

BRIMBIN NEW TOWN STRUCTURE PLAN REPORT



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Prepared for



By

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1.0 INTRODUCTION- Overview

1.1 Project History

In December 2010 Roche Group submitted a formal application to the Department of Planning & Infrastructure (Department) for the rezoning of the entirety of the land north of Taree referred to as Brimbin New Town, from RU1- Primary Production, RU4- Rural Small Holdings and E2- Environmental Conservation to a new mixed- use community consisting of low and medium density residential, a commercial centre and employment land. It is also proposed to set aside a significant amount of land for conservation purposes.

The Department advised, that prior to supporting the request to rezone the entire landholding, it would require further design analysis of the proposed Structure Plan and supporting information.

A comprehensive design review has now been undertaken for the whole of Roche Group's land holding focusing on the following areas as identified by the Department

1. The vision and the specific urban design and sustainability criteria upon which the town will be developed;
2. Context (its role and relationship with Taree) and rationale;
3. The proposed staging of development, the distribution of land uses (based on the land capability suitability, and economic assessment and good urban design principles);
4. The State and local infrastructure requirements, staging and preliminary costings;
5. Site access and required road upgrades and their staging (both on and off the site);
6. The environmental and conservation initiatives;
7. The broad scale open space and pedestrian and cycleway network;
8. Utility upgrade requirements;

9. Bush fire, aboriginal cultural heritage and other constraints; and

10. All the other matters as required by the project brief.



Figure 1. Taree Wingham Urban Growth Plan (1991).

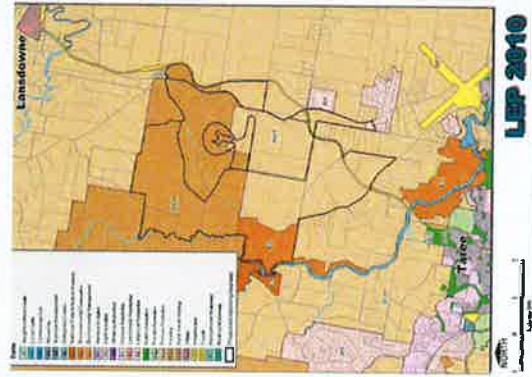


Figure 3. Greater Taree City Council LEP (2010).



Figure 2. Mid North Coast Regional Strategy (2009).



Figure 4. Planning Proposal- Rezoning of Land at Brimbin (2010).

1.0 INTRODUCTION- Strategic Context

1.2 Mid- North Coast Regional Strategy + Structure Plan Requirements

The Mid- North Coast Regional Strategy (refer to Fig.2) was released in March 2009 and identified the following principles pertinent to this Structure Plan:

- Appropriate balance of development against high conservation values;
- Identification and protection of key conservation values, regional conservation and habitat corridors, ability to maximise new development on cleared areas;
- Maximise the locational opportunities of the site- such as context to adjacent major employment area and Taree;
- Appropriate release of land consistent with infrastructure provision.

In addition, the Department, in consultation with Council, requested the Structure Plan to:

- Articulate the vision, context and rationale and expected timing for the implementation of the Brimbin New Town;
- Describe the type of community proposed, the desirable size having regard to its relationship with existing Taree Centre and the required infrastructure provision, employment opportunities and conservation initiatives embodied in the proposed development and its implementation;
- Identify the location of future residential, rural living / employment, retail, commercial, industrial, conservation, open space and other recreational and community uses;
- Provide a demographic and market analysis;
- Determine appropriate housing types and location within the new community and open space requirements;
- Provide a breakdown of likely demand for employment land into retail, commercial, light industrial and industrial.
- Identify local and state infrastructure requirements

- such as major roads and additional links as required, rail including crossing and alignment upgrades, schools, health facilities, emergency services facilities, water, sewer, electricity, telephone, bus services, local facilities- open space, libraries and community halls;
- Articulate a road hierarchy, identify additional roads and required upgrades;
- Review existing capacity and service limitations for sewer and water, electricity, telephone and services;
- Articulate development staging;

This document should be read in conjunction with the Planning Proposal and supporting specialist reports, as collectively they respond to both the requirements of the Mid- North Coast Regional Strategy as well as those requested by the Department and Council.

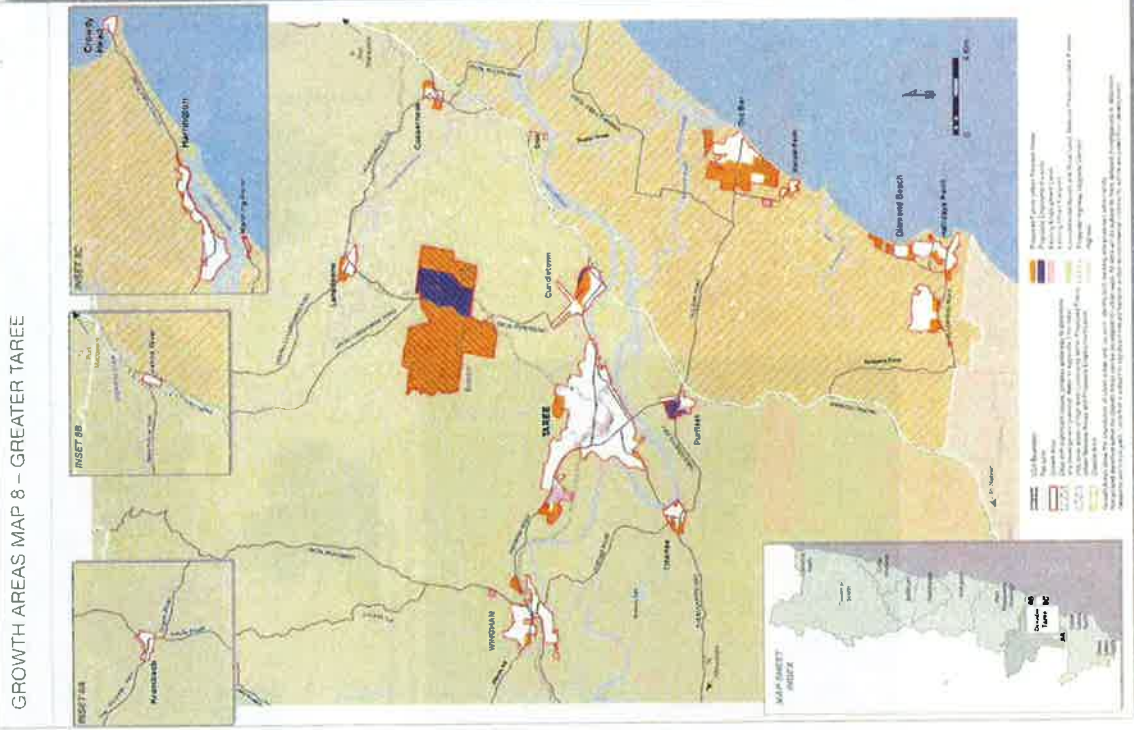


Figure 5. Mid North Coast Regional Strategy- Greater Taree Growth Areas

1.0 INTRODUCTION- Strategic Context

1.3 Regional Context1 - Role + Relationship With Taree

The Brimbin New Town will strengthen the role of Taree as a Major Regional Centre. It will enhance the Greater Taree Local Government area as a regional inland destination and provide the catalyst to enable the region to compete with coastal towns thereby removing development pressure from more sensitive coastal areas.

Historically, inland regional towns have struggled to compete with coastal towns which offer a quintessentially Australian lifestyle and unique landscape. However, it is envisaged that the development of the Brimbin New Town will help to position the region as a destination in its own right, leveraging off the natural amenity of the Manning River, the complementary centre of Taree, the amenity of the Dawson and Lansdowne Rivers and the two picturesque lakes; one with a pedestrian prioritised urban character and the other servicing agricultural lands providing an eco- tourism focus for the region.

The natural beauty and amenity offered by these towns will provide a 'tree change' alternative to people wishing to live or holiday in regional New South Wales. It will offer an affordable alternative to retirees and the ageing population, which now represents a significant proportion of both the existing and future population.

At full development in 30 years, Brimbin New Town is expected to accommodate a population of approximately 22,000 people which will significantly increase the population catchment of Taree and reinforce its role as a Major Regional Centre. Taree will provide weekly and higher order services for the new Brimbin community and this increased population base is likely to be a catalyst for new business opportunities. This growth will underpin the economic viability of Taree and provide Council with the opportunity to consider ongoing investment in a range of initiatives that will further enhance Taree such as: additional work along the riverfront, further activation of the main street, improved connectivity to the river and the introduction of a second armature to the town through the establishment of cafes, restaurants, riverfront greens and continuous cycle and pedestrian paths along the river foreshore.

The daily needs of the Brimbin community will be met through the proposed Mixed-Use Centre at Brimbin which will be within walking distance for many residents. It is envisaged that the centre will accommodate a supermarket and a discount department store.

There is an opportunity within the proposed Mixed-Use Centre at Brimbin to locate higher some order uses, such as regional medical facilities, which require significant land areas that may not be available within Taree.

The Mixed-Use Centre will be designed to become a destination in its own right. Traditionally, activity centres rely on exposure to passing traffic or the potential movement economy in order to capture the most business. Taree is located in close proximity to, and has strong connections with, the Pacific Highway. Conversely, the Brimbin local centre has been internally located at the lake increasing its accessibility for pedestrians, cyclists, and day trippers.

The location and natural features of the site define and contain the development footprint of the Brimbin New Town, ensuring that the Brimbin Mixed-Use Centre will remain a lower order centre, with Taree as the higher order, regional service centre. At a regional level, the conservation and rural lands surrounding the site limit further urban expansion, and locally, the 'green fingers' of the riparian corridors that feed into the lake establish the new town as a series of villages in the landscape which enable the natural systems to grow and intensify, rather than the size of the centre.



Figure 6. (Above) Movement economy- based centre of Taree and future internalised local centre at Brimbin New Town.



Figure 7. Taree main street/ centre has been built either side of Victoria Street to capitalise on passing trade from Pacific Highway and surrounds

1.0 INTRODUCTION- Strategic Context

1.4 Land Ownership

- The Brimbin New Town site has an area of 3,763 hectares and has been owned by Roche Group since 2003. The large scale and single ownership of the site presents a unique opportunity to realise an integrated urban community that not only complements the existing Taree township but provides employment opportunities for the new and existing communities.

heights reaching 66m AHD. Feeding into these lakes are a number of creeks and streams and associated riparian zones.

1.5 Site Location + Physical Context

- The Brimbin New Town site is located on the mid-north coast of New South Wales, in the Manning Valley, approximately 8 kilometres to the north of Taree, on Lansdowne Road within the Greater Taree Local Government Area (LGA) (refer to Fig 6). The historic township of Taree is located approximately 80 kilometres south of Port Macquarie and 35 kilometres from Foster- Tuncurry. The main access to Brimbin is via Lansdowne Road connecting onto the Pacific Highway via Cundletown.
- The subject site is bounded by Dawson River to the west, Lansdowne River to the east (the two main tributaries of the lower Manning River), Melinga township and farmland to the north and adjoining properties that front Kundie Kundie Road and Brimbin Road to the south and southwest respectively. The landholding is bisected by Lansdowne Road and the North Coast Railway line running in a north- south direction. It is proposed to realign the road and railway line to create a straighter and more efficient alignment.
- Development adjoining the site includes the UGL engineering works and Riddleys agricultural feed mill. The Brimbin Nature Reserve occupies 50 hectares to the west of Dawson River.
- The site is characterised by two picturesque lakes, one on the western side of Lansdowne Road and one to the east. These lakes can be viewed from key vantage points within the site with maximum

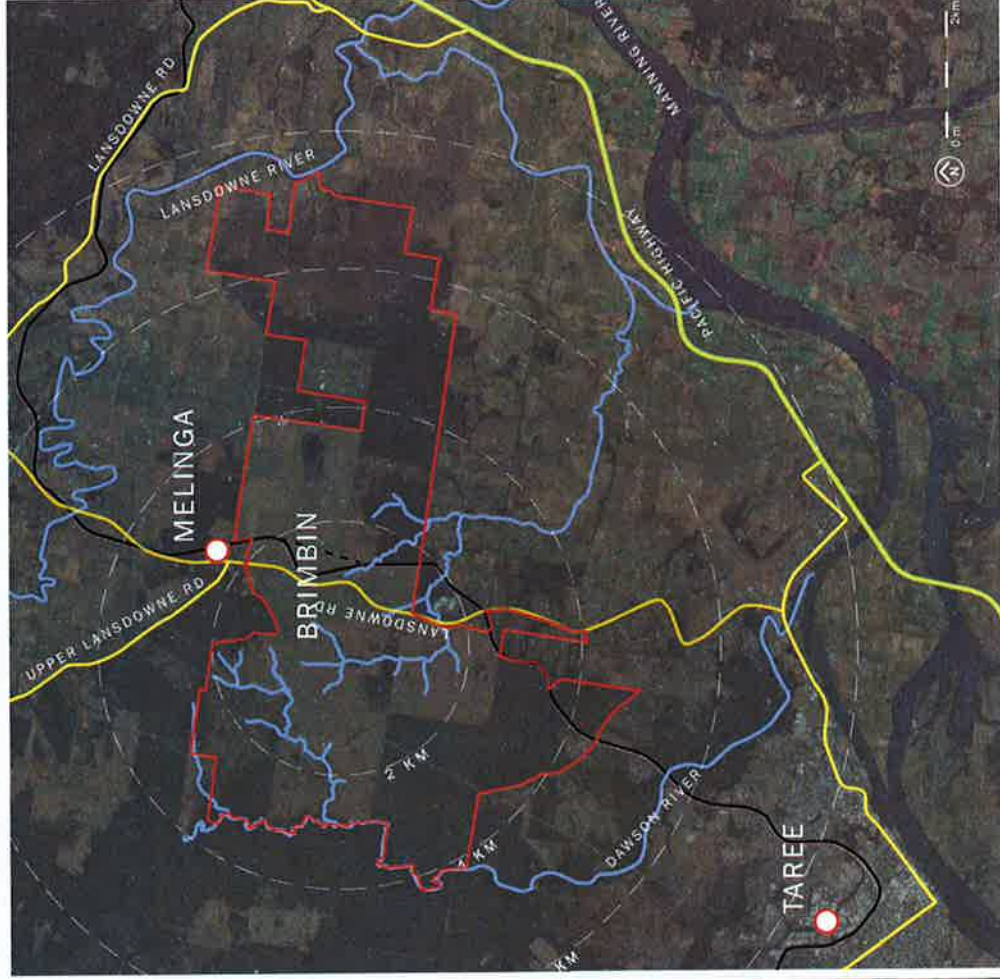


Figure 9. Roche Group landholding (subject site for Brimbin New Town) and immediate surrounds.



Figure 8. Brimbin aerial view looking east (taken in 2004).



1.0 INTRODUCTION- Strategic Context

1.6 The Development Pattern

The proposed development pattern respects the natural ecology of the site and has largely been sited on land already cleared thereby minimising the impact on the landscape. Where vegetation is proposed to be cleared appropriate offsets are proposed to mitigate any environmental impacts.

The design of the Brimbin New Town reflects a neighbourhood development pattern based on:

- An interconnected network of walkable neighbourhoods, centres and open spaces;
- An exclusion of land, with slopes greater than twenty percent, for development;
- Protection of key riparian corridors, creeks, water courses and floodways as discernible edges to the neighbourhoods;
- Retention of significant existing vegetation for conservation;
- Protection and enhancement of key view lines, corridors and high points;
- Utilisation of the ridgelines for major neighbourhood avenues, a strategic entry and connectivity with the Mixed-Use Centre and lake;
- Locating lower density urban development, in the form of eco-hamlets, on land with steeper grades and a sensitive interface with adjoining natural bushland or riparian corridors; and
- Locating Neighbourhood Centres, schools and playing fields where they can be shared between neighbourhoods providing ease of access for pedestrians and cyclists resulting in reduced vehicle trips, increasing numbers of students walking and cycling to school, promoting healthy living outcomes.

