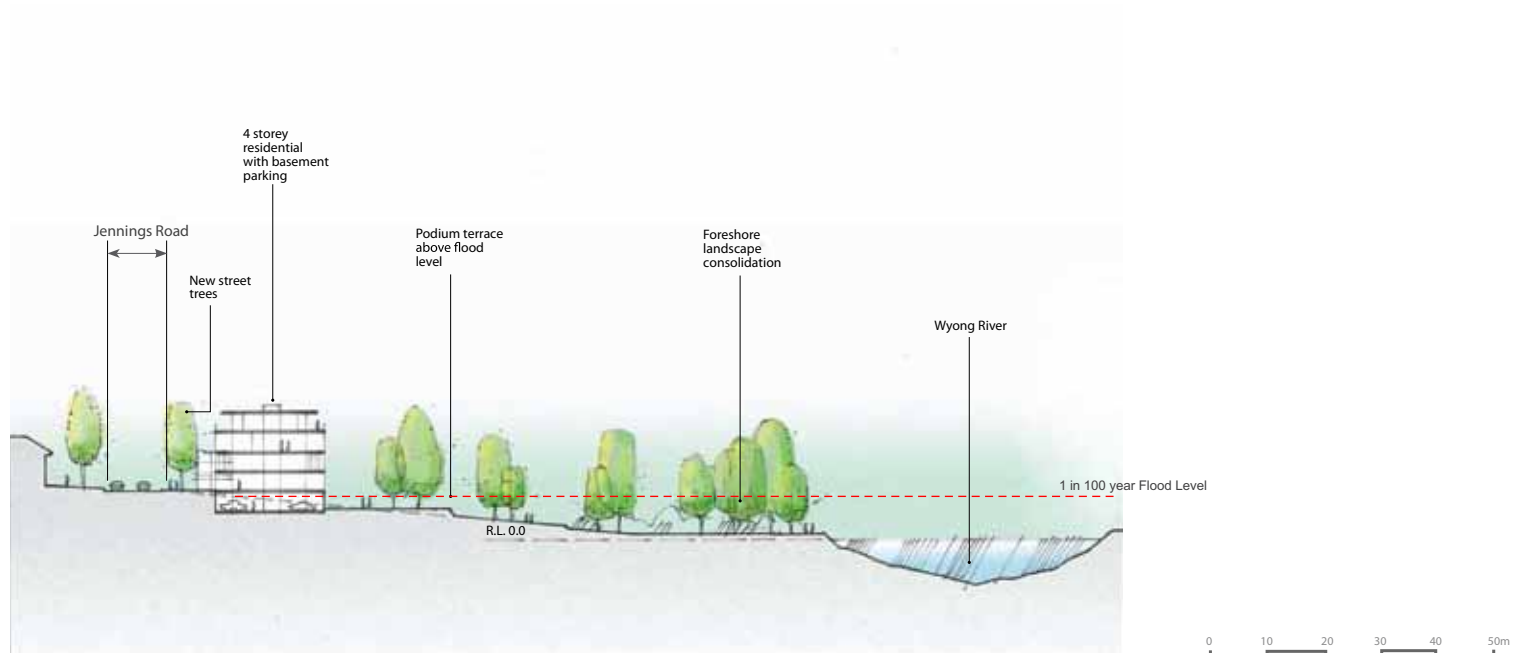


Figure 20: Section 1, Active River Foreshore Precinct

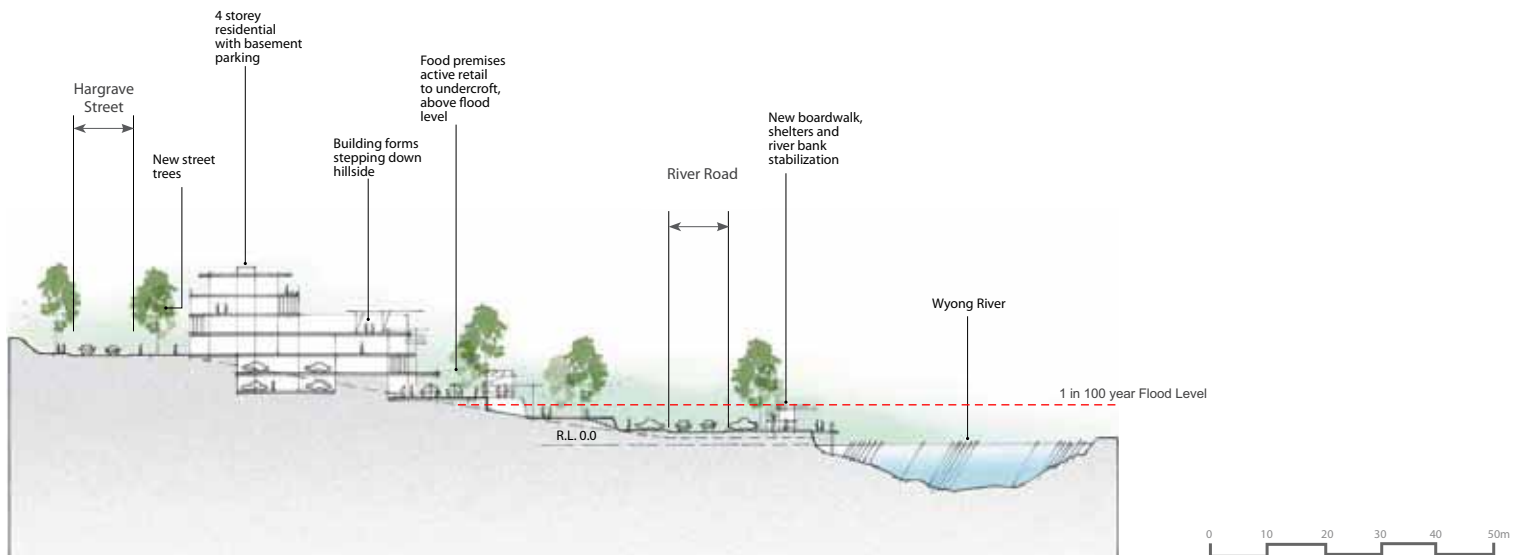


Figure 21: Section 2, Active River Foreshore Precinct

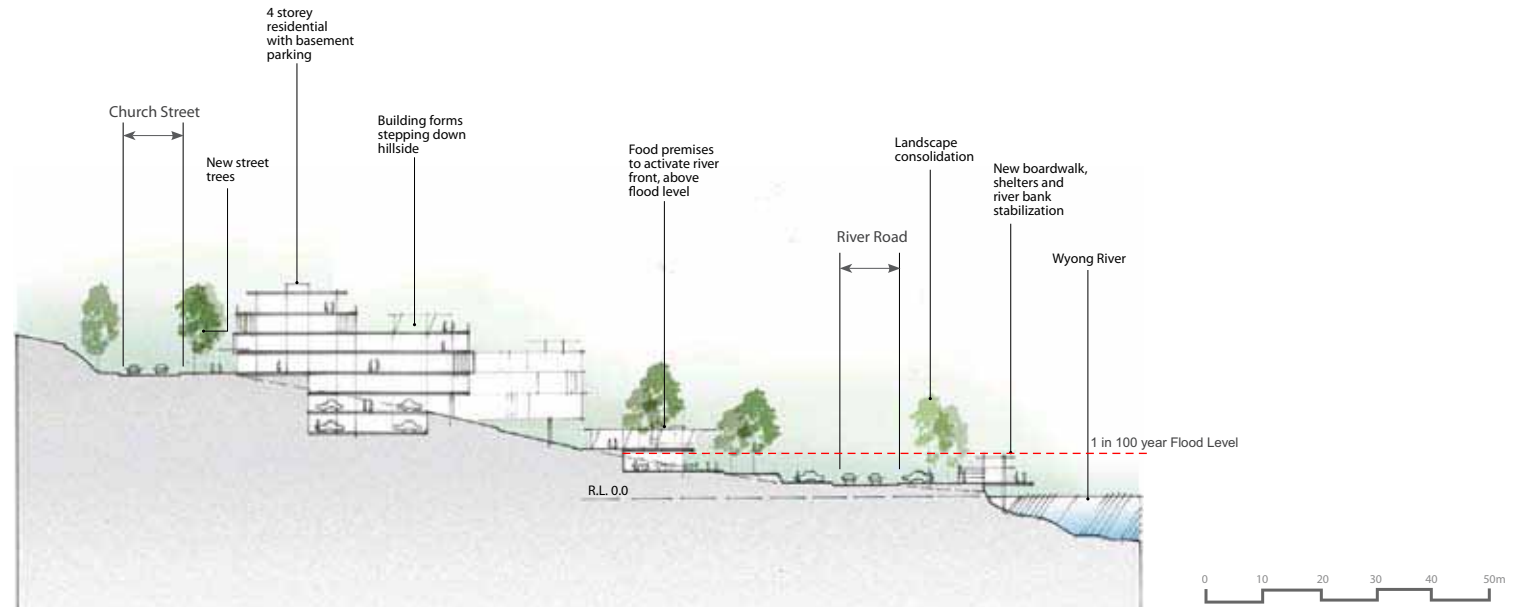