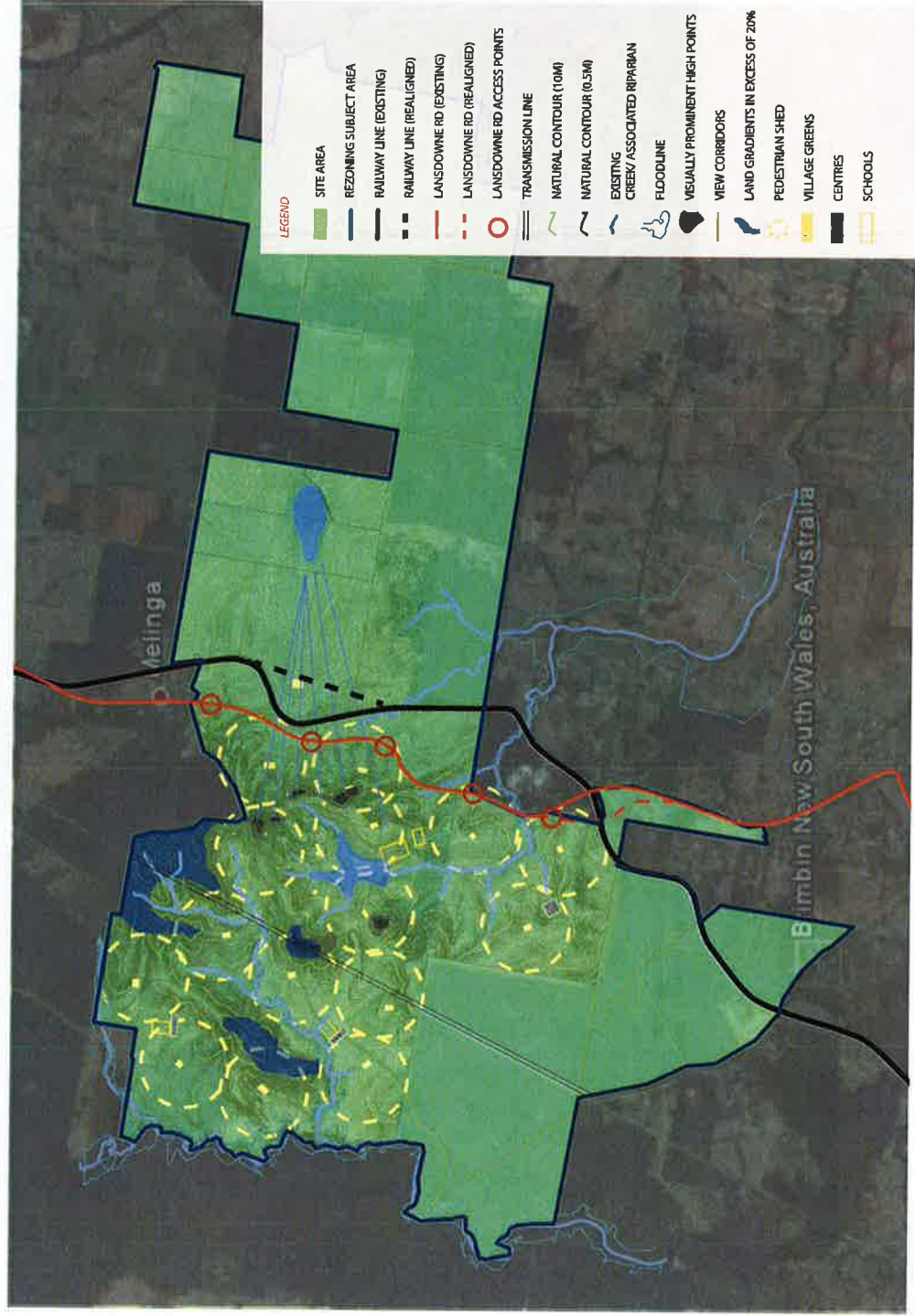


Figure 10. Brimbin New Town Site Analysis Plan.

2.0 THE VISION

2.1 Visioning Workshop

The Brimbin New Town Visioning Workshop was held in April 2010 at Harrington Waters Estate. It was a collaborative process, involving the landowner and the consultant team, aimed at developing the best outcome for Brimbin New Town and the broader Taree community. The workshop commenced with a comprehensive review of the extensive work previously undertaken, followed by a rigorous design review to refine and enhance the original Structure Plan to ensure an outcome that will guide set the foundation for an authentic, mixed-use, diverse, walkable community.

The Structure Plan presented within this report is the outcome of the Visioning Workshop and subsequent modifications to address matters raised by the Department, various Government agencies and the Council.

OBJECTIVES OF THE WORKSHOP

The purpose of the workshop was to:

- Gain an understanding of the vision and analysis that had informed the Structure Plan to date;
- Define and explore the opportunities of the site within the broader Taree context;
- Test and refine the Structure Plan, with a;
- Focus on the outstanding issues identified by The Department and Council;
- Establish a robust urban pattern responsive to the local context and site features, using the neighbourhood as the main structural element and the overarching principles of Traditional Neighbourhood Design;
- Establish a design proposal and delivery strategy.



COMPLETING THE VISION

This Structure Plan Report captures the vision for the Brimbin New Town which will lay the foundation for a mixed use community of 22,000 residents, 8,000 homes and associated employment opportunities to support local and regional demand.

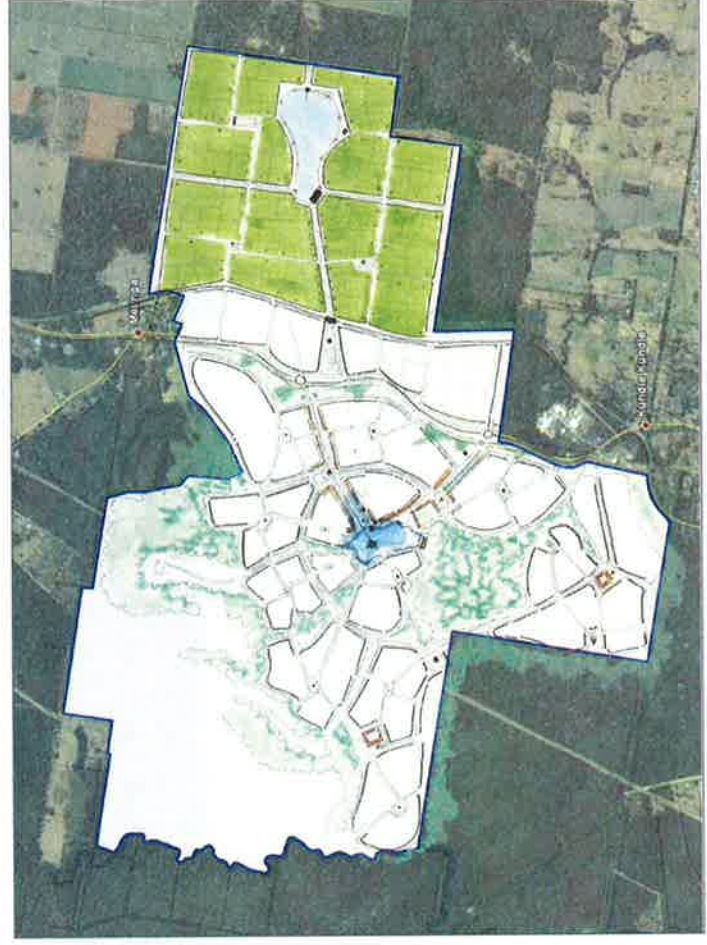


Figure 11: April 2011 Brimbin Visioning Workshop project team site inspection (left) and Brimbin draft Structure Plans prepared during the Visioning Workshop (centre and right).

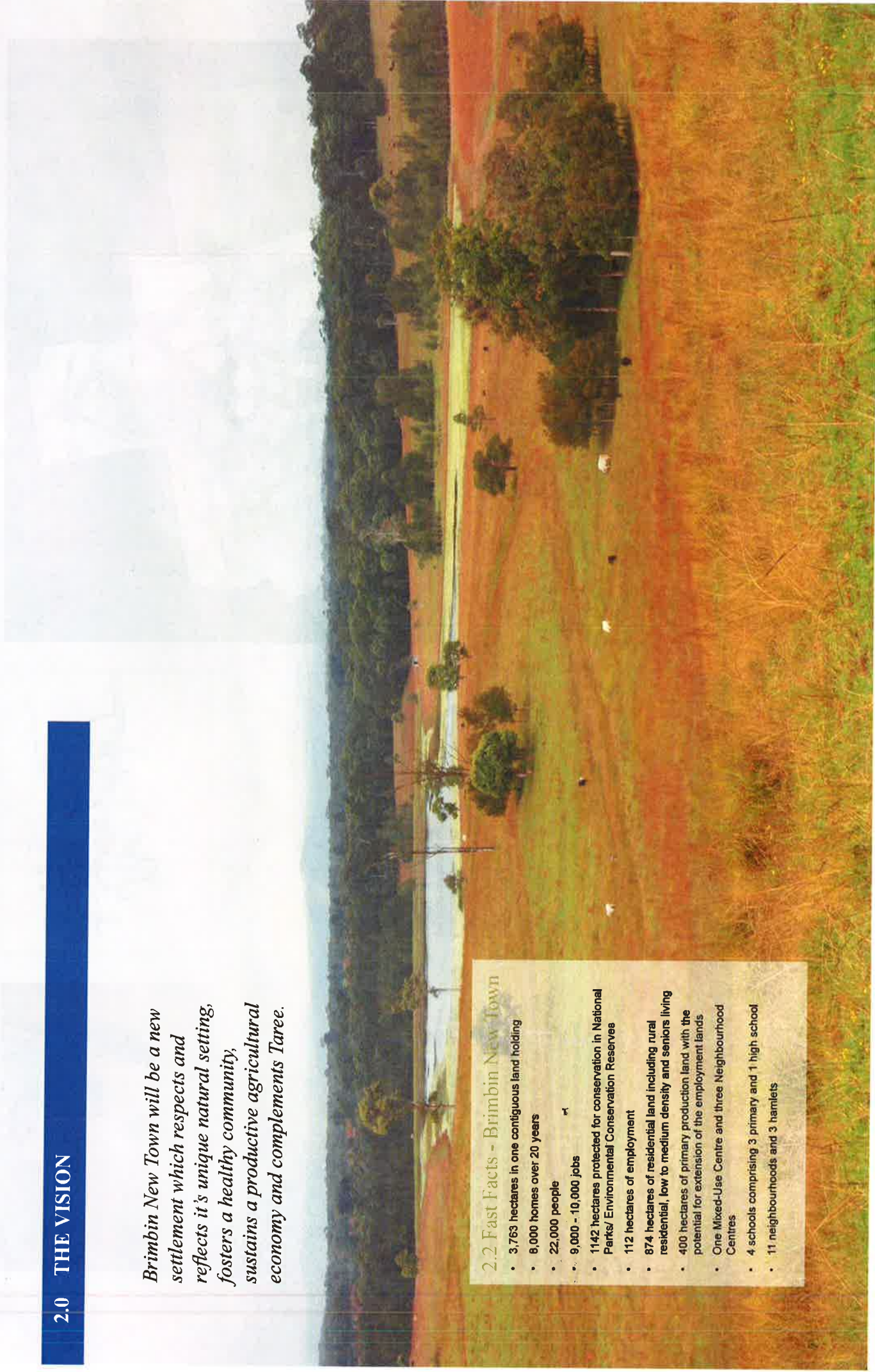


2.0 THE VISION

Brimbin New Town will be a new settlement which respects and reflects it's unique natural setting, fosters a healthy community, sustains a productive agricultural economy and complements Taree.

2.2 Fast Facts - Brimbin New Town

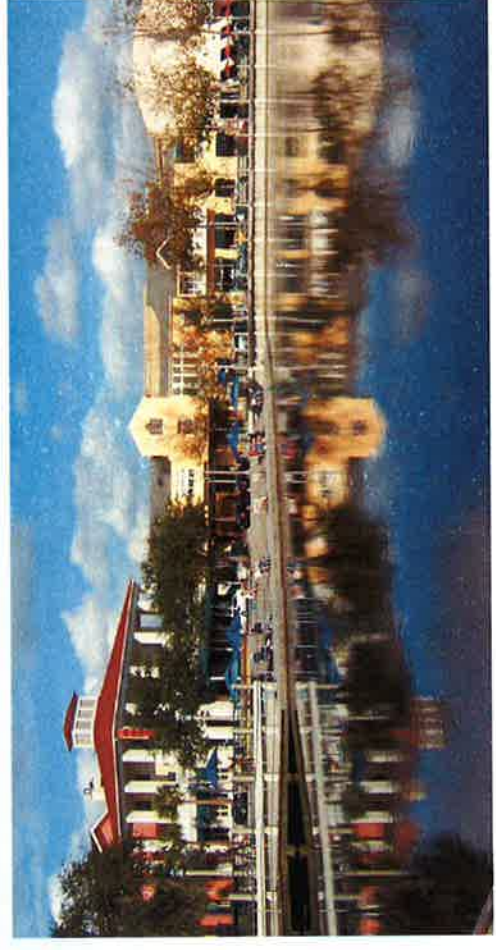
- 3,763 hectares in one contiguous land holding
- 8,000 homes over 20 years
- 22,000 people
- 9,000 - 10,000 jobs
- 1142 hectares protected for conservation in National Parks/ Environmental Conservation Reserves
- 112 hectares of employment
- 874 hectares of residential land including rural residential, low to medium density and seniors living
- 400 hectares of primary production land with the potential for extension of the employment lands
- One Mixed-Use Centre and three Neighbourhood Centres
- 4 schools comprising 3 primary and 1 high school
- 11 neighbourhoods and 3 hamlets



2.0 THE VISION

2.3 Brimbin New Town will:

- Lay the foundation for a sustainable and self contained township for 22,000 people and 8,000 dwellings;
- Be a mixed- use community with a high level of jobs, education and community facilities;
- Create an additional population catchment to support the ongoing growth capacity of Taree;
- Complement and support Taree;
- Provide diverse employment opportunities for the Brimbin community both in the short term early construction stages, through to longer term opportunities servicing the Brimbin New Town community;
- Provide a connected community of residential neighbourhoods, adjoining employment lands, historical primary production lands and the potential for future transit oriented mixed- use development;
- Be a strategic hub at the nexus of freight rail and road transport;
- Set aside a significant portion of land for conservation purposes to retain the natural landscape and ecological values of the site and create a regional corridor connecting 'River to River' and beyond;
- Reflect the timeless principles of traditional neighbourhood design (TND) by promoting urban development in discrete neighbourhood units to limit the township's carbon footprint and to preserve natural bushland settings;
- Establish a connected system of open space both within the site and through into the adjoining conservation areas and broader regional systems;
- Provide extensive opportunities for pedestrians and cyclists to experience the open space system, from the natural settings of the conservation area and riparian systems through to an integrated urban lake experience allowing variety and choice for users and promoting healthy living;
- Provide for new schools and specialised education facilities centred around special needs students, environmental innovation, community health initiatives, agriculture and the local food movement;
- Establish business and employment uses that complement and supplement Taree;
- Utilise an integrated water management system to minimize potable water usage and reliance on regional service infrastructure;
- Utilise 'Light Imprint' stormwater management techniques to provide low- impact sustainable solutions that reduce infrastructure, building footprint and stormwater runoff;
- Be delivered through a genuinely collaborative process which will encourage contribution from all key stakeholders.



2.0 THE VISION

2.4 The Structure Plan Framework

A Vision for the foundation of a new community at Brimbin

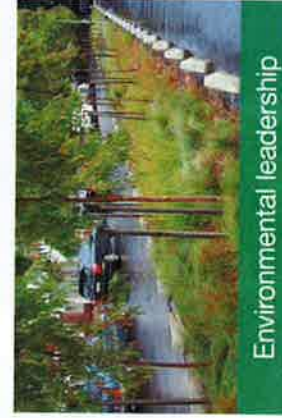
Brimbin New Town will be a new settlement which respects and reflects it's unique natural setting, fosters a healthy community, sustains a productive agricultural economy and complements Taree.



Community wellbeing



Economic vitality



Environmental leadership



High quality built environments

Four pillars toward creating a healthy, sustainable, self-sufficient community where residents can live, work and play.

3.0 STRUCTURE PLAN PRINCIPLES

3.1 The Structure Plan

The Structure Plan for Brimbin reflects sound planning and design principles that will ensure the preservation and celebration of the natural features, amenities and opportunities of the site.

The Structure Plan will provide:

- A Mixed-Use centre that is the focus of a series of residential neighbourhoods and hamlets;
- Approximately 112 hectares of employment land;
- A network of interconnected thoroughfares and linear open space systems encouraging walking and cycling as a viable alternative to private vehicle use and providing a robust structure for a future public transit system.
- A diversity of open spaces, community facilities and Neighbourhood Centres located within and between neighbourhoods provide ease of access and leveraging off the amenity arising from the natural assets and riparian corridors of the site;
- A variety of lifestyle opportunities that will seamlessly integrate with the natural landscape, minimising the impact of development on the natural assets of the site.

The Structure Plan provides a robust framework to deliver an authentic place of lasting value founded on the following principles and structuring methods:

- Traditional Neighbourhood Design;
- Community Types;
- Neighbourhood Types; and
- The Transect Approach.

The application of this methodology will be outlined in detail over the following sections.

3.2 Traditional Neighbourhood Design

The urban design of the Structure Plan reflects the principles of Traditional Neighbourhood Design (TND). The neighbourhood was the fundamental form of settlement in Australia through to the Second World War and created mixed-use, pedestrian friendly communities of diverse population mix. This has proven to be a more sustainable form of urban growth than much of the post war development that was characterised by single use car dependent outcomes.

The principles of neighbourhood design that informed the Structure Plan are described below.



(i) COMPACT WALKABLE NEIGHBOURHOODS

The neighbourhoods are limited in size so that the majority of residents are within a five minute walk (400m) of its central Village Green, which provides the opportunity for a future public transport stop and civic uses, and within a ten minute walk (800m) of a Neighbourhood Centre which will offer local shops and amenities for residents daily needs. By bringing the activities of daily life into walking distance, all people gain independence of movement particularly the young and elderly. The neighbourhood edges are also clearly defined through major infrastructure and landscape features.



(ii) CONNECTED NETWORK

Thoroughfares are laid out in a permeable network, providing alternative routes to most destinations. This allows most streets to have smaller widths with slower traffic speeds, whilst also accommodating parking, trees, footpaths and buildings. Streets are designed to accommodate pedestrian and cyclists as well as vehicles including potential long-term provision of public transport while respectful of the terrain and minimising extensive engineering impacts upon the natural land form.



3.0 STRUCTURE PLAN PRINCIPLES



(iii) QUALITY OPEN SPACES

Open space has the potential to be provided in a range of forms including specialised plazas, parks, linear riparian corridors, active and natural reserves. Each type is defined by its size, landscaping and its surrounding uses. Well designed open space should be overlooked by buildings and fronted by thoroughfares to provide a sense of enclosure and passive surveillance. To be fully functional it should be located on significant pedestrian routes or adjacent to meaningful destinations.

Where the opportunity exists to integrate the regional landscape, open space can become a broad connected network. Residents and visitors can then experience a variety of open space types with the opportunity to move from expanses of naturalistic bush and river landscapes through to more intimate and urban spaces.



(iv) MIX OF BUILDINGS + USES

There are a diversity of home options that can be accommodated across all the neighbourhoods including multi-unit dwellings, terraces, live/works, courtyard houses, lightweight eco-housing and mixed-use buildings. Additionally, a structure and framework can be provided for offices, light industry and agriculture. The buildings associated with these uses are diverse in function but compatible in size and disposition on their lots. By providing a full range of housing types and work places, age and economic classes are integrated and the basis for an authentic and lively community is formed.

There are also opportunities for a range of adaptive buildings to be located within centres that may function as residential (or even a sales office) in the early stages of development and transition over time as the community matures into commercial/retail use. Traditional homes can be located at the neighbourhood edge and lightweight rural housing in areas of increased slope and adjoining riparian zones providing a unique and desirable lifestyle option.

Vertical integration of uses, such as shop-top housing and other live-work models, can provide affordable urban living options in high amenity areas, particularly where long-term opportunities exist for transit oriented mixed-use development.



(v) CIVIC STRUCTURES

Civic buildings and structures, such as schools, meeting halls, gazebos and public art can be located within village greens and open spaces at the termination of important vistas or at key junctions. These locations enable the structures to function as important landmarks and also encourage community gatherings which are the catalyst for the evolution of a true community.

3.0 STRUCTURE PLAN PRINCIPLES

3.3 Community Types

The Brimbin Structure Plan is comprised of four primary areas: Open Space/ Conservation; Rural/ Environmental Living; Neighbourhoods; and Employment Lands. A range of uses, activities, character areas and built form are provided within these areas.

- Lansdowne Road (Existing)
- Lansdowne Road (Realigned)
- - - Railway Line (Existing)
- Railway Line (Realigned)
- - - Transmission Line
- Future Connection Options
- Neighbourhoods
- Retail/Commercial Precinct
- Employment Lands
- Rural Living/ Employment Lands
- Rural Living
- Environmental Living
- Open Space/ Conservation

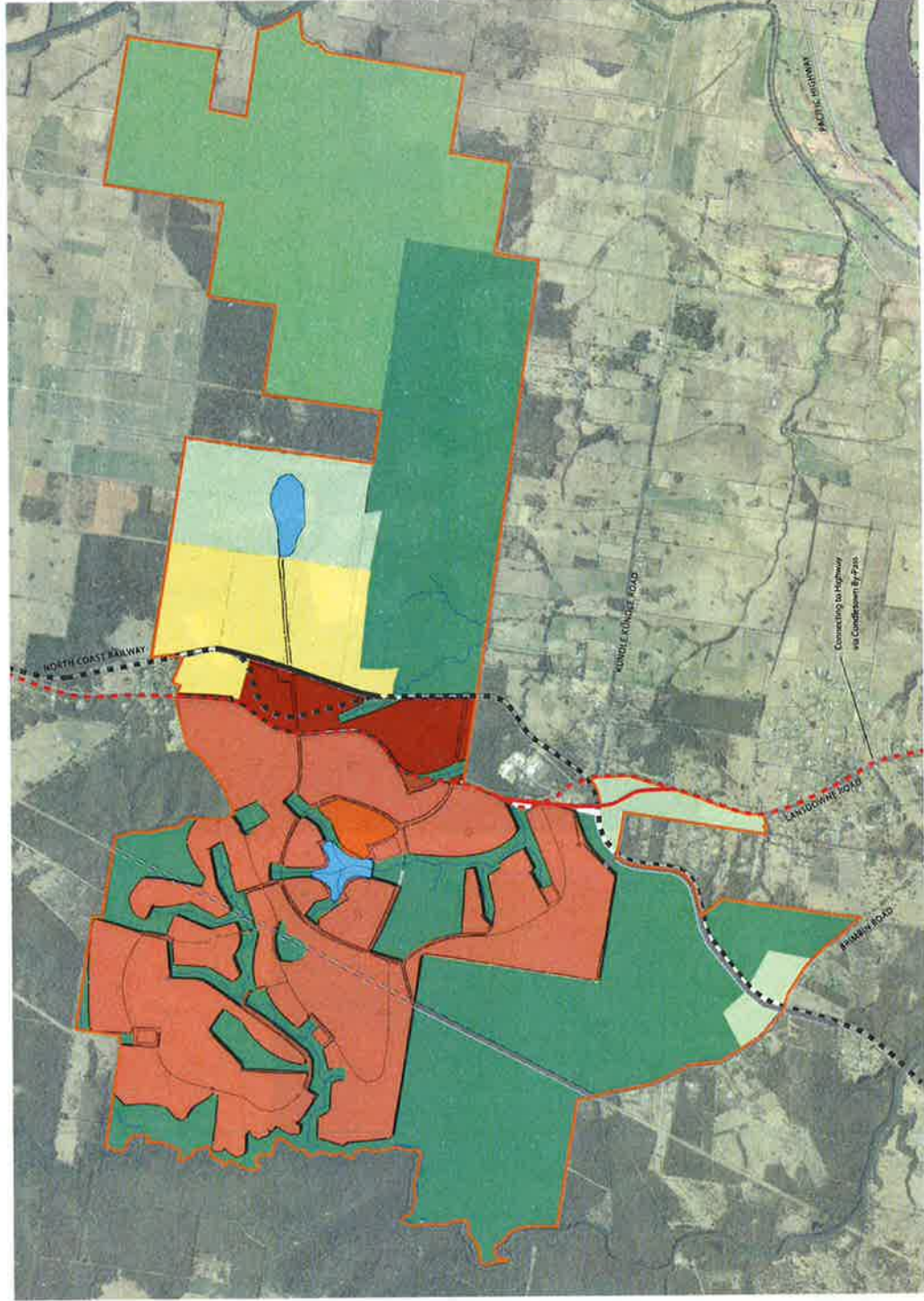
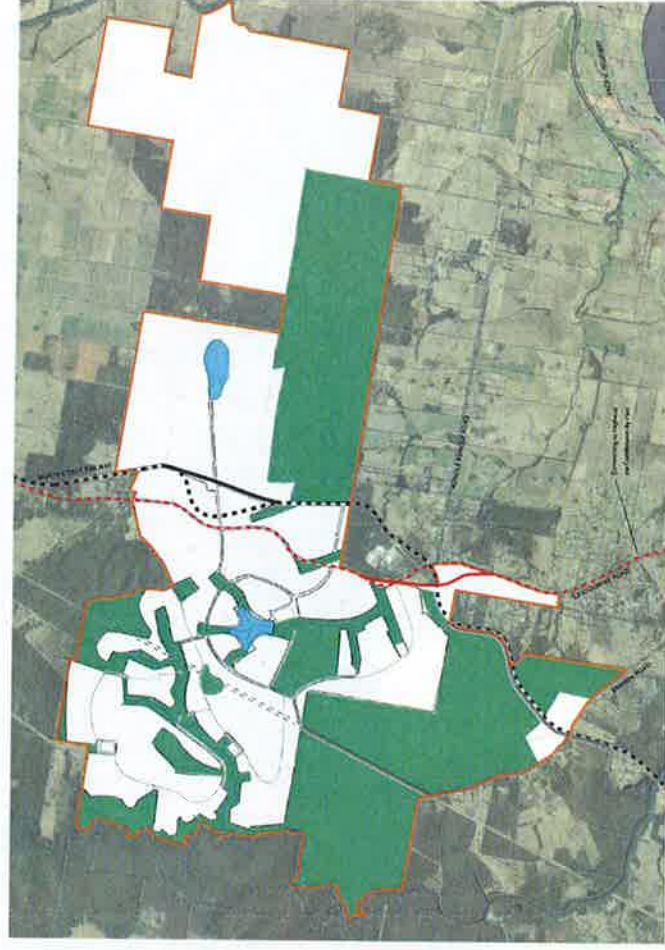
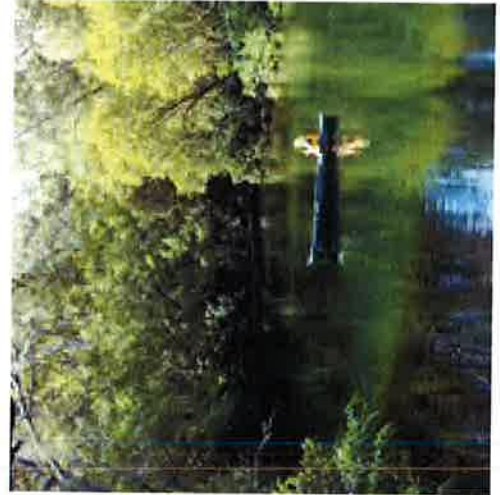


Figure 12 Brimbin New Town Community Types Plan



3.0 STRUCTURE PLAN PRINCIPLES



OPEN SPACE/ CONSERVATION

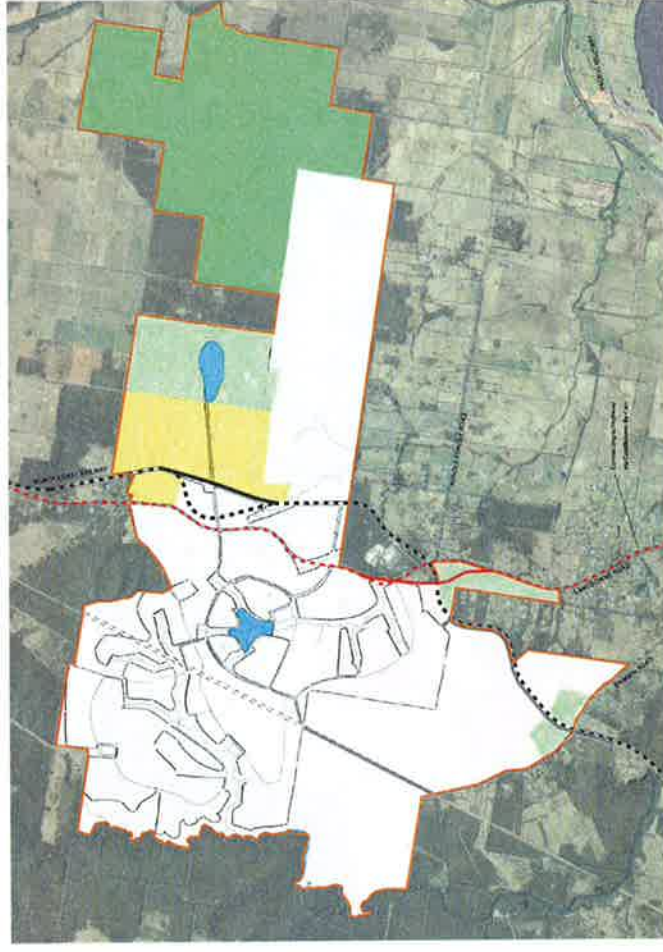
Areas allocated as open space include land set aside for conservation and rehabilitation, on the basis of its topography, hydrology or vegetation, and land classified as suitable for primary production purposes.

The conservation areas, riparian corridors and land with steep grades are generally in linear formations providing opportunities for both active and passive recreation. Whilst the predominant function is to retain these lands for conservation purposes, there are opportunities to enhance the development outcomes through alternative

interface and land use solutions such as environmental stewardship and inter-urban agriculture opportunities which would provide fresh food for the community in the form of community gardens.

Additionally, public access, hiking and bridle trails may be provided to enable wilderness experiences to occur.

3.0 STRUCTURE PLAN PRINCIPLES



RURAL ENVIRONMENTAL LIVING

The rural and environmental living areas consist of lands in an open or cultivated state and sparsely settled. The areas may contain some existing vegetation or be agriculturally capable land but are predominantly land with a rural landscape quality that is desirable to be retained.

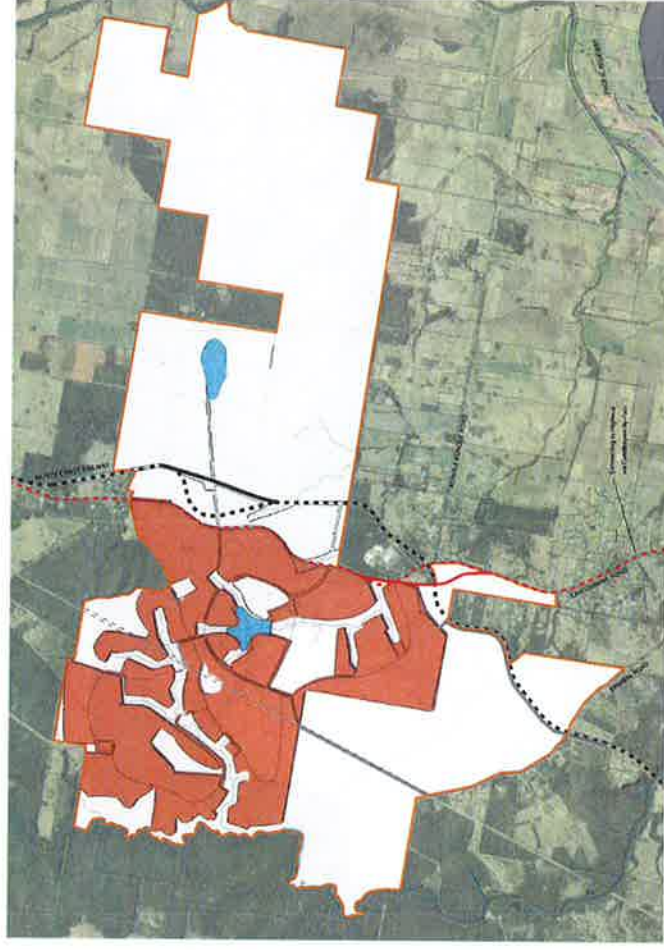
There is the opportunity for eco-living on large bushland allotments using sensitive built form construction to minimise the impact upon the natural landscape.

Agricultural settlements of varying scales could be established in this area with the primary focus being on offering a rural lifestyle in close proximity to the Brimbin New Town. Land immediately east of the railway line has the potential for future employment uses including both primary production and agricultural support industries.

Much of the environmental living land to the east of the site is flood prone and may be suitable for cluster development and environmental management.



3.0 STRUCTURE PLAN PRINCIPLES



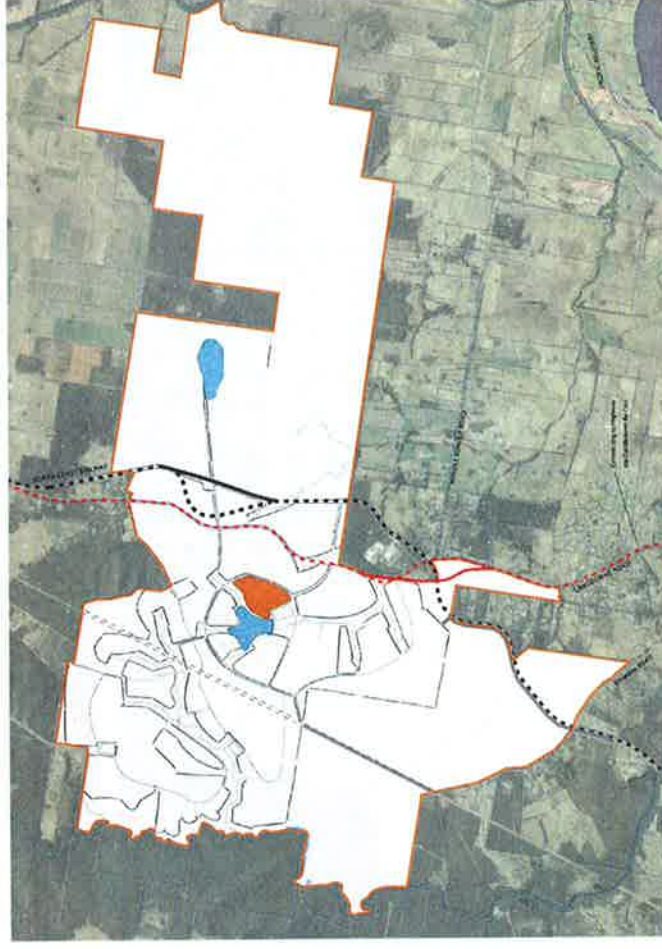
NEIGHBOURHOODS

The neighbourhoods within the Structure Plan are referred to as residential areas. Their primary function is to accommodate residential development, and it is the organisation of the neighbourhood units within the broader area which provides the structure for the new community.

Each neighbourhood is defined principally by its central space and secondarily by its edge, with the edge ideally being a 5 minute walk from the centre. Typically, the centre contains a Village Green as a

place for socialising and recreation and the edges are defined with riparian corridors and key infrastructure. Small parks are also scattered throughout the neighbourhoods to provide a range of open space types. This combination of focus and limit helps to establish the functional and social identity of the community. The neighbourhoods are also transit-ready with a connected road network linking each neighbourhood to enable an efficient future public transport system.

3.0 STRUCTURE PLAN PRINCIPLES



RETAIL/ COMMERCIAL PRECINCT

The Retail/ Commercial Precinct will have the greatest commercial intensity with the potential to significantly contribute to employment opportunities in addition to the eastern employment lands.