Figure 22: Section 3, Active River Foreshore Precinct

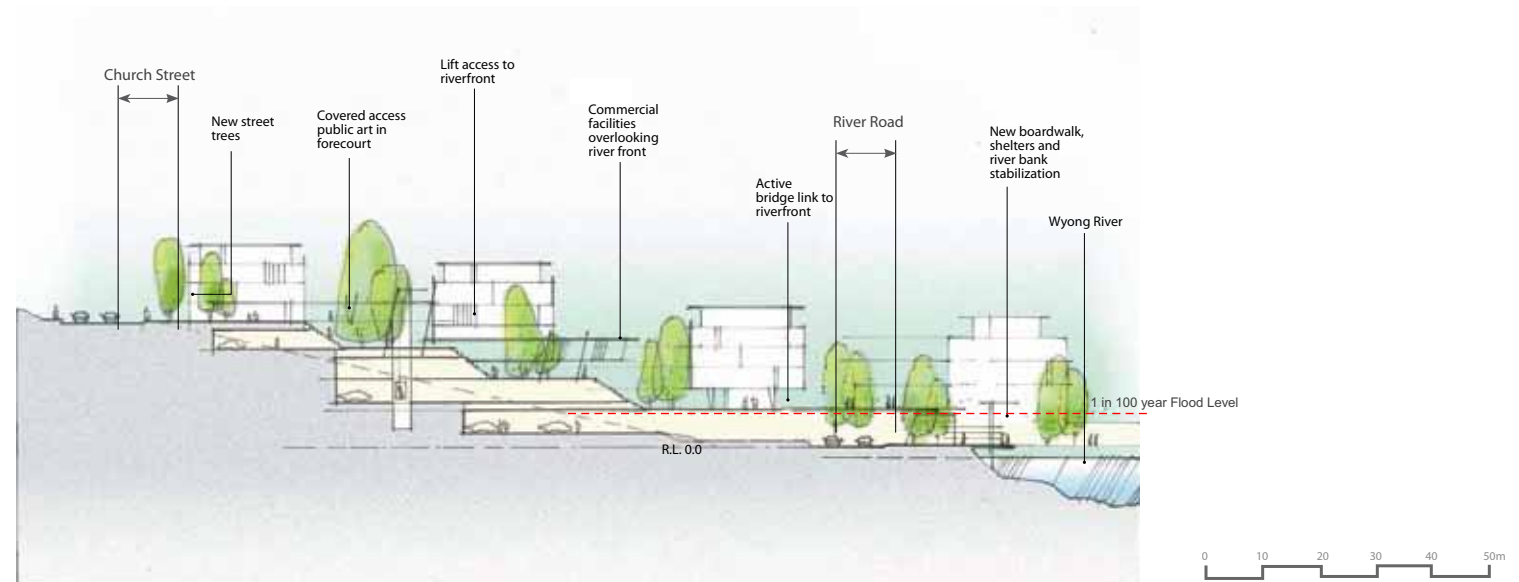


Figure 23: Section 4, Active River Foreshore Precinct

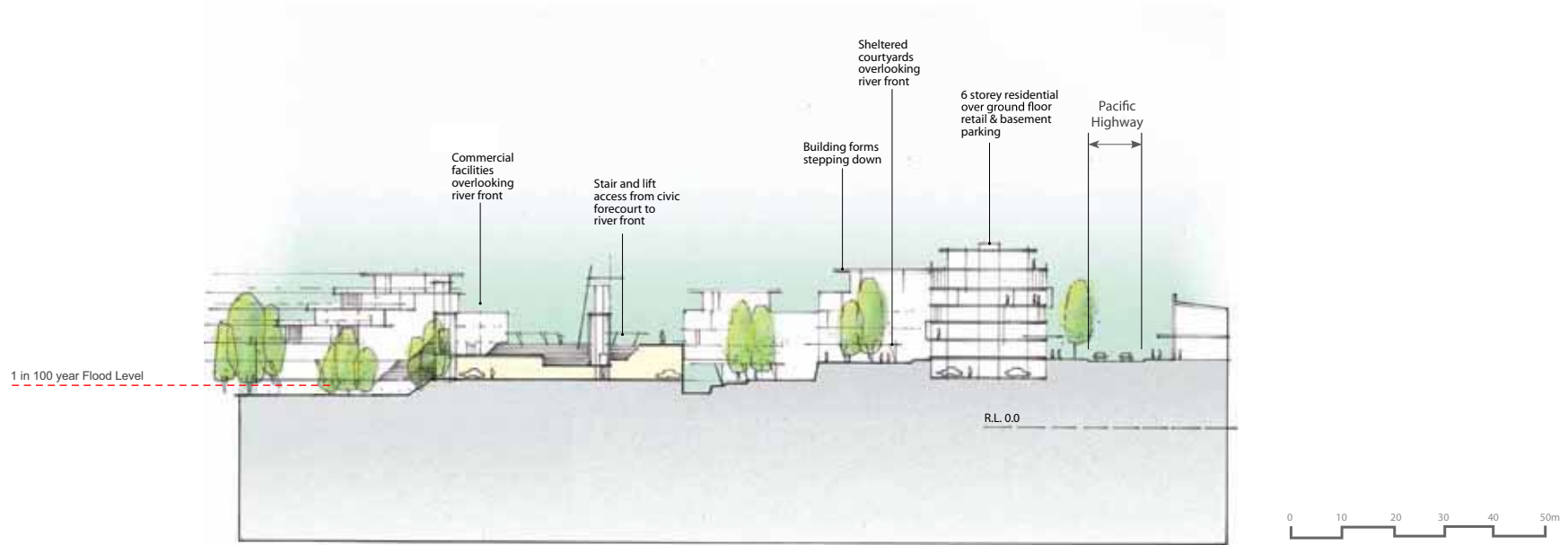


Figure 25: Section 5, Active River Foreshore Precinct