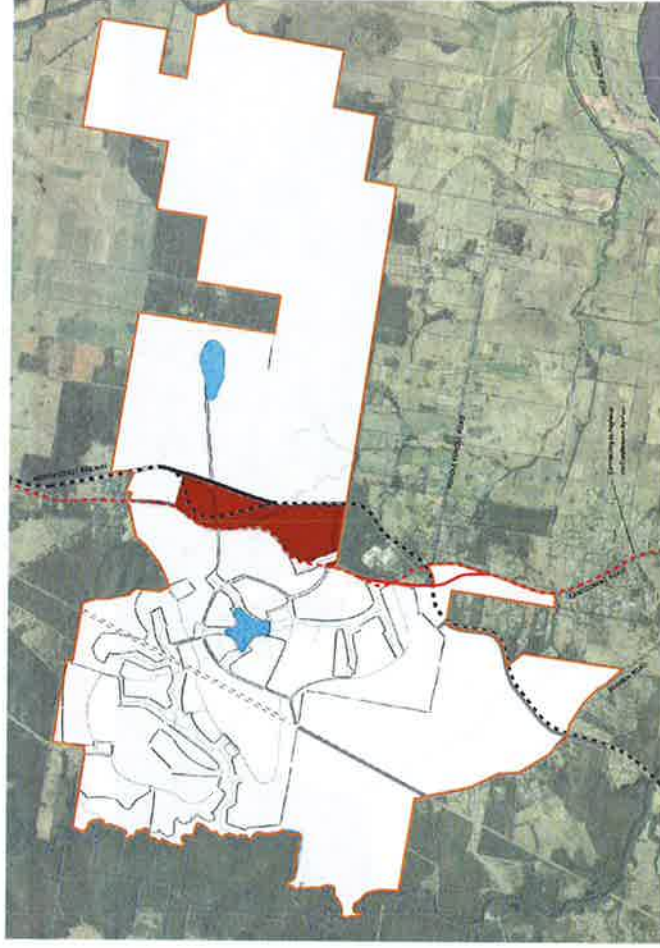
The primary function of this precinct is to service the weekly needs of the Brimbin New Town community potentially accommodating a shopping centre (supermarket and discount department store), commercial office space, medical suites and speciality shops which will capitalise on the amenity of the

adjoining lake.

The precinct will be easily accessible for pedestrians, cyclists and private vehicles. Additionally, the surrounding road network would allow the precinct to easily connect to future public transit.



3.0 STRUCTURE PLAN PRINCIPLES



EMPLOYMENT LANDS

The employment lands will provide jobs to the both Brimbin residents and existing local communities. The nature, scale and configuration of employment uses will vary from general industry through to light industry. These employment areas are easily accessible by Lansdowne Road connecting Brimbin New Town to the wider regional area. The Structure Plan provides visual and physical connectivity to, and from, the employment areas from key avenues and aspects of the local centre.

The configuration of the employment lands within the overall Structure Plan has been designed to deliver conventional employment uses but to also enable flexibility in regard to the size of lots in order to cater for new businesses to be established.

3.0 STRUCTURE PLAN PRINCIPLES

3.4 Neighbourhood Types

Within the areas designated as neighbourhoods, three key location-based neighbourhood types exist that are distinctive because of their unique natural features. These neighbourhood types include Lake Neighbourhoods, Ridge Neighbourhoods and Edge Neighbourhoods. Collectively, these neighbourhoods will achieve an overall minimum net density of 10dw/ha, however, each neighbourhood type will have a different density target reflecting its location, market conditions and other factors.

- Lansdowne Road (Existing)
- Lansdowne Road (Realigned)
- Railway Line (Existing)
- Railway Line (Realigned)
- Transmission Line
- Future Connection Options
- Edge Neighbourhood
- Ridge Neighbourhood
- Lake Neighbourhood

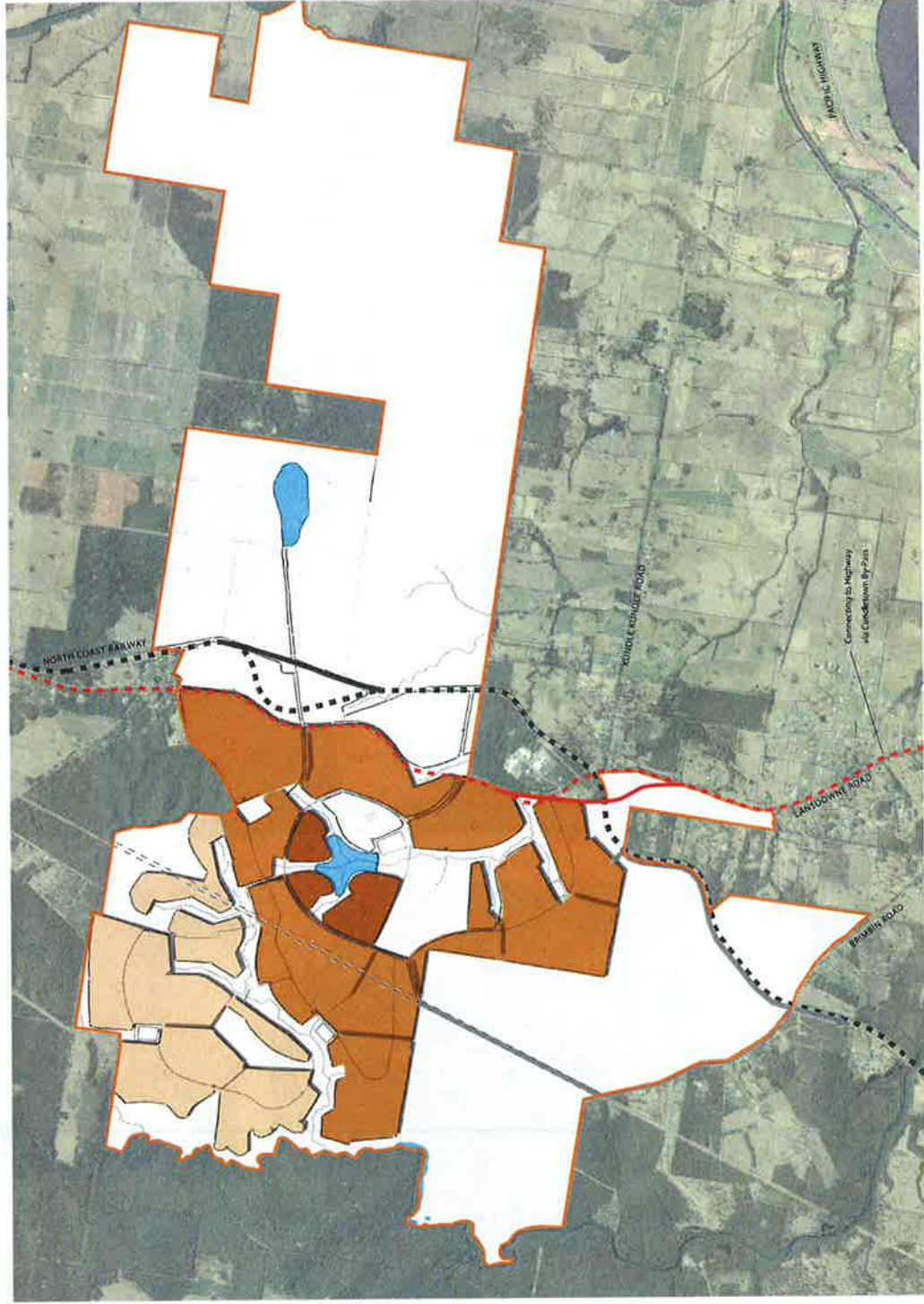
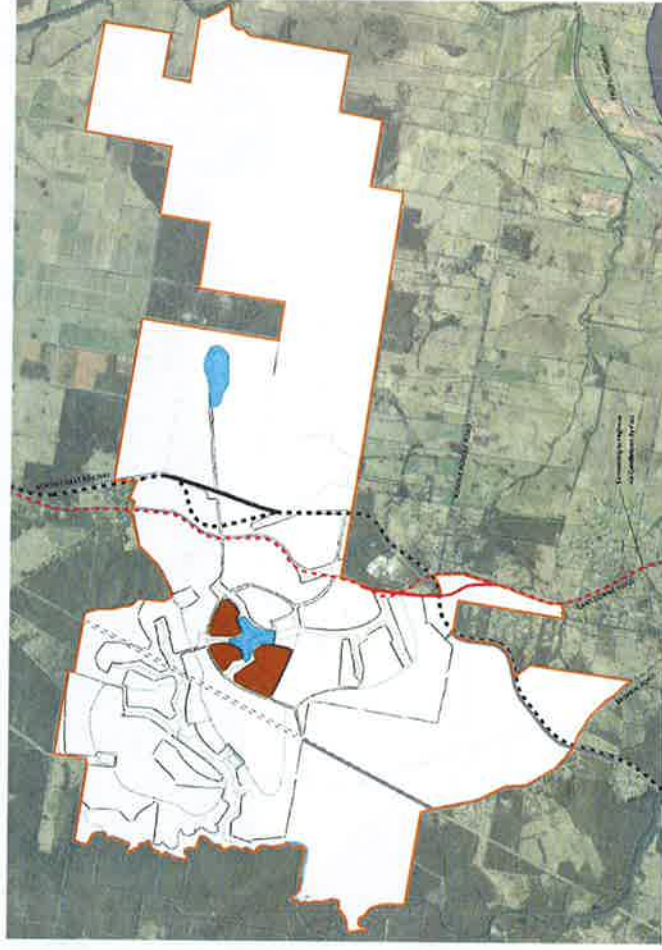


Figure 13. Brimbin New Town Neighbourhood Types Plan.



3.0 STRUCTURE PLAN PRINCIPLES



LAKE NEIGHBOURHOODS

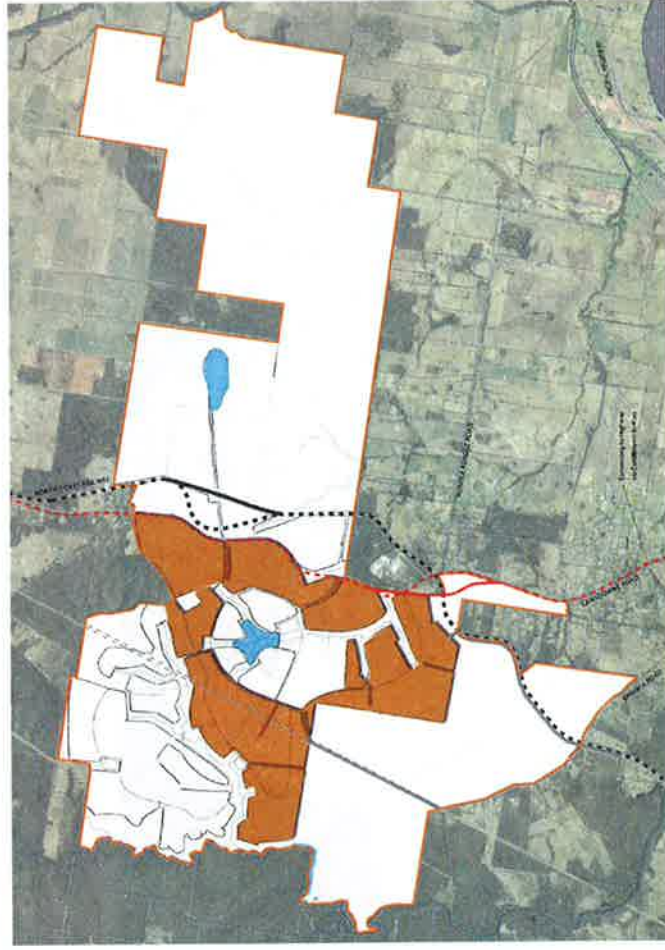
The lake neighbourhoods comprise mixed-use neighbourhoods framing the existing western lake. They may provide a range of businesses, medium density residential accommodation, seniors housing, shops, dining, recreation and other cultural activities designed to promote activity and a vibrant street life.

They may include mixed-use building types as well as townhouses, villas, live-works, apartment buildings and active street-level commercial uses. Supporting this activity are larger retail and entertainment uses

located in a mixed-use main-street environment across the lake in the commercial precinct, giving the town an identity, a community gathering point for residents and a complementary, but different, waterfront experience to that of historic Taree, located adjacent to the Manning River.

Pedestrians and cyclists are given priority around the lake enjoying the activities, public art and urban extension of the natural open space and trails system.

3.0 STRUCTURE PLAN PRINCIPLES



RIDGE NEIGHBOURHOODS

The ridge neighbourhoods are structured to celebrate the natural topography of the site. Major avenues link the neighbourhoods via a ridge road which also enables key views of the lake to be opened up.

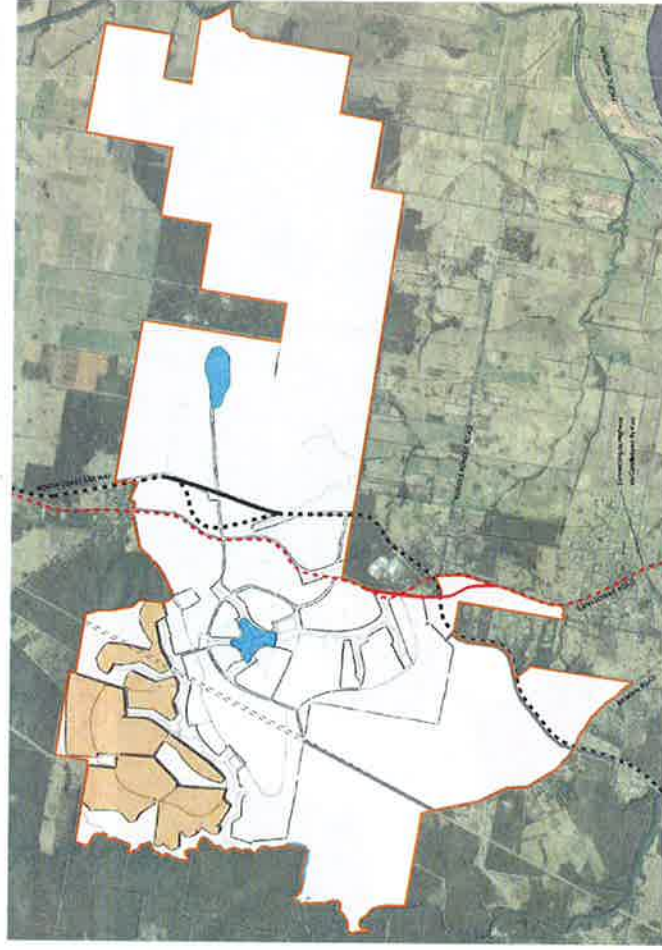
They provide the predominant residential fabric within the new town, with the flexibility to include a diversity of building types designed to accommodate a range of uses over time. These buildings may include detached dwellings, attached residential dwellings, live-works as

well as adaptive building types that begin as residential but as the project matures could also accommodate a corner store, café, post office or community activities.

Community facilities and recreational reserves are located at key locations within these neighbourhoods to ensure facilities are within walking distance for local residents.



3.0 STRUCTURE PLAN PRINCIPLES



EDGE NEIGHBOURHOODS

The edge neighbourhoods are defined by green 'fingers' which comprise steep land, hydrology and riparian corridors. These neighbourhoods are more organic in form as a result of the natural systems that weave through the north western portion of the site.

The design of these neighbourhoods will be site responsive through the sensitive arrangement of streets and the built form.

There are a number of hillside hamlets proposed which will create a setting for stewardship and bush allotments that retain remnant bushland while limiting building activity to designated development footprints, providing buffers for conservation and bushfire purposes.

3.0 STRUCTURE PLAN PRINCIPLES

3.5 The Transect Approach

The Transect is a cross-section through a sequence of natural and urban environments. The Transect for Brimbin New Town describes the range of environments from the natural edges, to more rural environs through to a more intense urban and employment uses. Natural edges include the Dawson and Lansdowne Rivers at the extremities of the site as well as the various conservation lands within the site. Rural productive land to the east of the railway line not only presents the opportunity for an additional character and lifestyle opportunity but also a productive contributor to a self-sufficient township. A network of residential neighbourhoods will offer more traditional living environments and at the heart of the community is the mixed-use centre, which is more urban in nature and where pedestrians will take priority and the community will gather. The employment lands adjacent to the east of Lansdowne Road will accommodate larger footprint uses with mixed-use liner buildings delivering finer grain employment opportunities to the street frontages, assisting the development of a truly walkable town.

Within each Neighbourhood, the allocation of at least three Transect (Character) Zones will promote housing diversity and affordability. Each Transect Zone will have different density targets determined during detailed design.

This sequence of environments is the basis for organizing the built elements of Brimbin New Town to ensure the successful integration of the range of building blocks of new urban communities (building, lot, land use, street, and parkland etc). Each environment, or Transect zone, is comprised of elements that reflect its location within the neighbourhood and contributes directly to the creation of character, identity and diversity throughout the new township – aspects that define a community's 'sense of place' and identity.