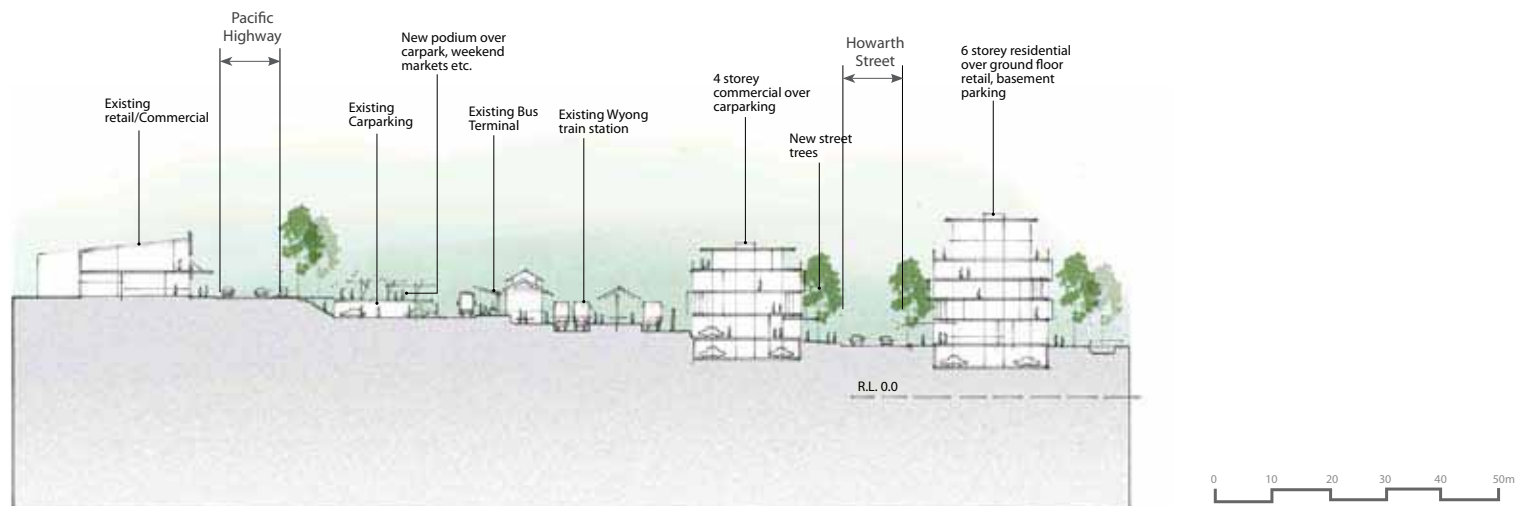


Figure 26: Section 6, Active River Foreshore Precinct

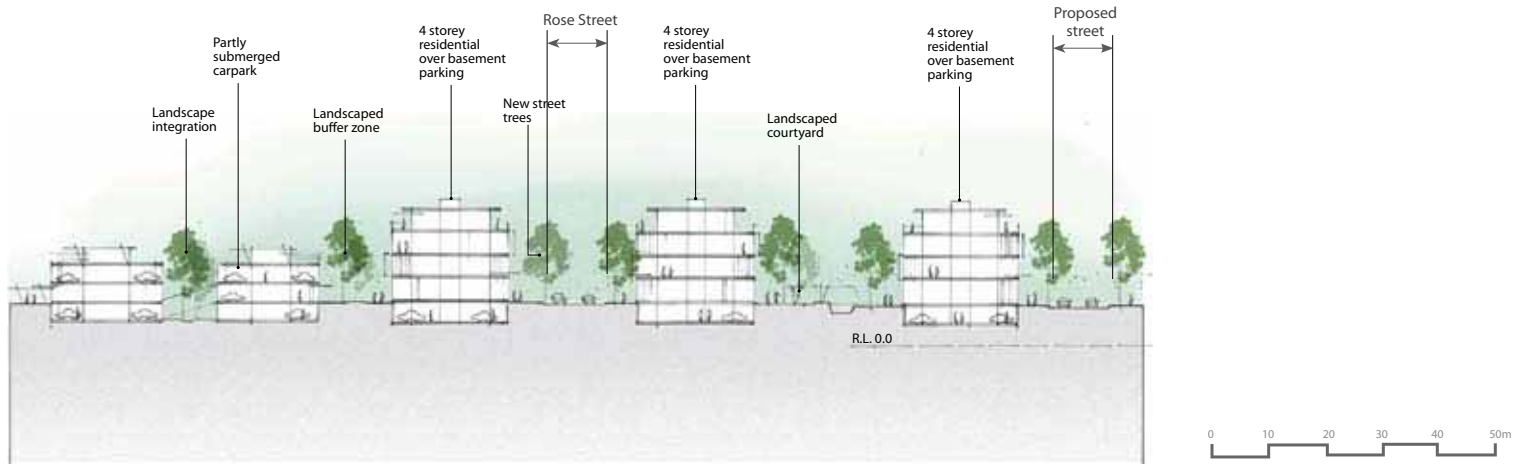
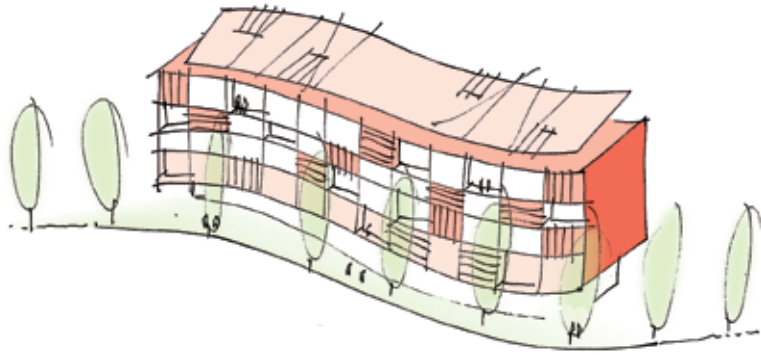


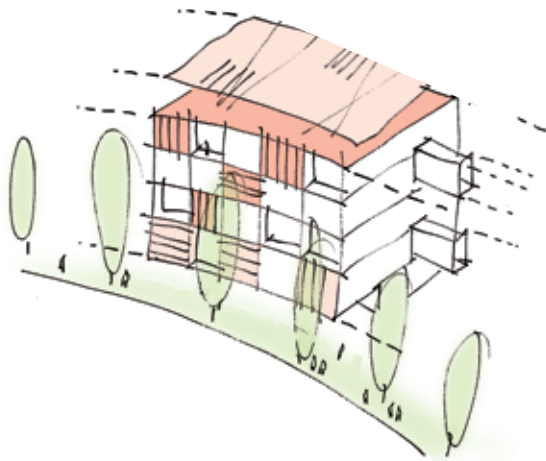
Figure 27: Section 7, Baker Park Precinct