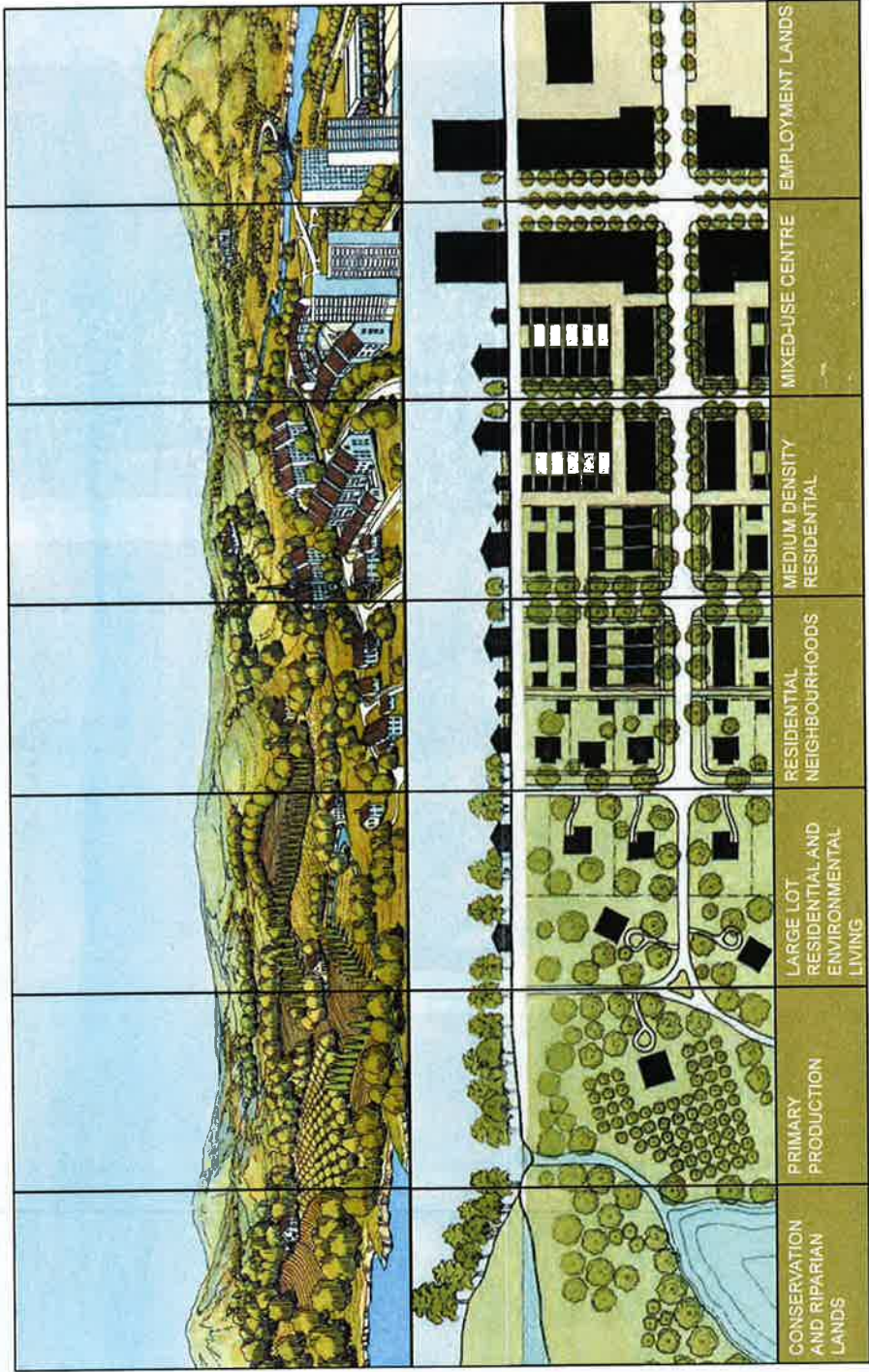


Figure 14. The Human Transect, Source: DPZ.



4.0 THE STRUCTURE PLAN

The Structure Plan covers the entire Roche Group landholding (3,763ha) with approximately 1,500ha proposed for development with the balance of the site set aside for conservation purposes.



The Structure Plan can accommodate 22,000 people and 8,000 dwellings. Within Brimbin New Town there are eleven walkable neighbourhoods and two rural hamlets clustered around and supporting a Mixed-Use Centre and an employment area between Lansdowne Road and the realigned North Coast railway Line. The Structure Plan could also accommodate an agrarian village or smaller rural allotments east of the railway line. This horticultural focused village will be linked to the town and to the employment lands physically and through the creation of mutually beneficial relationships between the town, employment and horticulture lands. This will provide commercial benefits to the farmers, healthy and affordable local produce for residents and future employment and research synergies.

The urban pattern is an organic structure of connected and walkable neighbourhoods sensitively sited within the landscape. The series of neighbourhoods, with an interconnected street network has been configured to respond to the natural contours of the site and to capture views through green corridors, boulevards and avenues in order to celebrate the natural beauty of the site.

The Mixed-Use Centre, framing a picturesque natural lake, will provide a retail and community focal point for residents and day trippers. This centre will present the opportunity for civic celebration that compliments the historic township of Taree and provide a level of self-sufficiency for the residents of Brimbin New Town through the establishment of a town where residents can live, work and play.



Figure 15. Brimbin Structure Plan

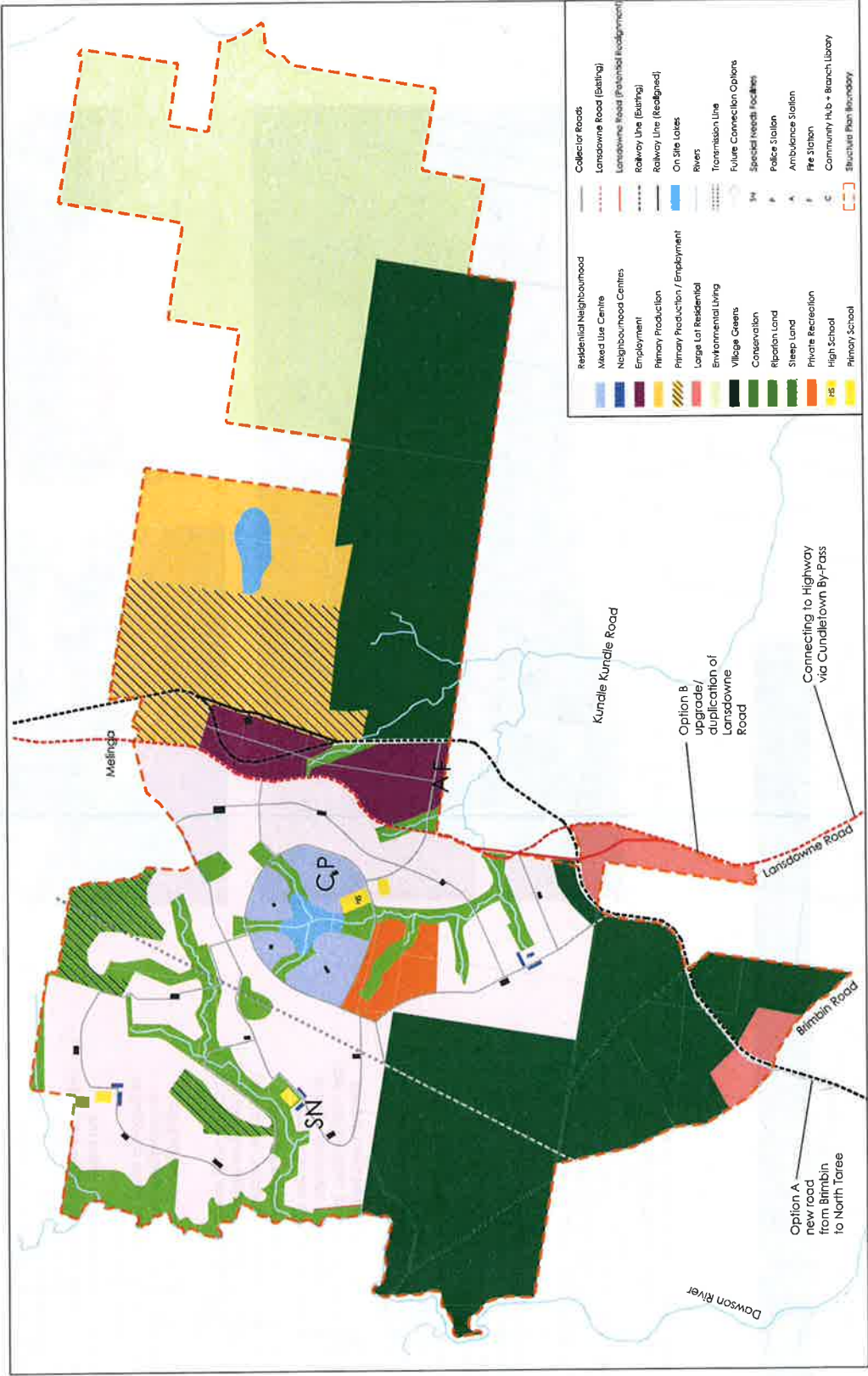


Figure 15. Brimbin Structure Plan.

4.0 THE STRUCTURE PLAN

4.1 Neighbourhood Structure

The neighbourhood unit is the fundamental increment for designing our villages, towns and cities.

The neighbourhood structure provides an organising framework to ensure all households and workplaces are within walking and cycling distance of Neighbourhood Centres and future local public transport services.

- The location and extent of the neighbourhood pattern has been informed by protecting and conserving the unique conservation areas, riparian zones and steep land.
- The design of the neighbourhoods responds to the natural topography to balance cut and fill across the site, while respecting natural watersheds and view corridors.
- Each neighbourhood and hamlet has a defined edge and a discernible central Village Green, with the neighbourhood generally contained within a five minute walk (400m) from centre to edge.
- Neighbourhoods are clustered around three Neighbourhood Centres with shops, commercial, community and education facilities such that most residents are within a ten minute walk (800m) of daily amenities.
- The neighbourhoods are connected through a legible street network, encouraging walking, cycling and public transit use whilst providing an ease of vehicular movement.
- The extensive riparian corridors define the edges of the neighbourhoods and the movement systems. In addition to the natural features Lansdowne Road and the North Coast Railway also define the neighbourhood boundaries ensuring that the compact integrity of the neighbourhood unit is retained and access to natural amenity is shared by neighbourhoods.
- There is a broad range of housing types and price points which unites people of diverse age, income and backgrounds through daily interaction, strengthening the social bonds essential to the creation of authentic and liveable communities.



Figure 16. Neighbourhoods

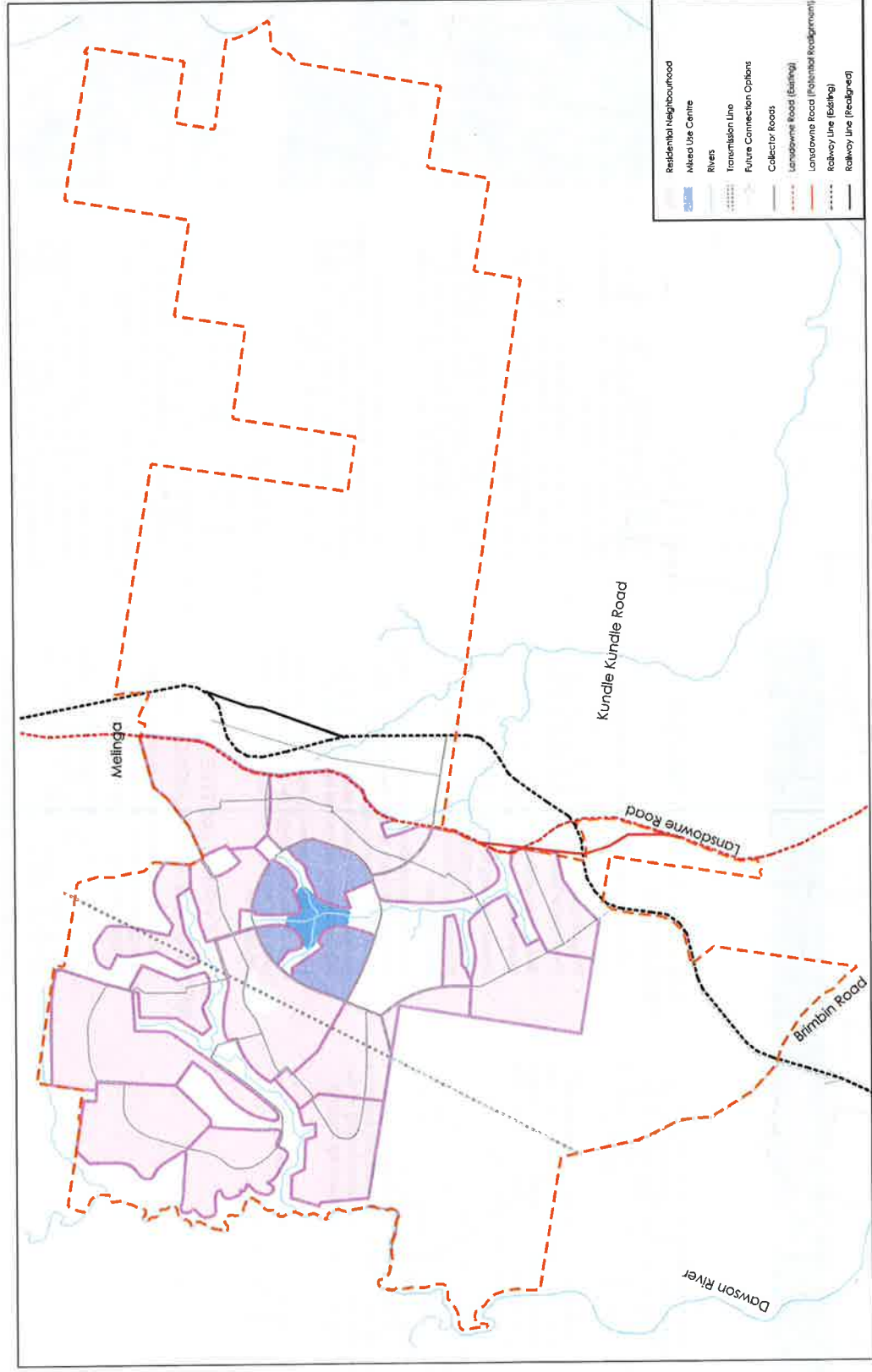


Figure 15. Residential Neighbourhoods



4.0 THE STRUCTURE PLAN

4.2 Open Space Network

A variety of open space and recreation opportunities will be provided at Brimbin to accommodate a range of ages, needs and user groups. Open space will be provided for conservation appreciation and passive and active recreation at local, district and regional levels.

These open spaces will become destinations and key community gathering spaces within the community, and provide the amenity required to support and encourage higher density residential living and high quality settings within the town and neighbourhood centres.

The Structure Plan provides a framework for an uninterrupted system of trails, footpaths and cycle paths along a connected open space network. This will be a regional destination where residents and visitors can choose to wander through a naturalistic setting of conservation, riparian corridors and creeks or alternatively engage with the more urban setting of the lake before re-emerging into nature and the regional systems.

The range of open spaces provided within the Brimbin New Town Structure Plan include:

CONSERVATION AND RIPARIAN CORRIDORS

- Will protect and enhance the natural habitats and watercourses;
- Provide opportunities for the conveyance and treatment of storm water within these corridors;
- Will ensure public access is maintained to the Dawson and Lansdowne Rivers;
- Provide opportunities for informal passive recreation through the provision of path networks, fitness trails, lookouts, rest areas, playgrounds and public art;
- Provide opportunities for controlled public access through sensitively located pedestrian and cycle paths linking neighbourhoods and creating access to schools, active open space reserves, neighbourhood centres and local centres; and
- Facilitate the movement of fauna throughout the area, particularly through the establishment of an east-west corridor, providing key linkages to the natural areas.

DISTRICT PARKS (ACTIVE RECREATION AND PLAYING FIELDS)

- Are located between neighbourhoods (typically co-located with primary schools/ community hubs) or directly adjacent to riparian corridors;
- May include multi-purpose playing fields suitable for a range of activities and user groups such as: Playing fields (rugby/ cricket/ AFL/ soccer), tennis and netball facilities;
- Provide an opportunity to incorporate adventure based activities for all a range of ages and user groups including mountain biking, horseback riding and BMX facilities; and
- May provide associated facilities that accommodate court sports and indoor activity spaces, such as shade structures and pavilions as well as changing facilities, fitness circuits and shaded playgrounds.

VILLAGE GREENS

- Are typically located at the centre of the neighbourhoods, within 400 metres of the surrounding neighbourhood at the intersection of important thoroughfares;
- Will be of a size that facilitates both passive and informal active recreation and may include formal playgrounds, park facilities (such as BBQ, shelters, seating) and public art;
- Can be utilised for civic purposes and cultural events including group picnics and family events and commercial activities such as weekend markets, and are defined by building frontages; and
- May include mature/ significant vegetation, integrate Water Sensitive Urban Design principles (such as the provision of water tanks and use of recyclable water) and potential agriculture uses (such as community scale gardens).

LOCAL PARKS

- Are located within neighbourhoods, usually within 200 metres of surrounding residents;
- Configured to accommodate informal play and passive recreation that support community and family activity and may include playgrounds, park facilities (such as BBQ, shelters, seating) and public art; and
- May include mature/ significant vegetation, integrate Water Sensitive Urban Design principles (such as the provision of water tanks and use of recyclable water) and potential agriculture uses (such as community scale gardens).