## BUILDING TYPES

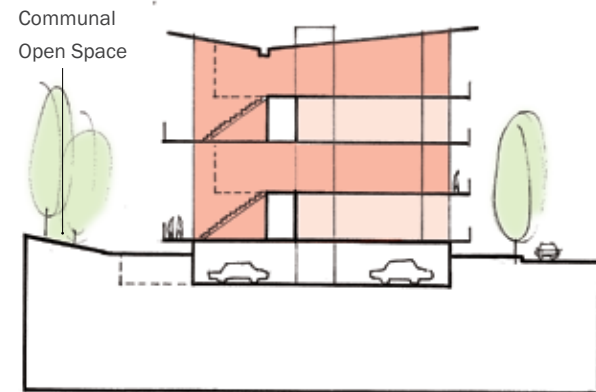
### MEDIUM DENSITY APARTMENTS



Building Type Location



Perspective



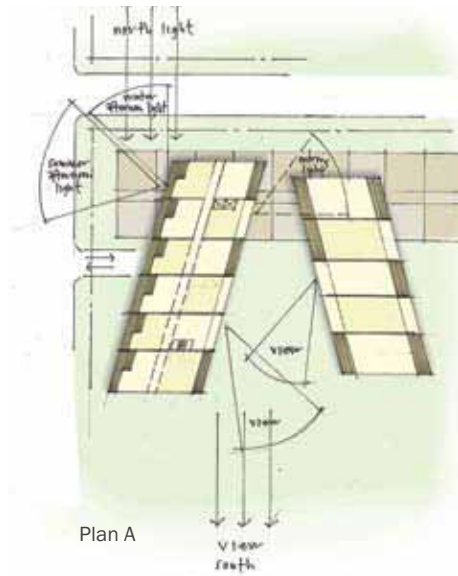
Section



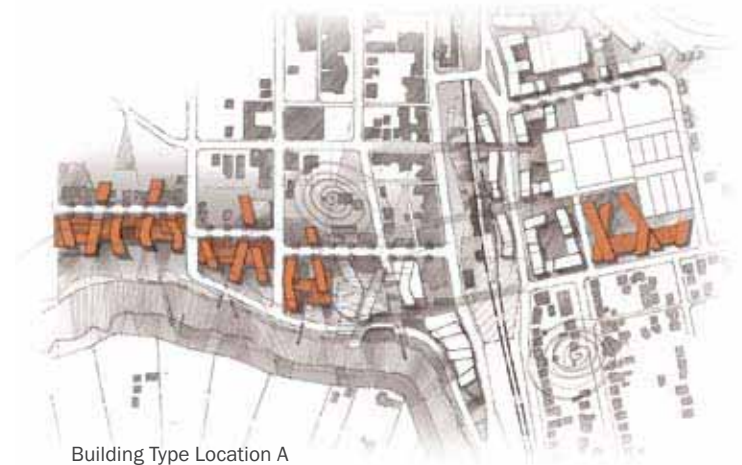
WATERFRONT APARTMENTS



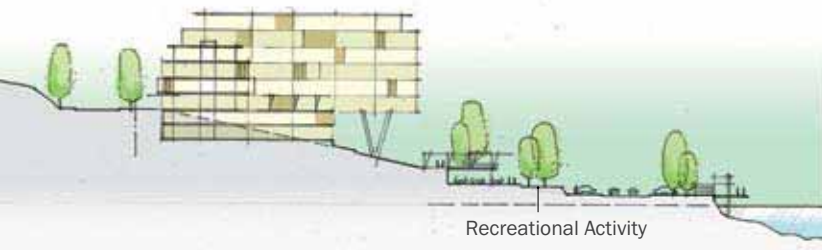
Perspective



Plan A

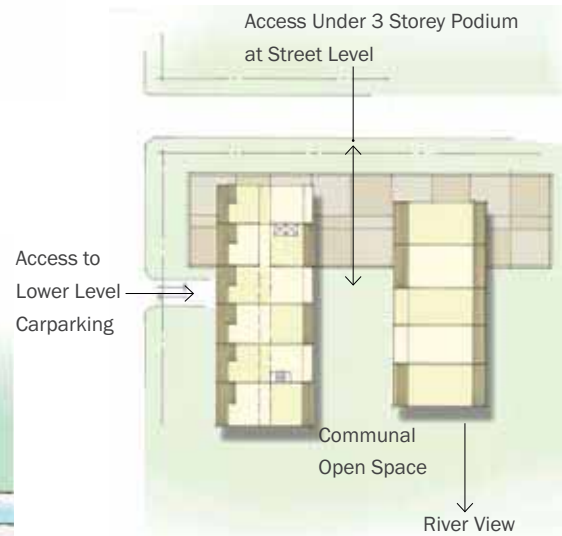


Building Type Location A



Section

Recreational Activity to Both Sides of River Road East



Plan B

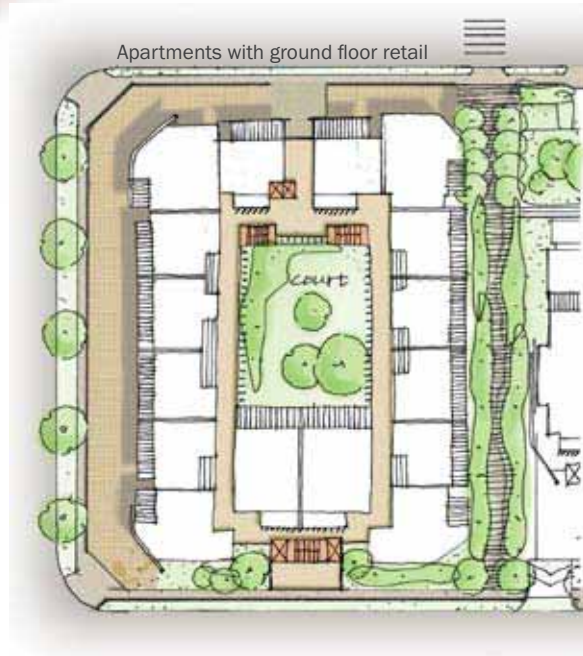


Building Type Location B

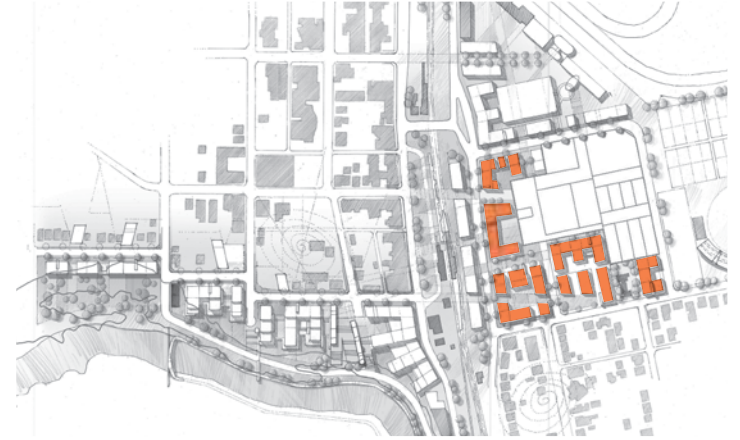
### COURTYARD APARTMENTS



Perspective

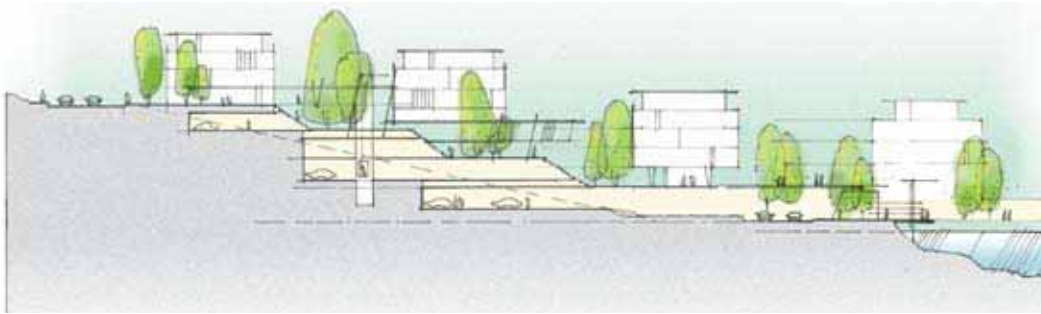


Plan



Building Type Location

### TERRACED CIVIC SPACE



Section



Building Type Location



Perspective

## LANDSCAPE ELEMENTS AND MANAGEMENT

### VEGETATION MANAGEMENT

#### Values of vegetation

Trees are a vital component of rural and recreation areas. The benefits of trees include:

- Regulating the micro-climate - trees moderate wind and urban heat mass through shade and windbreaks
- Reducing water run-off + stabilising embankments - trees protect topsoil and bind soil to avoid erosion. Trees also allow greater stormwater infiltration, allow stormwater to be cleaned and replenish subsurface water reserves allowing plants to survive during extensive periods of without rain or during drought
- Improving air quality – by removing pollutants from the air
- Carbon storage – by removing carbon dioxide from the air
- Property values – properties surrounded by substantial landscaping have been shown to increase in value and their attractiveness to consumers
- Traffic control - trees can make a street appear smaller therefore encourage drivers to reduce speed. This is a major passive traffic calming design treatment

#### Protection of existing vegetation

The protection of existing vegetation and endemic trees is essential for the following reasons:

- Indigenous vegetation provides a sense of place. Within the subject site two vegetation communities exist
- Coastal Foothills Spotted Gum - Ironbark Forest (Foreshore)
- Wyong Paperbark Forest (Baker Park)
- The protection of the existing vegetation on the river bank is essential for stream health. Riparian zones require soft planted edges for bank stabilisation and healthy habitat. Indigenous terrestrial plants, aquatic plants and native fauna are dependent on each other, where one fails all others are likely to be heavily affected
- The proposed urban character can be enhanced by managing existing trees and ameliorating with others.
- Steps for protection of existing trees include;
  - Where development occurs, trees should be fenced as recommended by a qualified arborist (minimum certificate 5 in arboriculture) and the root zone protected.
  - Trees must be reviewed regularly by an arborist (minimum certificate 5 in arboriculture). Establishing a risk management plan should determine the interval of review (ie annual, biannual,

every 5 years or after major storms).

- Planning should consider connected stands of indigenous vegetation for habitat.
- In the event of major works occurring within areas of the site including large stands of native vegetation a Vegetation Management Plan may be required (deemed by WSC) as noted in section 5 of WSC DCP 14.

#### Proposed tree species

Tree species have been selected to:

- Reinforce the existing character of three different zones identified in the master plan
- Reinforce the natural landscape character and provide benefits to native fauna (through the inclusion of a proportion of locally-native tree species)

Any trees selected must reflect Wyong Shire Council guidelines for selection and planting of trees.

Note: E.Pilularis or E.Saligna to substitute C.Maculata Species indicated on Schedule Alternative Species scheduled by Council's Landscape Architect:

Eucalyptus umbra

Eucalyptus propinqua

Syncarpia glomulifera subsp.glomulifera

Eucalyptus acmenoides

Eucalyptus paniculata subsp. paniculata

Note: Line of trees indicated on Figure 28. to the eastern side of the Pacific Highway in blue dashes will have different soil conditions to trees along the foreshore. Council's landscape architect to consider selection of species to suit soil conditions.

Refer to Table 2 and Figure 28.






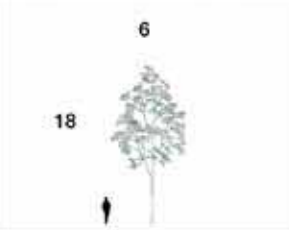
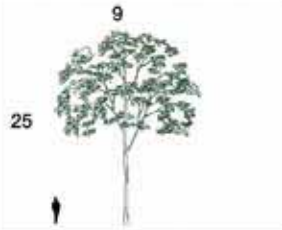
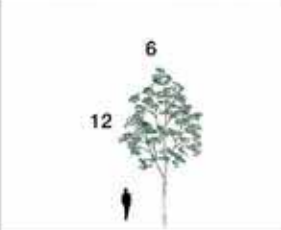
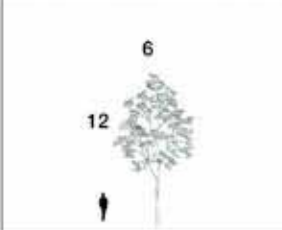
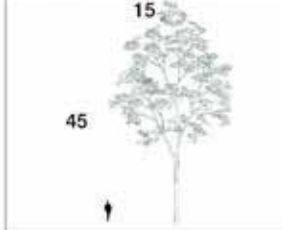





					
<b>Size + Habit</b> height x spread	6 18 	9 25 	6 12 	6 12 	15 45 
<b>Botanical Name</b>	Casuarina glauca	Lophostemon confertus	Eucalyptus haemastoma	Melaleuca quinquinervia	Corymbia maculata
<b>Common Name</b>	She Oak	Brush Box	Scribly Gum	Paperbark	Spotted Gum
<b>Features</b>	Hardy, tolerates periods of drought and extended water logged soils. Fast growing	Tall, extremely hardy tree with an balanced canopy. Tolerates some frost and extended periods without rain.	Low to medium gum tree featuring interesting bark and highly suitable as a street tree. While not indigenous to the site it exists endemic to the region.	A medium sized indigenous tree found growing in swamps a wetlands and commonly used as a hardy street tree in urban areas.	A large indigenous tree suitable for parklands. The tree is symbolic of this region with mature specimens located beside the river.
<b>Zone</b>	Active foreshore; - River edge - Vegetation buffer	Baker Park, oval boundary.	Roads connecting to the river edge.	Roads adjoining Baker Park.	Active foreshore.
<b>Code</b>					

Table 2: Street tree schedule.

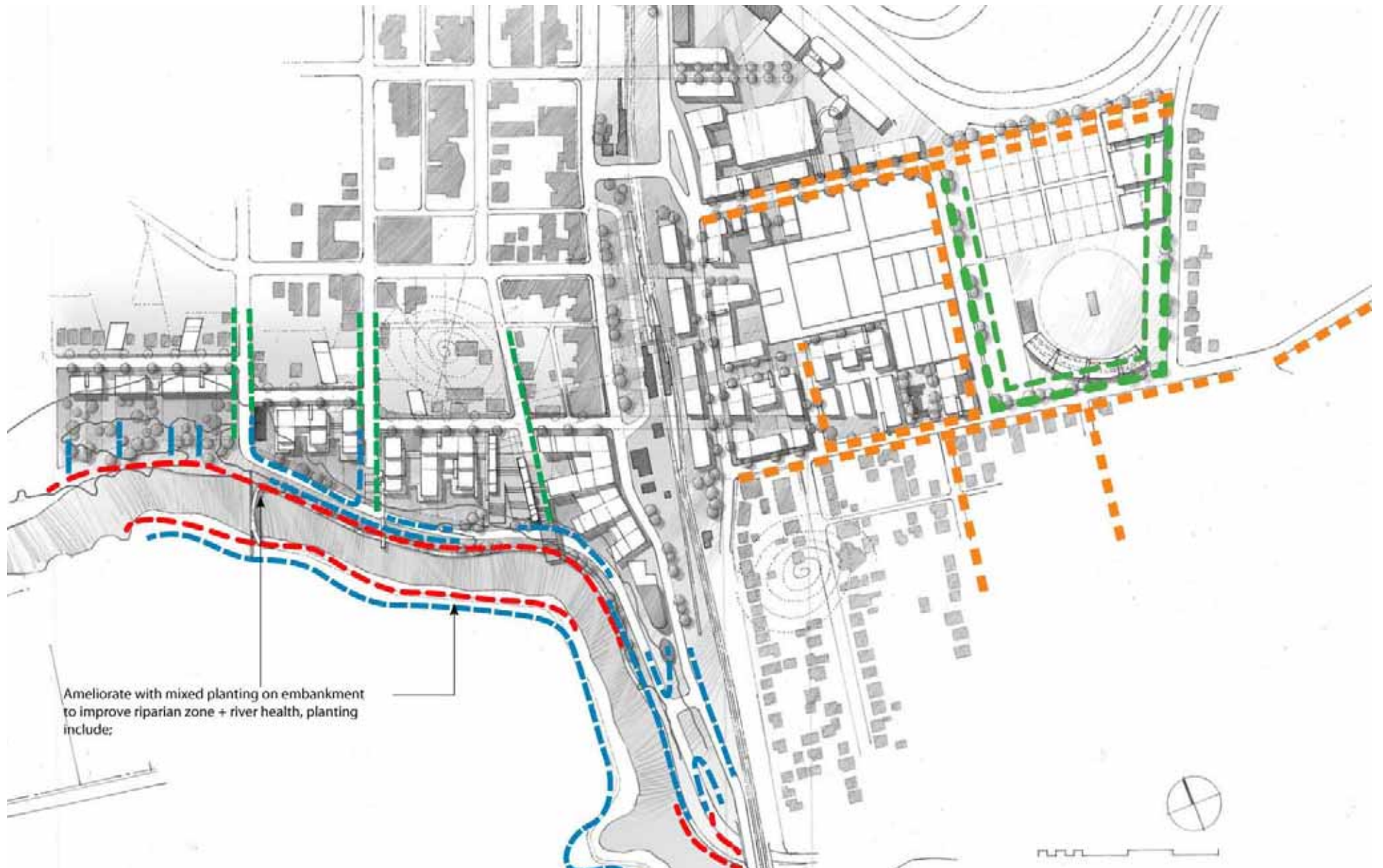


Figure 28: Street tree plan

LANDSCAPE TREATMENTS

Foreshore River Edge Treatment

The foreshore areas consist of three interface zones:

- Hard – where the road reserve and/or river erosion issues shall deem necessary a hard river edge to provide access and minimise further erosion. The edge may be an extension of the existing sandstone wall, rock gabions or informal boulders.
- Integrated – Where pedestrian access has been provided adjoining the river edge however the river contains a soft planted edge. While this zone has natural qualities, planting has been selected to allow for maximum embankment stabilisation, visual access and low maintenance qualities.
- Riparian – Where pedestrians pathways are located away from the revegetated indigenous riparian zone.

While the foreshore’s main focus is recreation; social, aesthetic, security, tourism and ecological consideration must be accounted for within a detailed design. Sites containing high levels of existing use may not be suitable for future revegetation. However through an integrated zone, both recreation and ecological functions can be combined.

Active recreational uses must also be considered. The foreshore is not suitable for active open space. The area is most suited to passive spaces including shelters, seating and

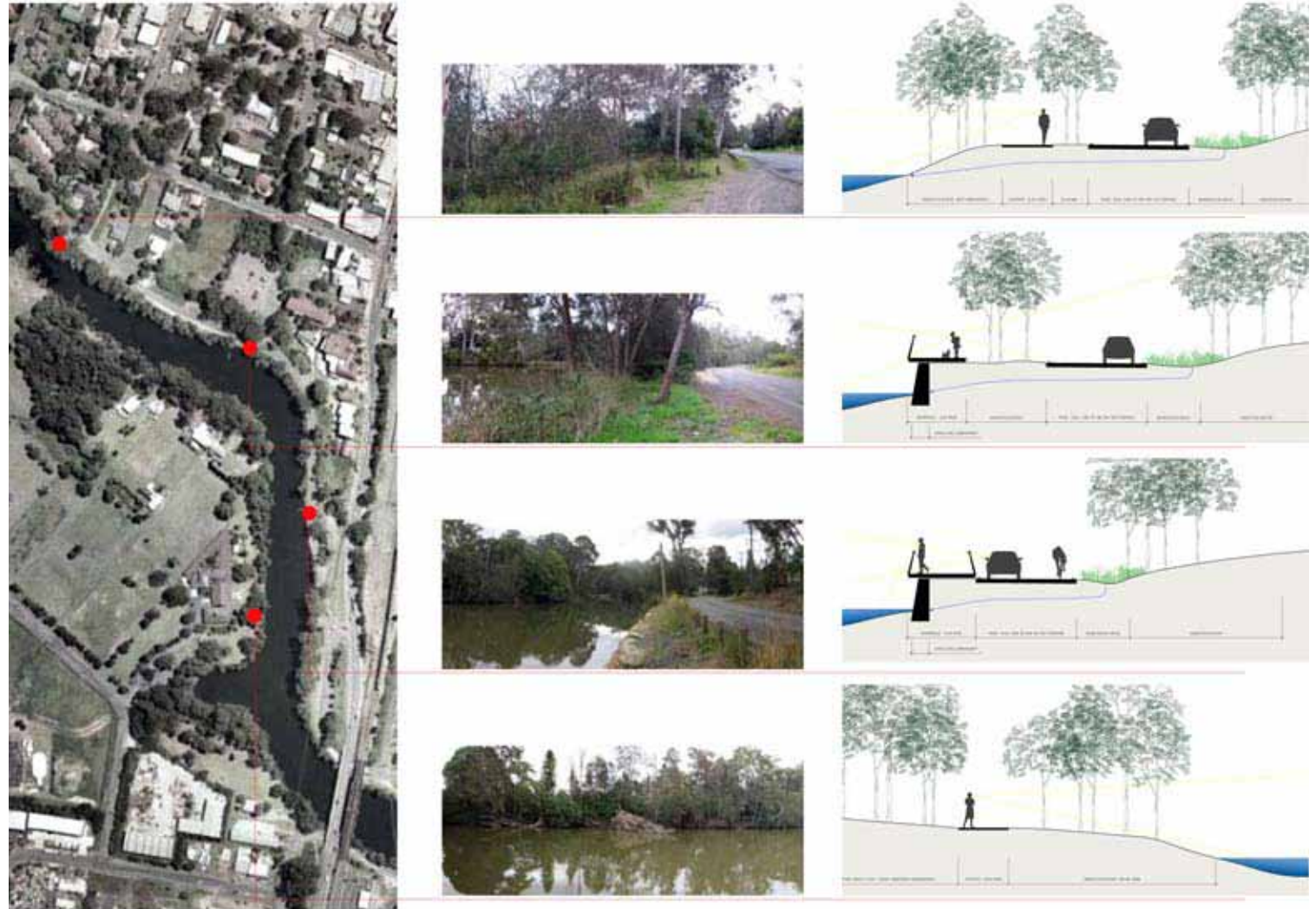


Figure 29: Active Foreshore landscape sections

meandering paths. Active uses may consist of jogging, bike riding and walking with possible installation of public exercise facilities.

Access to a launching point for canoes should be encouraged as River Foreshore provides excellent potential for viewing boat and canoe racing.

Long term maintenance must be considered for native revegetation areas. Areas for revegetation should be focused on large connected stands that may fall into local Landcare maintenance programs. Stormwater must also be treated prior to reaching the creek system and these treatment systems can be integrated into the revegetation.

#### Pedestrian & Cycleway Network

An integrated pedestrian and cycleway network has been planned along the foreshore consisting of a shared recreational pathway and a commuter/fitness pathway. Considerations include:

- Sufficient width for passing and stopping, refer to the RTA's NSW Bicycle Guidelines and Austroads – Section 14
- A legible path with clearly defined destination points at suitable intervals
- Regular rest spaces adjoining the main pathway
- Convenient connections that allow users to choose alternative routes and where possible pathways designed for non-discriminatory access

- Safe access points across busy streets (either by signalised crossings or non-signalised marked pedestrian crossings, with roundabouts not suitable where other treatments are not included to greatly slow or stop traffic)

The conceptual design of the pathway system presented in the Master Plan has been based on these principles. Generally, paths must provide non-discriminatory access. Path design must comply with Austroads Part 14 and AS 1428 Parts 1, 2, 3 and 4 – Design for Access and Mobility.

Facilities to support bicycle riding shall be integrated into greater civic design. Considerations include:

- Areas of high use along the shared pathways should be provided with bike racks (particularly near children's playgrounds, picnic and rest areas)
- Bubblers located near seating or stopping areas
- Bicycle facilities designed and constructed in accordance with the RTA's NSW Bicycle Guidelines and Austroads – Section 14 Bicycle Standards
- Regular tree planting for continuous shading

#### Lighting

Main pathways and night-time thoroughfares should be defined and may require lighting relative to nocturnal use levels and requirement



*Top left: Timber boardwalk, handrails only where necessary. Top right: Information signage inserts into boardwalk. Bottom left: Timber boardwalk over water, architectural handrail. Bottom right: Preserving soft edges to the water in key locations.*



for greater levels of safety. Generally, public open space should not be lit at night, to minimise anti-social activities.