Figure 17. Open Space Network

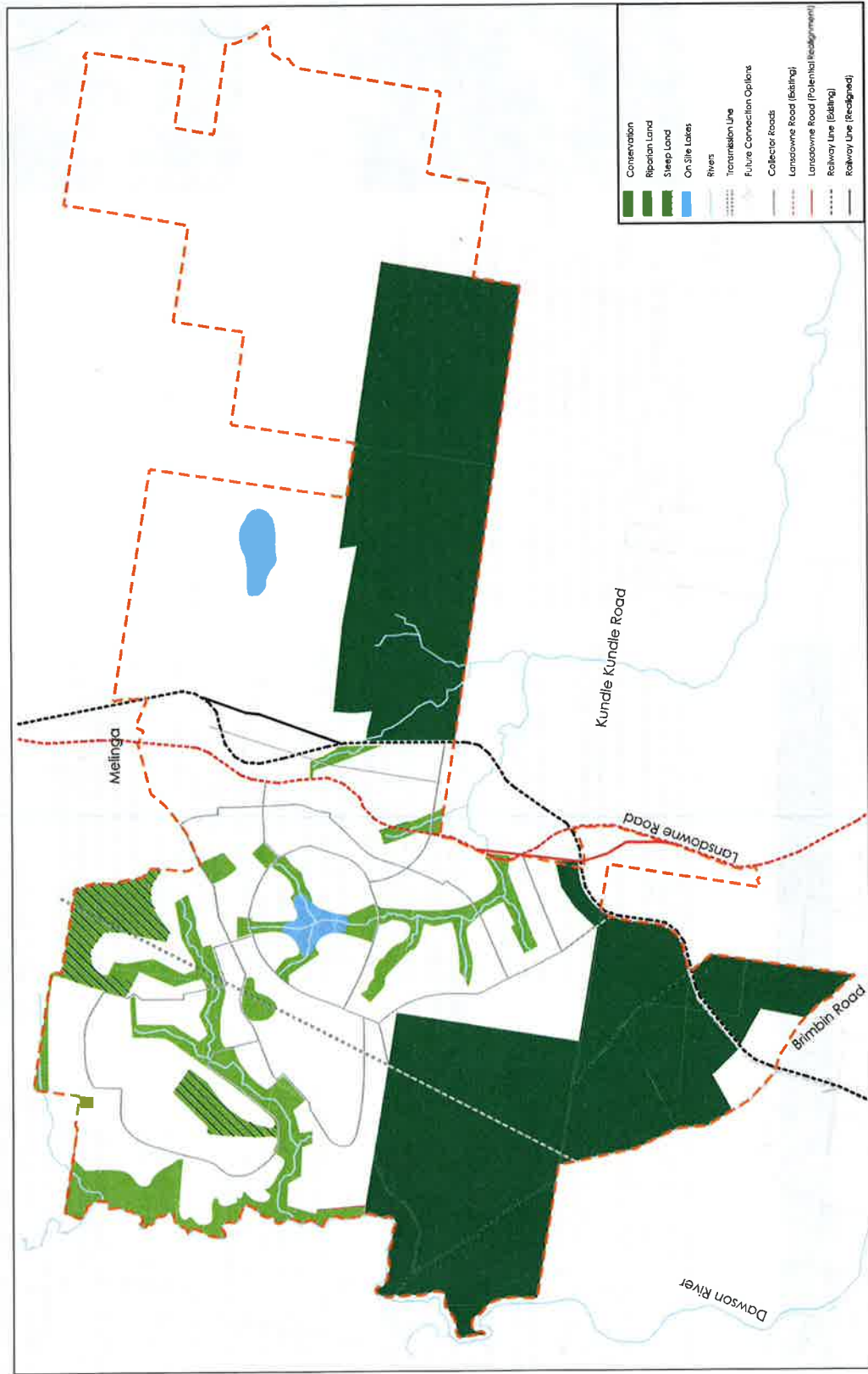


Figure 17. Public Open Space and Conservation.



4.0 THE STRUCTURE PLAN

4.3 Centres

A range of activity centres and employment districts are proposed within the Brimbin New Town including the following:

- A Mixed-Use Centre as the lakeside focus of the Brimbin new town;
- Three Neighbourhood Centres to provide for the daily needs of local residents;
- Village Greens as the local identity for each neighbourhood;
- An employment area for high intensity employment uses and light industry sleeved by finer grain uses;
- The opportunity for a future mixed- use transit oriented development subject to the development of a rail station within the landholding.

MIXED-USE CENTRE

The Mixed-Use Centre is strategically located around the western lake providing a picturesque setting and accessible off Lansdowne Road at various locations. The Structure Plan also makes the provision for a future access option, currently being investigated, which would connect Brimbin directly to Taree.

The Mixed-Use centre will:

- Be located within the urban footprint and within close proximity to the most concentrated catchment of residents;
- Weave together the natural systems and movement systems creating a nexus of activity with full connectivity for all modes of transit including walking, cycling, the private vehicle and the potential long- term provision of public transit;
- Provide land within the local centre with significant employment opportunities, within proximity to, and physically connected to, the employment lands and possible future public transport nodes;
- Provide a direct street connection facilitating a potential future rapid public transport connection to a potential future passenger rail station to the east;

EMPLOYMENT LANDS

The employment lands will provide a balance of high intensity jobs, commerce and industry which will support the existing agricultural sector as well as invite new businesses with the prospect of unconstrained and serviced land. The site is adjacent to the Primary Production land to enable synergies to develop and is within close proximity to the Mixed-Use Centre, new residential neighbourhoods and the nearby Taree centre.

The employment land offers convenient access to main roads for freight and will be within easy access to public transport which is likely to be comprised of bus services in the short to medium term and with the potential for passenger rail over the life of the project. A parcel of land will be set aside in an appropriate location adjacent to the railway line for a future transit stop.

- Contain the highest intensity of uses including a range of retail, commercial, community education, entertainment and residential uses;
- Incorporate a main street environment with an active waterfront retail, community and dining hub prioritising pedestrian movement and creating an attractive urban setting; and
- Accommodate residential dwellings within the town centre, primarily apartments, townhouses and shop-top housing.

NEIGHBOURHOOD CENTRES

The Neighbourhood Centres:

- Are located on the edges of neighbourhoods in order to provide community uses and facilities that can be shared by multiple neighbourhoods;
- Are located along avenues and near high amenity areas such as riparian zones and parks to ensure the centre is accessible to all residents;
- Are co-located with schools and recreational playing fields in order to create an intensity of uses within walking distance of residents;
- Will provide a mix of uses including local convenience retailing, community services and home office settings and be supported by higher density residential living;
- Will provide for a concentration of daily services and needs for local residents as well as local jobs – serving to maximise social interaction, economic and cultural activity – all of which leads to a high quality of life and sustainability.

VILLAGE GREENS

Each neighbourhood will have a discernible central Village Green to provide the opportunity for socialising, recreation, provision of a future bus stop, a future and potentially a corner store or café. While this use does not need to be established up front it is important to allow the flexibility in use and building type so that a residential use (or sales office) in the early stages of the development could be adapted to a future corner store to provide for the daily needs of residents.



Figure 18. Centres

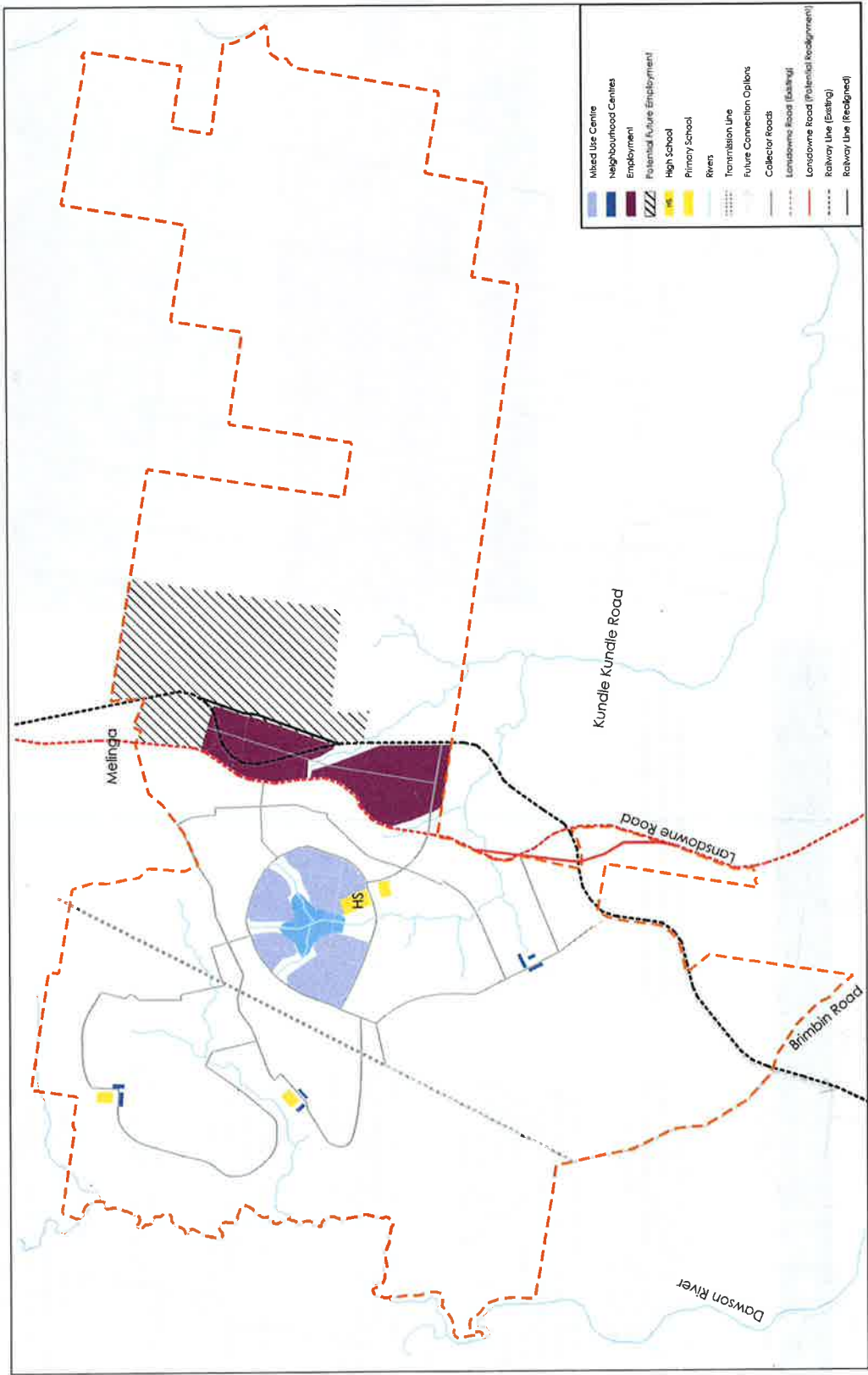


Figure 18. Employment Centres.



4.0 THE STRUCTURE PLAN

4.4 Views

The site is gently undulating moving from the Lansdowne to Dawson River, with relatively flat areas to the east and a mixture of rolling hills and prominent peaks to the west. Small portions of land in the northwest exceed 20% slope.

The structuring of the development and key centres, and siting of the individual neighbourhoods has been informed by the identification of key view corridors. Hill tops are retained as parks or civic spaces which will offer critical view lines that have been established through a system of streets and pedestrian paths that follow ridgelines or contours to preserve views.

The Structure Plan:

- Offers long views to the surrounding rural hinterlands and Brimbin Nature Park, reinforcing the community's sense of place in regional NSW.

- Encompasses the hilltops, lakes, riparian corridors and conservation areas into an open space system and supplements it through a system of village greens and avenues to preserve and enhance view corridors;

- Uses the unique topography of the site to capitalise on the ecological features of the site, such as creeks and riparian corridors, to increase the level of interest and visual 'destinations' through the Brimbin New Town, and extend the distance individuals are willing to walk;

- Provides for a combination of open space, avenues and local roads to preserve and channel a variety of views and visual experiences;

- Retains critical visual connections from 'lake to lake' giving unified identity to the development and visual integration of residential, employment and agricultural lands. Physical connectivity is also maintained reinforcing the inclusion of all aspects of the town;

- Incorporates a ridgeline connector road which loops around the edge of the mixed use centre. Through the integration of a system of local roads running perpendicular to the ridge road and the strategic positioning of the village centres, multiple views down to the lake are opened up at regular intervals.



Figure 19. View Corridors

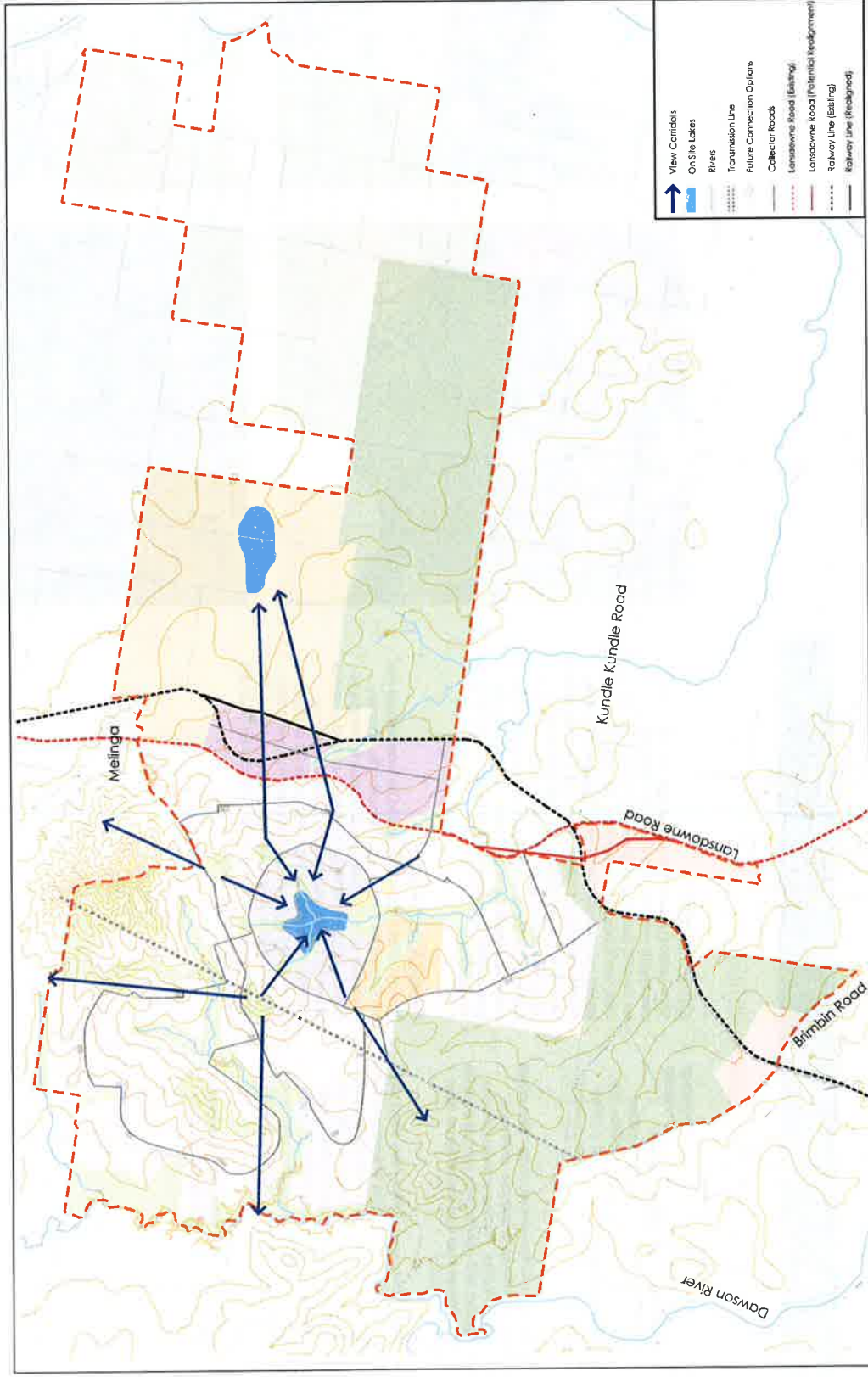


Figure 19. View Corridors



4.0 THE STRUCTURE PLAN

4.5 Civic, Education + Community Facilities

With a projected population of 22,000 at the completion of development, a number of education and community facilities will be required. Civic, education and commercial activities are proposed and embedded within the neighbourhood pattern. These facilities are often located between neighbourhoods and in close proximity to the Mixed-Use Centre or Neighbourhood Centres.

Traffic congestion in suburban communities often arises from parents driving children to schools, child care facilities and other activities. Placing schools and day care facilities together and near activity centres enables time-saving multipurpose trips and the ability for older children to walk to school.

Within Brimbin New Town, school sites have been sized and located between neighbourhoods to ensure children can walk or cycle. The school facilities are typically co-located with active recreation reserves to promote the sharing of playing field facilities, reducing the overall need for larger schools sites. They are also located adjacent to linear open spaces and riparian reserves promoting access for children by cycling and walking over the use of the private vehicle.

A high school has been located within the mixed use centre to promote easy accessibility to a broader catchment.

CIVIC SITES

Civic buildings and sites will emerge naturally as a community matures, but it is critical to make provision for them in the early stages of planning. Typically, civic sites are located at the centre of the neighbourhood and associated with the Village Green. This enables shared parking and transit access with complimentary uses. The best locations are elevated sites or at the termination of axial vistas so that even small buildings, pavilions or public art are enhanced. Until the community matures to the extent that a civic building is warranted, the site can be retained as a landscaped Village Green.

COMMUNITY HUB

A Community Hub is proposed to be incorporated into the Mixed-Use Centre. The Hub will offer a variety of spaces for a range of social, leisure, learning and cultural activities; lounge/foyer area; exhibition space; rooms for health, support and outreach services; meeting rooms for training; play space for children; active indoor and outdoor areas; service desk; cafe; kitchen facilities; toilets; storage space; and an outdoor socialising area. A branch library will also be co-locate with the community hub.



Figure 20. Civic Reservations

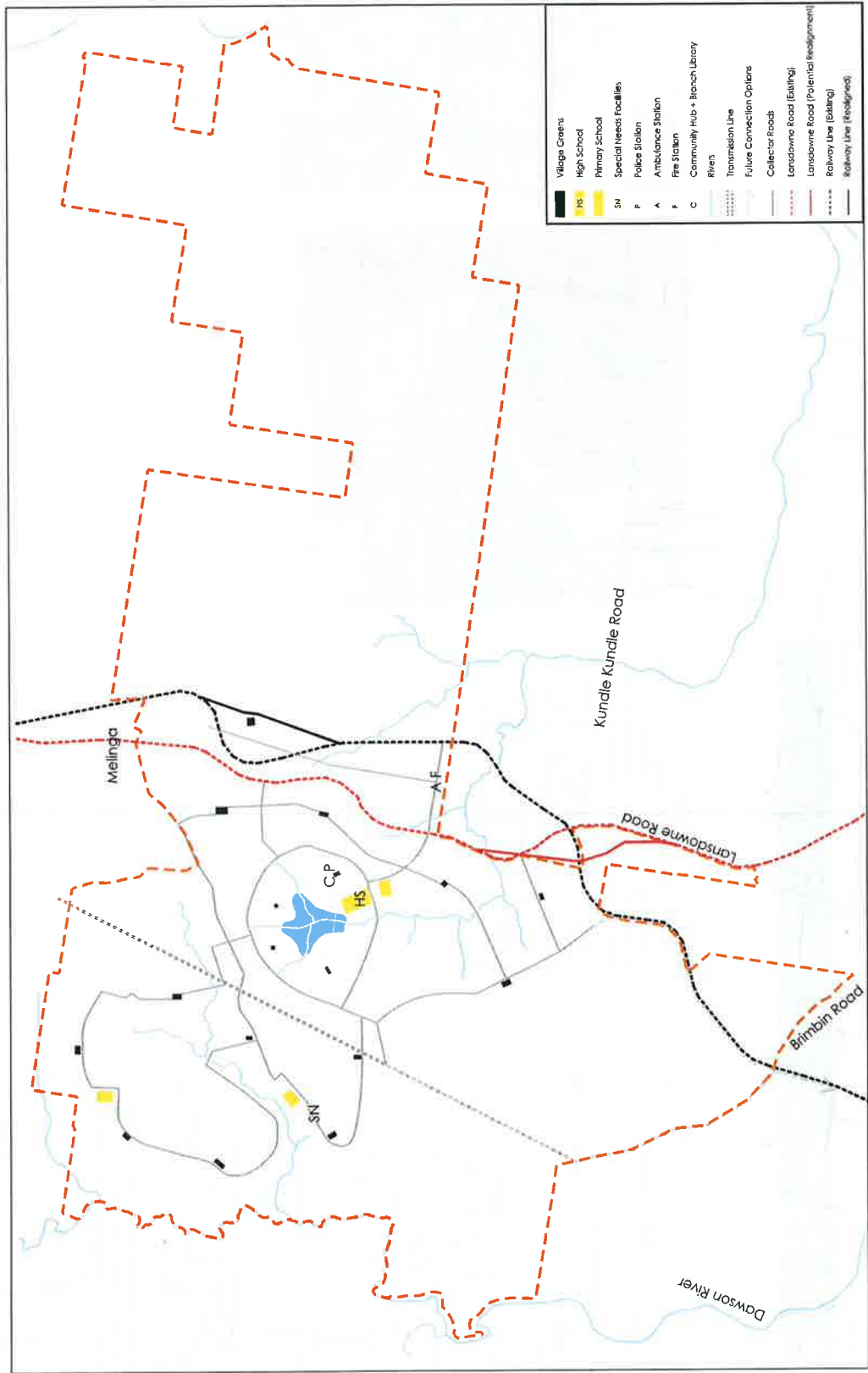


Figure 20. Civic Reservations



4.0 THE STRUCTURE PLAN

4.6 Access + Movement

Natural topography and landscape assets, slope conditions and existing movement networks are used to provide edges and give definition to the neighbourhood unit and the urban footprint.

The movement networks also respond to the natural landform of the site. Major streets are aligned to follow ridges or drainage lines and have been located to capture the best views.

THOROUGHFARE NETWORK

The thoroughfare network has been designed to accommodate projected traffic volumes and define urban character, creating a legible environment equitable for the pedestrian, cyclist and driver.

- A finer grain network of local streets, designed for slow moving traffic provide multiple routes to key destinations, dispersing traffic throughout the neighbourhood and providing an ease of movement for pedestrians, cyclists and vehicles;
- Laneways will also be utilised to create vehicle access to mixed-use buildings within the mixed use centre and neighbourhood centres; and
- Laneways also provide settings throughout the neighbourhoods that accommodate a range of housing types and could provide vehicle access/ garaging for small lot housing.



- Lansdowne Road is the highest order thoroughfare, catering for the highest traffic volumes and designed to allow for the future provision of public transport. Lansdowne Road will provide primary access into the residential and employment areas of the site in the early stages of development as well as providing access to the broader 'Taree area'.
- The thoroughfare network provides the opportunity for future high capacity connections via Cundletown Bypass out to the Highway and also to North Taree via a northern link road connecting to Kanangra Drive;
- Immediate access to Brimbin New Town will be from Lansdowne Road, providing a direct connection to the Mixed-Use Centre to the west and employment lands to the east via new access roads. These access roads will connect the Mixed-Use Centre, Neighbourhood Centres and surrounding neighbourhoods;
- The primary access road will change character as it moves along the edge of the neighbourhoods and enters the Mixed-Use Centre, becoming a main street;
- Neighbourhood collector roads provide connections to key destinations, facilitating public transport, pedestrian, cycle and private vehicle movement;

Figure 21. Collector Roads

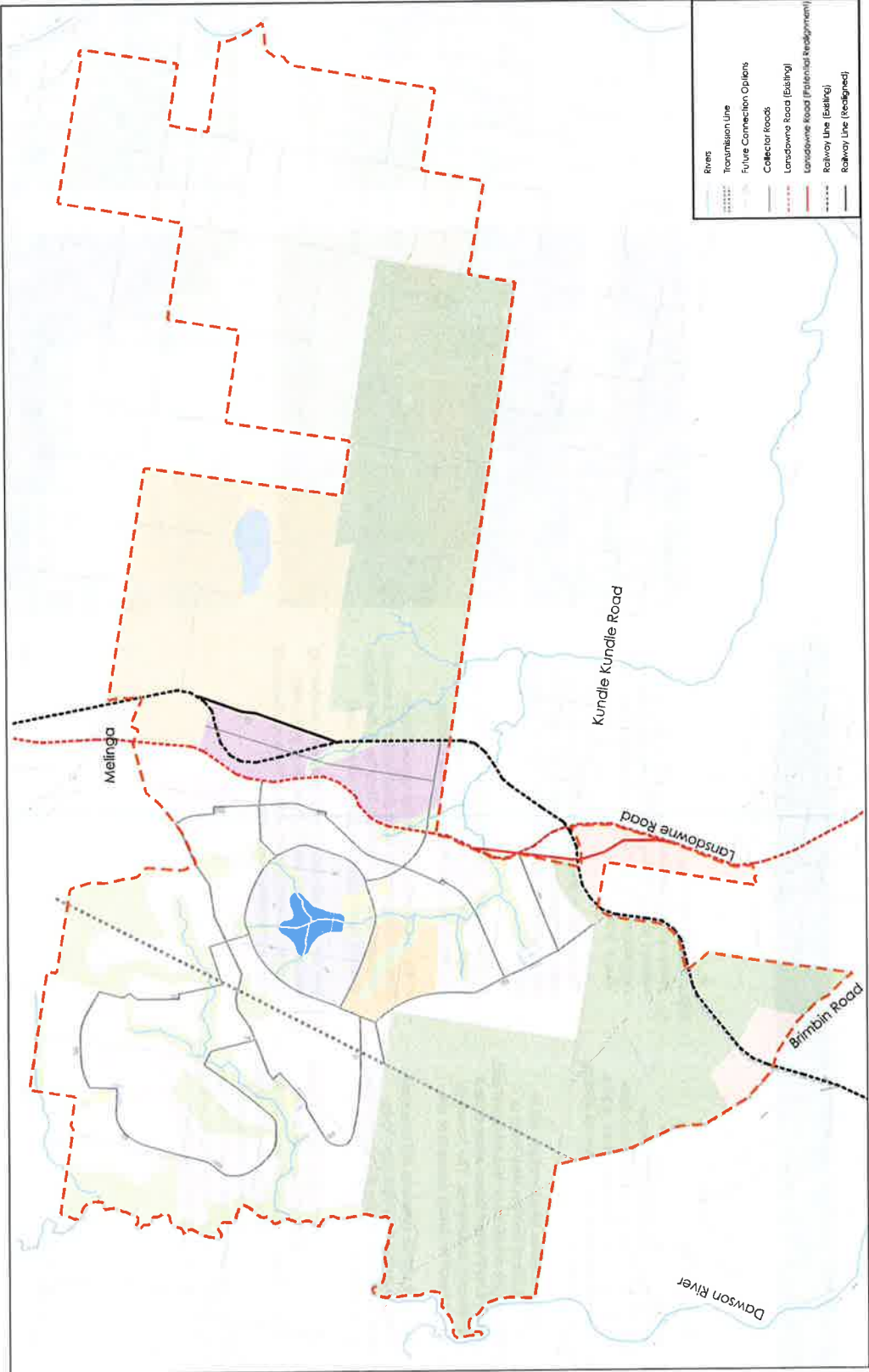


Figure 21. Collector Roads.



4.0 THE STRUCTURE PLAN

4.6 Access + Movement Contd.

PUBLIC TRANSPORT

A future public transport network is based on a high capacity bus service that connects the major destinations and neighbourhoods within Brimbin New Town via a ridge road and onto the wider Taree region. It also allows for a possible future passenger rail station along the North Coast Railway.

Allowance for future provisions for passenger rail in developments at the scale of Brimbin New Town is critical. It will alleviate the pressure on bus transport and the private vehicle in employment driven areas once a critical mass and ridership is achieved. The Structure Plan provides a framework for future passenger rail.

Transit, pedestrian and bicycle networks will maximise access and mobility throughout Brimbin New Town and the greater region while reducing the communities' dependency on the automobile.

As the neighbourhood unit is based upon the five minute pedestrian catchment, all neighbourhoods are transit ready and can accommodate a highly efficient local bus route running through and connecting the central Village Green of each neighbourhood to provide a safe and desirable environment for passengers to wait. The route also connects via the Neighbourhood Centres to provide connectivity between houses and daily amenities.

Within Brimbin New Town:

- There is the opportunity for a local public bus network along the ridge roads which connects the neighbourhoods via Neighbourhood Centres and Village Greens;
- The location of the bus route through the heart of each neighbourhood ensures that most residents will be within a 5 minute (400m) walk to a local bus stop.
- Bus stops will be located in close proximity to schools, community, recreation facilities, as well as the Mixed-Use and Neighbourhood Centres;
- In the longer term, there is the opportunity for frequent bus services to be established to transport residents to a future Brimbin New Town Rail Station creating patronage for regional rail services;
- Bus services will also connect residents to other key destinations and local employment opportunities such as the employment area to the east, Taree and other surrounding townships.



4.0 THE STRUCTURE PLAN

4.6 Access + Movement Contd.

PEDESTRIAN + CYCLE NETWORK

- A safe, connected and attractive pedestrian and cycle network will encourage non-vehicular based travel. This will contribute to the creation of an authentic, active and healthy community.
- There will be a series of interconnected on-street and off-street cycle paths to encourage commuter and recreational cyclist movement, linking key destinations within Brimbin New Town and the greater Taree area through a combined system of natural and urban path systems;
- A key opportunity to leading a healthier lifestyle is to reduce vehicle dependency and provide healthier alternative transportation. Brimbin New Town will provide street design that fosters walking and cycling through traffic management, enhanced visual interest through views of natural assets, and by locating community facilities within walking distance of the majority of residents;
- Designated cycle paths will be provided on key streets providing direct connections to centres, facilities and amenities within Brimbin New Town; and
- The structure of Brimbin New Town is based on walking and cycle catchments where a range of destinations can be accessed within 5 minutes (400m walk or 1.5km cycle) encouraging walking and cycling through the physical design of place by creating points of interest at critical intervals. People are more likely to walk and cycle further, therefore increasing their daily physical activity, where the journey is attractive and visually interesting. A 400m radius is known as the 'pedestrian shed' and the 1.5km radius as a 'cycle shed.'



Figure 22. Pedestrian Shed

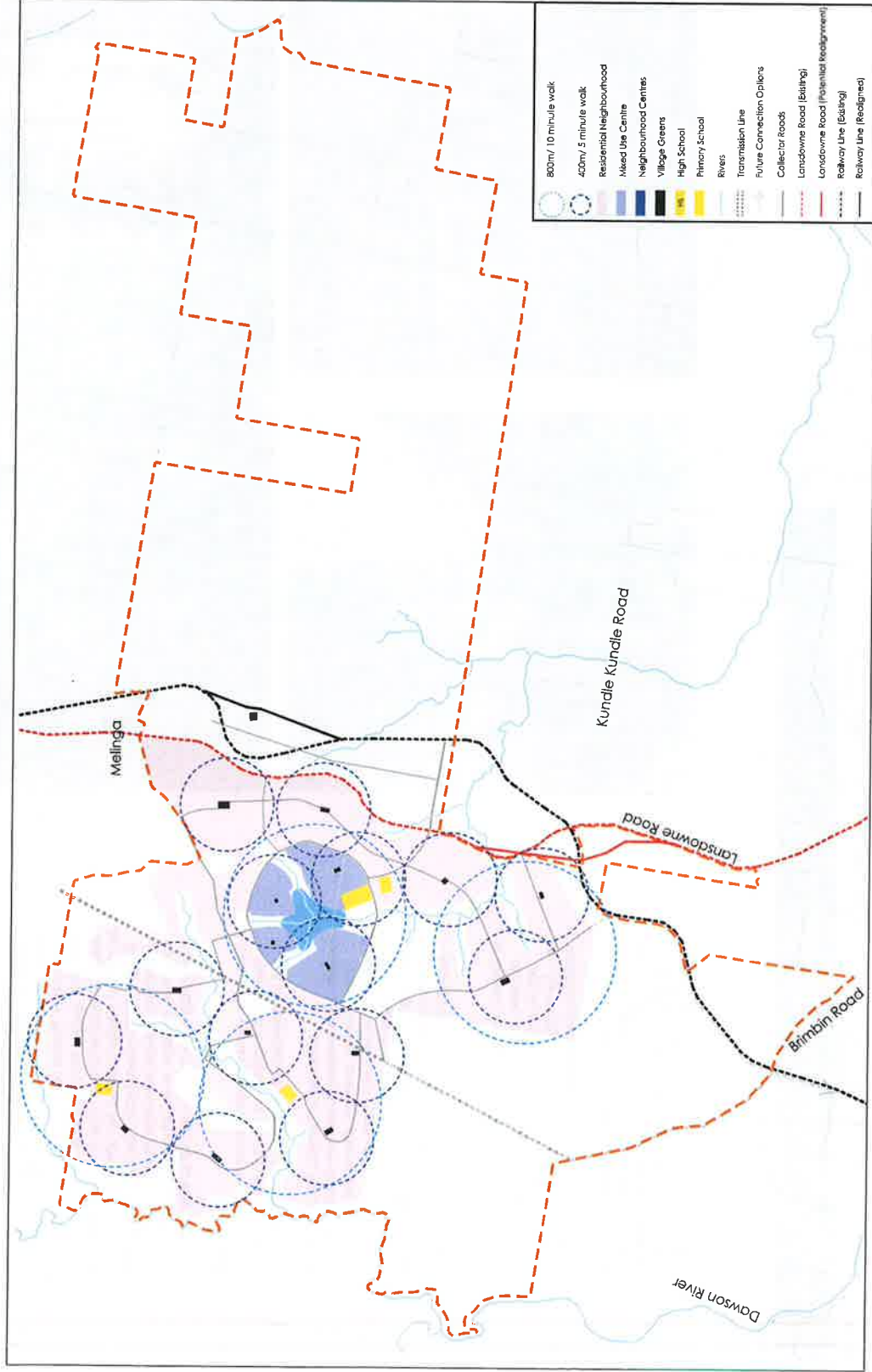


Figure 22. Five minute (400m) pedestrian shed around Village Greens and 10 minute (800m) pedestrian shed around Neighbourhood and Mixed-Use Centres.

Figure 23. The Cycle Shed

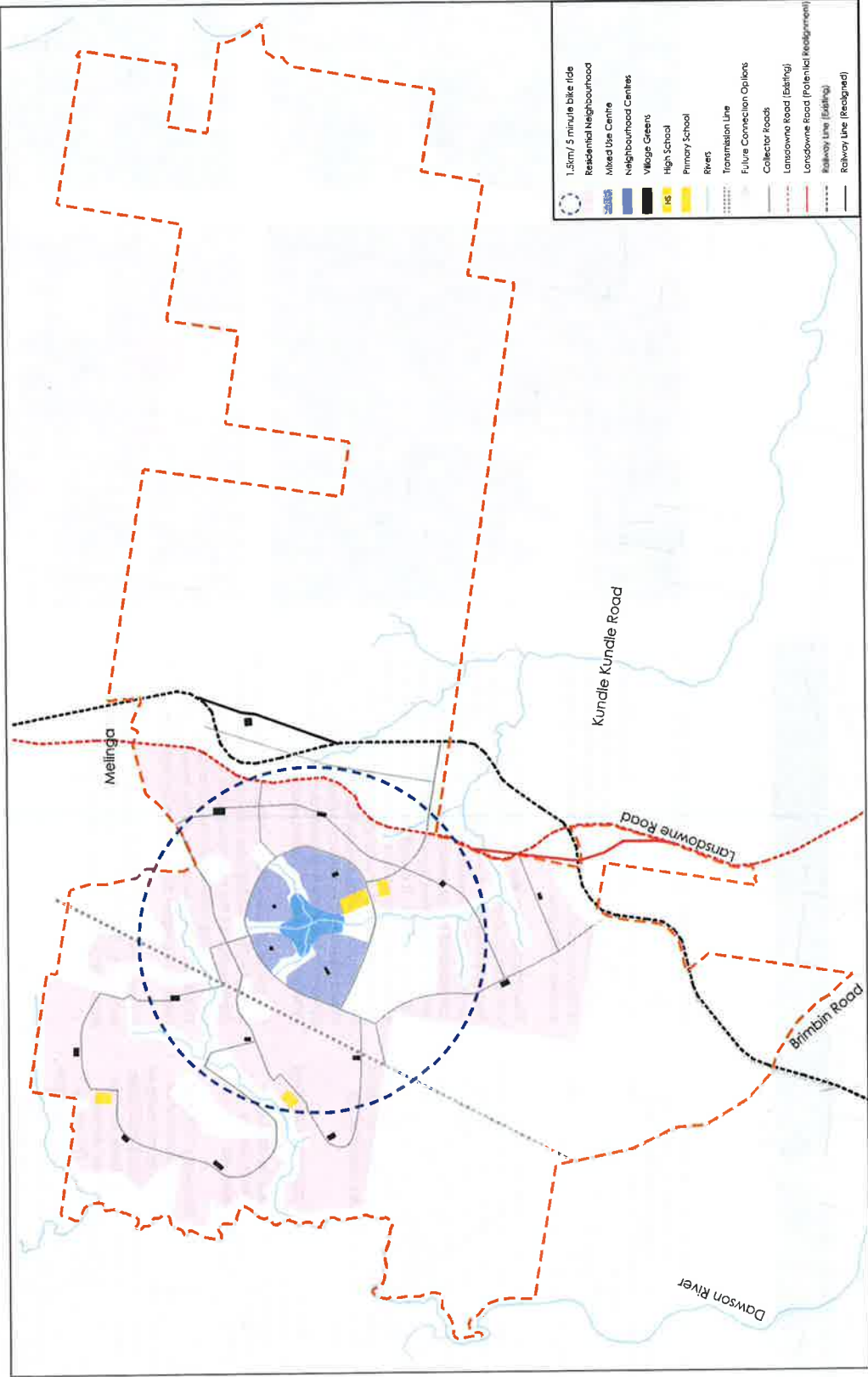


Figure 23. Five minute (1.5km) cycle shed around Mixed-Use Centre.