**Park furniture**

Park furniture is one of the most visible and identifiable aspects of a typical urban park. Qualities for furniture within the subject site include

- Selection from one consistent suite with a standard form and finish:
  - Baker Park – Timber and weathered steel with select paint finish
  - Active Foreshore – Timber and weathered steel
- Must demonstrate robust, easily maintained and fixed and require little ongoing maintenance
- Incorporate anti-skateboard features in units such as park seats

Consider anti-social behaviour as a result of incorrectly located seating areas.

The use of furniture installed elsewhere by Wyong Shire Council may be appropriate, to build upon an established suite for the local

government area. It may be possible to modify such styles to include a motif or other aspect of the design reflective of the river and/or bushland.

**Paving + Surfaces**

Paving and surfaces shall be selected from the standard palette of materials.

- Feature paving – Exposed aggregate (white – mixed ag sizes) and with coloured oxide (white)
- General paving – Plain concrete with feature panels including colour inserts, rock salt finish
- General access + seating areas – Concrete



Active River Foreshore materials, finishes and park furniture

Baker Park materials, finishes and park furniture

stabilised gravel fines. Not to be used on steep grades (over 1 in 20) and not to be used in major thoroughfares

#### Picnic areas

The existing Picnic Area located at Centennial Park adjacent to the Bridge leading south to Tuggerah Straight to be retained and enhanced. New planned picnic areas should include some sheltered and non-sheltered tables, BBQs and shade tree planting. Amenities to be close to car parking areas and other facilities such as children's play areas.

#### Children's play facilities

A number of children's play facilities are proposed, such as playground areas and a children's bike path to the Baker Park Precinct. These facilities have been designed to be located close to other complimentary activity centres such as picnic areas.

The central zone at the termination of Rankens Court includes a play/sculpture feature. This feature has been designed to become a signature focal point that draws visitors



*Top: Baker Park shade structures on periphery with seating setting. Top right: Baker Park climbing playground structure to view across the park. Right: Playground setting with integrated edges*

to Wyong Town Centre and is an identifiable feature of it. Where such facilities exist they can become popular drawcards to tourists and local residents.

**Car Parks and existing parking arrangements**

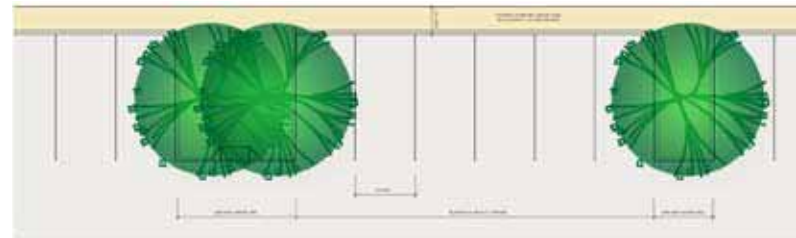
Minimum car parking requirements shall be defined by the WSC DCP 61 and designed to accommodate extensive canopy cover and planting as noted within this document. Car parks shall include regular planting and access bays.

Where possible car parks and stormwater treatments shall be integrated using swales, detention basins and/or permeable paving. Refer to stormwater treatments.

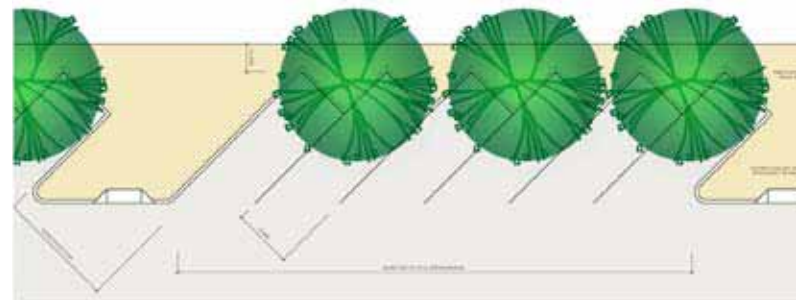
**General plant management**

All public open space should be designed to minimise landscape maintenance. Design measures include:

- Planted areas to be well prepared prior to planting. Soil to be free draining, uncompacted, well mixed with suitable levels of organic matter and contain an approved soil conditioner.
- Trees planted in turf areas must contain a minimum 1m wide mulch barrier, no machine maintenance (mowers + whipper snipers) should encroach into mulch area. Mulch to be replenished regularly.
- Provide hard mowing edges to define garden beds. Hard edges may include concrete edge strips, steel edges and/or hardwood timber edges.



perpendicular parking with tree planting.



angled parking (45 degree) with tree planting.



parallel parking (45 degree) with tree planting.



A-symmetrical tree planting for areas with overhead powerlines.

Figure 30: Baker Park car parking landscape details

- Plants must be hardy, where possible native and where suitable indigenous.
- Regular spacing for tap and/or quick coupling valve.

#### Turf areas

Turf is relatively high maintenance requiring a regular mowing and maintenance program. Costs of turf can be far greater than planting beds considering long term maintenance requirements. Turf also has very low ecological benefits and can increase pollution levels. Therefore, the use of turf must relate to the anticipated function.

Regular turf maintenance treatment programs should be considered to improve drought resistance, grass cover and reduce compaction of heavily used areas. Turf varieties should be selected for drought resistance and low maintenance (fertilising). Turf such as Zoysia may be a more effective alternative to traditional Couch.

#### Weed management

A weed maintenance regime should be considered to minimise weed cover relative to stands of indigenous bushland and relative to public exposure. Generally, weeds must be removed and safely discarded prior to soft landscape works. Where appropriate, weed clearing may be undertaken using chemical means, however, where there is a risk to existing native site vegetation or vegetation adjacent to the site, weed removal must be undertaken by hand. A bush regeneration program should be

considered for areas intended to be returned to indigenous plant communities and/or the managing stands of indigenous vegetation.

Species selection for future planting areas should be considered based on ability to out compete major weed species.

#### Soil management

The site's soils are generally altered and the result of extensive filling. Existing soil, particularly within the Baker Park precinct, should be tested by an approved soil laboratory and treated as necessary. Samples should be taken from a variety of locations and treatments specific to those locations rather than a single predefined treatment solution.

#### Trees

The following guidelines should apply to tree selection and placement:

- All trees are to be sourced from accredited Natspec suppliers accompanied by written Certification that the trees are true to type and grown to Natspec standards.
- Trees must be planted in accordance within an approved root control device or structural soil vault where trees are designed within



*Retaining character of the Spotted Gum Forest along the river*



*Custom tree guards on highly visible trees*

paving to avoid pavement damage.

- Location to comply with RTA clear zones.

### Stormwater Management

Stormwater management systems and Water Sensitive Urban Design (WSUD) should be integrated into all future development concepts to improve water quality and river health. WSUD water treatments should be integrated into a network of treatment systems, known as a 'Treatment Train'. No single stormwater treatment can treat all pollutants. A treatment train may include:

- Absorption and bio-retention swales - to remove fines and gross pollutants.
- Permeable paving – to increase subsurface penetration and minimise run-off.
- Retention basin – to remove suspended solid.
- Gross Pollutant Trap – to remove gross pollutants.
- Shallow detention basin – to remove suspended solids and heavy metals.



*Top: Gravel parking areas with swales for level parking areas. Top middle: Swale in median strip, rock spalling used to manage erosion and reduce compaction through vehicle access. Top right: Permeable pavers with gravel infill for areas with greater fall and likelihood of erosion. Bottom left: Artificial creek system with varying sized rocks and macrophyte. Bottom right: Cement stabilised gravel fines with drainage swale adjoining, is a cheap material, allows permeability.*

## RECOMMENDATIONS

### DEVELOPMENT ADJOINING WYONG STATION

The master plan options identify development opportunities in the land adjacent to the rail line which will promote a transit orientated development building as it will significantly increase uses in the vicinity of the transit hub.

Wyong Shire Council should undertake discussions with Railcorp, Roads and Traffic Authority and other tiers of Government to investigate development opportunities close to the Northern Rail Line and Wyong Station.

### CAR PARKING FACILITIES

Council should investigate Joint Venture Development to improve public car parking in a number of key locations including options with Wyong Race Club to have a joint use carpark on the Race Club's land adjacent to Rose Street and opposite Wyong Sports and Tennis Club.

It is noted that the Race Club mainly have week-day meetings with the occasional races on Sundays, no races are held on Saturdays. The netball courts are used on Saturdays between April and August which present few conflicts.

### IMPLEMENTATION

The full implementation of the Active River Foreshore and Baker Park Precinct Master Plans will be dependent on a number of factors:

- Availability of capital works budget to realise key infrastructure works and detailed staging to meet specific financial streams available to Council.
- Detailed Staging requirements relating to major proposed infrastructure works such as:
  - The Performing Arts Centre or Multi-Function Community Centre
  - The Active River Promenade
  - Bridge link to Wyong River South Bank
  - Upgrade to Railway Overpass to Pacific Highway
  - Implementation of integrated car parking Strategy to Baker Park Precinct including Wyong Race Course
- The tendering and take up of key development nodes and associated public realm improvements.
- The commencement of the next stage of consultant studies to further test, resolve and document each of the Master Plan key features.
- Finite staging/ costing cannot be determined until each of the above are further resolved.

Any preferred staging of the Wyong Active River Foreshore and Baker Park Precincts would therefore be indicative and is necessarily flexible with each element able to be staged into a sequence of component parts.

### FUNDING OF PUBLIC INFRASTRUCTURE

Council should seek to engage other government and private sector entities to offset costs and mitigate some of the risks involved in the project and to assist in providing funding for common user infrastructure associated with the development, such as the realignment of roads, bridge links, pedestrian walkways and the like.

At this stage, the scale of the Active River and Baker Park precincts should be investigated for potential to generate a Public Private Partnership (PPP). In this instance, private sector involvement is more likely to involve property developer providing some economic infrastructure and community facilities and part of a residential and commercial development adjacent to the riverfront. Projects that could be developed through a PPP include: the Performing Art Centre, the Aquatic Centre, the 3000 seat stadium to Baker Park and potentially the multi-storey parking structures to Baker Park and the Rankens Court.

Wyong Shire Council will likely need to fund common-user infrastructure through the S94 Plan for public domain areas including Children's play areas to Baker Park, boardwalk along Wyong River and connection to Wyong Town Centre at least in the first instance.

The best outcome for Wyong Shire Council would be to secure some seed funding under

State Major Projects and/ or Commonwealth programmes such as the Commonwealth Regional Assistance Programme. In this case, the risk and costs are shared by multiple sectors.

Council should consider the preparation of an Economic Assessment Study to ascertain delivery strategy of public infrastructure .

### RIVERFRONT DEVELOPMENT KEY SUCCESS FACTORS

Common factors that assist in successful outcomes in development sites of the scale proposed within Active River and Baker Park Precincts are listed below:

- The staging of developable areas that establish essential infrastructure with the aid of government seed capital funding from at least two tiers of government.
- Necessary common-user infrastructure should be in place in order for the precincts to attract private sector development including residential interests. It is a common outcome within similar types of projects that the private sector will be attracted following public domain infrastructure being implemented.
- Easy pedestrian access and ample car parking are important, in particular to both precincts in a Region that is significantly car dependent.

Provision of LEP controls that provide incentives for redevelopment of site, such as Increased Height and FSR and bonuses for minimum lot size or a desired land use.

DCP guidelines that are both robust and flexible and promote innovative building design.

### DCP RECOMMENDATIONS

The following recommendations address key planning and design considerations that could be incorporated into a Development Control Plan (DCP) for the Active River Foreshore and Baker Park precincts.

The aim of the DCP is to allow robust and flexible controls that promote viable developments, as envisioned in the Master Plan options, in both precincts.

#### ACTIVE RIVER FORESHORE DCP

##### Public Open Space Provision

Local open space should be considered at a broader context level:

- Riverfront walkway, jogging track that crosses Wyong River should be regarded as local open space.
- Walkways that step down from Church Street and Hargrave Street in particular along Rankens Court are to be regarded as local open space.

- Provision of clear public domain areas to Rankens Court and Margaret Street and view corridors to south looking over Wyong River.

##### Built Form

The built form is integral to shaping the size and nature of the public domain to the Active River Foreshore Precinct. The proposed height and built form recommendations in this Master Plan report should inform any amendments to the current planning instruments.

In particular the following built form controls should be incorporated in the DCP:

- Provision of more floor space with higher density residential development ranging between 4 and 6 storeys.
- Encourage a continuous podium along Church Street and Hargrave Street to define street frontage.
- Maintain lower scaled development west of Hope Street along Jennings Road that is more consistent with existing character of area.
- Differentiate and emphasise Gateway Sites through use of landmark buildings in particular at the Junction of River Road and Pacific Highway and at Rankens Court.
- Corners should be addressed
- Continuous awnings along Church Street and Hargrave Street should be provided.
- Building form and location should minimise overshadowing of public open space in

particular along River Road. Promote demonstration of impacts of overshadowing on open space through different times of the year.

##### Protection of view corridors

- View corridors along Rankens Court and Margaret Street are to be promoted as a significant component of Active River Precinct Master Plan. Building Forms are to respond to view corridor vantage points.
- Promote building forms that also respond to provision of views between built forms and sharing of viewing lines to the South.

##### Housing Types and Mix

- Housing choice and mix should refer to the whole precinct not only particular lots or street frontages.
- There should be provisions for a mix of apartments, attached and semi-detached dwellings across the site.
- The housing mix should also relate to the topography of the site.

##### Sustainability - Energy Efficiency and Conservation

- The controls should promote the location of the living areas towards the north while having bedroom areas towards the south.
- Incorporate energy efficiency in the design, construction and use of buildings.

- Use alternate power sources such as solar energy where appropriate.
- Encourage recycling of stormwater for irrigation.

#### BAKER PARK DCP

##### Built Form

The proposed height and built form recommendations in this Master Plan report should inform any amendments to the current planning instruments.

In particular the following built form controls should be incorporated in the DCP:

- Provision of Medium Density Residential Buildings with low level retail space at ground floor along Howarth Street on east and western sides close to the rail.
- Reinforce the existing urban grid and block structure between Warner Avenue and Rose Street.

##### Protection of view corridors

- View corridors to recreational open space at Baker Park Sporting Fields to the east of the site should be promoted.
- Views looking north over Wyong Race Club should also be promoted.
- A view corridor from Alison Road looking east across Wyong Station to the Baker Park Precinct should also be integrated as part of any DCP control.

#### Housing Types and Mix

- Housing choice and mix should refer to the whole precinct not only particular lots or street frontages.
- There should be provisions for a mix of apartments, and attached dwellings across the site.
- The housing mix should generally be promoted as having a high quality urban character.

#### Sustainability - Energy Efficiency and Conservation

- The controls should promote the location of the living areas towards the north while having bedroom areas towards the south.
- Incorporate energy efficiency in the design, construction and use of buildings.
- Use alternate power sources such as solar energy where appropriate.
- Encourage recycling of stormwater for irrigation.

- Encourage collection of rainwater for use in building amenities.

#### Car parking

- Ensure all future residential developments provide for 100% of their own parking requirements including visitor and service vehicle requirements.
- Retail and special use developments to provide 90% of their parking requirements on site within basement car parking.