4.0 THE STRUCTURE PLAN

4.7 Employment

The Structure Plan provides 112ha of employment and industrial land which could accommodate general and light industry as well as large format retail. The relative affordability of Brimbin compared to proximate metropolitan areas and flexibility of the site to meet varying needs in size and configuration, will make Brimbin a unique and desirable employment base for many existing and emerging companies.

The employment land has good access to Pacific Highway and a freight hub is proposed to be established at the Taree highway interchange, suggesting freight based business would thrive in this location. Regional Development Australia has approved \$10m funding for the Northern Gateway Transport Hub in Taree which will enable the breakdown of large freight to smaller modes of transport that can move around the local road network. Ultimately, this will improve metropolitan goods delivery to the area, and also increase local produce access to metropolitan markets.

Being located within an agricultural region and adjoining agricultural land, the employment land will also be marketed to attract support businesses for agriculture such as food storage, processing, milling, baking, packaging, bottling, canning, distribution etc.

The Structure Plan maintains approximately 179ha of land for primary production which will be promoted for more intensive horticulture than is currently occurring on the site. The provision of a range of lot sizes will enable small-scale intensive farming which has lower start-up costs of land, machinery and outside labour making it more accessible to the local population. This model offers much greater employment density than traditional broadacre agriculture (1 full time employee per ha for market gardening, compared to 1 per 30ha for dairy farming), helping to boost the local economy.

Agriculture at Brimbin would likely target a range of non-Sydney markets including local centres such as Taree and Port Macquarie; Hunter Valley tourism businesses; and farm-direct sales (there are in the order of 150,000 people living within an hour's drive of Brimbin). This

area is estimated to accommodate in the order of 5,900 jobs.

A further 22ha of land is identified for either Primary Production or Employment Lands with its future use dependent upon the success and take up rate of each of the land uses, which could potentially accommodate another 5,000 jobs.

The Structure Plan also provides a Mixed-Use Centre with a range of retail and commercial services reducing the need to travel and create active and thriving centres for community interaction. Importantly though, the scale and nature of the proposed retail facilities would seek to reinforce, rather than compete with the existing centre hierarchy of Taree. It is expected that around half of all available retail expenditure will still escape the Brimbin release area to higher order centres such as Taree, benefiting the existing community. The project will also attract investment to Taree by enhancing demand for services in this primary regional centre and therefore enhancing local employment opportunities.

Overall the Structure Plan is projected to provide in the order of 9,000 - 10,000 new jobs, providing enhanced opportunities for the new residents in Brimbin as well as existing residents in the surrounding area. This is particularly beneficial as the region currently experiences higher than average unemployment levels.

For more information regarding employment refer to Appendix 7 Employment Land Assessment and Appendix 14 Employment Land Provision.



4.0 THE STRUCTURE PLAN

4.8 Sustainability

The Manning Valley Community Plan 2010- 2030 identifies 'respect of the natural environment as a priority' and outlines some of the key environmental issues for the future.

The design of the Structure Plan reflects a commitment to protect and enhance the natural environment through the delivery of a sustainable development at Brimbin. The principles of TND which are the basis of the Structure Plan are inherently sustainable. Developments which are based on the neighbourhood unit are compact and walkable in nature and reduce private vehicle use.

The Structure Plan establishes a vision for balanced development and habitat retention and enhancement. The Brimbin New Town has the potential to become a model for how the human and natural habitat can be mutually supportive through the careful combination of housing, education, employment, conservation and recreation activities.

Key sustainability principles that will guide the development of the Brimbin New Town include:

- Securing the conservation of major areas of native vegetation via rezoning and management statements;
- Retaining all riparian corridors with appropriate development setbacks to conserve biodiversity and maintain natural water quality;
- Reducing greenhouse emissions through building orientation and design, and encouraging sustainable transport with walkable and transit-ready neighbourhoods;
- Minimising the ecological footprint through waste reduction, water sensitive urban design, low potable water use, and environmentally friendly building materials;
- Creating a network of green spaces to provide a safe and creative environment for different ages and lifestyles;

- Providing diverse, adaptable and affordable housing options that support a diverse community and the opportunity for aging in place;
- Establishing social and physical links to surrounding areas including walking and cycling paths; and
- Encouraging local enterprise through land provision, infrastructure investment and establishing networks for local agricultural businesses.

CONSERVATION

Approximately 1544 hectares of private land will be set aside for public conservation purposes, a demonstration of the Roche Group's commitment to ensuring that the local biodiversity and ecological values of the site remain well preserved and publicly accessible in perpetuity. An additional 740ha will largely be conserved in private ownership in the Environmental Living Zone.

The Structure Plan provides a connected ecological corridor where nature can be enjoyed by all ages and socio-economic groups throughout the greater Taree region. Sensitive ecological communities, key habitat, and riparian areas will remain in their natural state with low impact provisions for trails, cycleways and viewing platforms to allow this regional asset to be celebrated by residents and visitors alike providing eco-tourism and research opportunities.

Future consideration may be given to the provision of public access to the appropriate parts of the Dawson and Lansdowne Rivers as well as the smaller creeks throughout the site. These areas could offer informal gathering places ideal for family gatherings, community retreats, school camps, communal entertainment and wellbeing activities as well as corporate outings. These forums function to increase environmental awareness.

Where development abuts the conservation area, a system for environmental stewardship and community ownership will be explored as an additional lifestyle choice and a method for protection and preservation of the natural landscape.

AN INTEGRATED APPROACH

At Brimbin New Town, alternative 'green' solutions will be explored for all aspects of the development practices at every level, including "light imprint" environmentally friendly alternatives to current engineering practices and best practice integrated water cycle management.

"Light imprint" planning addresses stormwater runoff at the scale of the precinct, neighbourhood and the block through natural drainage, conventional engineering infrastructure and innovative infiltration practices. The range of methods available offers a set of site specific design solutions that function in a co-ordinated manner across the development by employing different tools in each transect zone.

Components of the integrated water cycle management strategy proposed at Brimbin New Town include:

- Water supply servicing connecting to the MCW system;
- Construction of a low pressure reticulation system and transfer for treatment at Dawson STP with the potential future option to adopt improvements such as on- site reclamation;
- Minimisation of potable water use and maximisation of the potential for water reuse and recycling through connecting to a reticulated recycled water system, providing supply for internal and external non- potable reuse; and
- Stormwater runoff management will be managed via a series of detention basins.

The integrated approach to water cycle management at Brimbin will result in minimisation of potable water demand and maximisation of water recycling opportunities for the life of Brimbin New Town.



4.0 THE STRUCTURE PLAN

4.9 Urban Agriculture

The vision for Brimbin New Town has always been based on establishing a healthy and liveable community. To further this concept, we have explored recent global trends which integrate local food production at the home, neighbourhood and township levels.

By designing communities with the capacity to produce fresh food we are future-proofing the community from a reliance on external food sources. The ability for communities to grow their own food counteracts not only the rising cost of food, but will contribute to healthier people and reduced medical costs.

The Manning Valley Community Plan 2010- 2030 prepared by Greater Taree City Council on behalf of the Manning Valley Community highlights the importance of maintaining, protecting and enhancing the local agricultural lands and exploring opportunities to advocate and educate on supplementary sustainable farming practices within The Manning Valley.

The fresh urban food movement has begun in Taree with The Hub Market which occurs on the third week of every month and has over 75 stalls.

The Structure Plan will provide the opportunity to expand local food capacity by providing agricultural land for small-scale farming as well as adjoining land for supplementary agribusinesses to develop, both with access to an enlarged local catchment population associated with the new town.

The provision of a range of lot sizes will enable small-scale intensive farming which has lower start-up costs making it more financially accessible to the local population and can be adapted readily to changing market conditions resulting in a more resilient industry. This model also offers greater employment density both on the farms, as well as by attracting a range of support businesses such as food storage, processing, milling, baking, packaging, bottling, canning, distribution and agritourism, helping to boost the local economy.

A growers association will be established to foster networks and sharing of knowledge and resources amongst the community. Roche Group has also

committed to funding a Community Development Officer for the first 10 years of the project who will, amongst other responsibilities, help to assist and coordinate the growers association.

In addition there will be opportunities for food production throughout neighbourhoods and centres including:

- Small farms located at the edges of the township;
- Community gardens located adjacent to riparian corridors, shared between neighbourhoods and typically located in close proximity to other community facilities;
- Gardens within the private allotments of homes in the less urban areas (rural and sub-urban zones) satisfying the food needs of the owner/ family;
- Window boxes, balcony and roof gardens in more urban areas;
- Community gardens in the more urban areas, including neighbourhood and mixed use centres.

The benefits of urban agriculture are wide reaching with the potential to impact on local employment, historical production capacity, horticulture research and education. Many major international non-governmental organisations have sited small-scale farming as a key platform to improve food security, build resilience in the face of climate change and address environmental issues associated with agriculture.

With small-scale farming, agriculture can become more place-based and embedded in the community, helping to create a strong place identity, forge strong networks in the community and re-establish more locally based food systems. The networks and collaboration needed to make small-scale agriculture successful will build the social capital of the community.

Urban Agriculture offers a range of benefits to the community including:

- Local job creation;
- The reduction of fossil fuel dependence;
- The reduction of shipping expenses and the overall

carbon footprint of the transfer of goods;

- A healthy local economy;

- Eco-tourism revenue potential;

- Increased economic and social resilience to global changes (reduces susceptibility to drastic supply shortages and price increases);

- Food security/ local access to food for the community;

- The reduction of the costs associated with fresh food;

- A greater focus on the health and wellbeing of the community; and

- Nutritional and health awareness.



4.0 THE STRUCTURE PLAN

4.10 Housing Diversity

A healthy neighbourhood includes a wide range of dwelling types. For an authentic community to evolve, social networks require a diversity of ages, incomes and backgrounds. A healthy social environment includes dispersed, rather than concentrated, affordable housing.

Life-cycle housing allows residents to move up rather than move out, upsize or downsize without leaving their established social networks and communities. From a commercial perspective, a diversity of housing options allows developers access to multiple market segments, therefore achieving faster product take up rates. As such, while the majority of housing provided at Brimbin New Town will remain consistent with the more conventional product offered in Taree, Brimbin will provide the opportunity for many new housing types including walk up apartments, terraces, townhouses, villas, cottages, houses and large estate homes.

- A range of residential living options are provided for within Brimbin New Town, providing for a diversity of residents in respect to age, income groups and life stages;
- Across the neighbourhoods, large to small house types are accommodated including estate homes, large homes, cottages, terraces and apartments;
- Across the neighbourhoods, the more compact housing types will be located adjacent to the neighbourhood and local parks, capitalising on the created amenity;
- Within, and in close proximity to, the mixed use local centre and neighbourhood centres, terraces, townhouses, villas and apartments will be provided, creating a greater density of dwellings in close proximity to daily needs, employment, future public transport, education and community facilities.



5.0 LAND BUDGET + STAGING

5.1 Land Budget

BRIMBIN NEW TOWN		HECTARES	GFA	DWELLINGS	RESIDENTS
A	Site area	3,763			
B	Conservation Land*	1,544			
C	Gross Developable Area	1,479			
D	Residential Area**	874			
E	Mixed Use Centre	26			
F	Neighbourhood Shops		7,500 m ²		
G	Private Recreation	52			
H	Schools*	15			
I	Employment Lands	112			
J	Primary Production**	400			
L	Environmental Living	740			
M	Projected Population			8,000	22,000

* Comprises conservation reserves, creeks, riparian, flooding areas, bushfire and areas of slope exceeding 20%.

** Includes neighbourhoods, medium density/ seniors housing and large lot residential

* 1 high school and 3 primary schools.

** Potential for extension of employment lands

Note: areas are approximate only and subject to master planning and detailed design.

5.0 LAND BUDGET + STAGING

5.2 Indicative Staging

The vision for the delivery of Brimbin New Town is over a 30 year timeframe.

The staging strategy (opposite and described below) is one way that the development of Brimbin New Town may occur. The intent of the plan is to provide a logical sequencing for development commencing at Lansdowne Road as the primary access and entry point into the broader area.

The indicative staging for the Brimbin New Town development is based on the following considerations:

- The need to deliver jobs in the early stages of development to support the new residential community;
- The ability to utilise existing infrastructure;
- The early provision of hard infrastructure, such as streets, laneways, parks and open spaces to provide a high level of amenity for early residents
- The early provision of social infrastructure based on need and population capacity;
- The timing and requirements of local and state infrastructure requirements; and
- Market demand for certain development location, lot size and housing type.

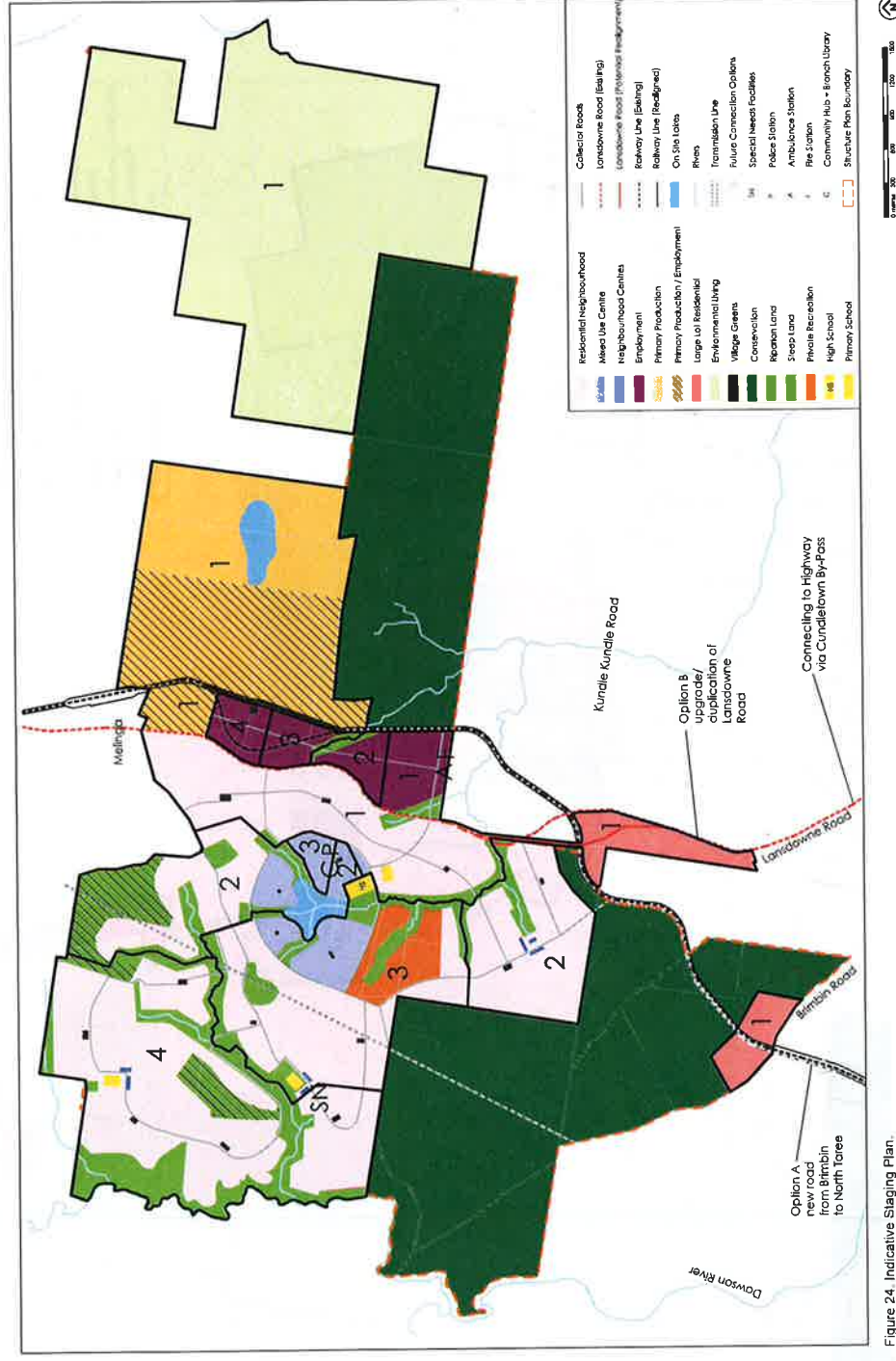


Figure 24. Indicative Staging Plan.

Figure 25. Indicative First Stage

The Indicative Stage 1 for Brimbin New Town (refer to figure opposite) will deliver an appropriate mix of residential, mixed use, employment, rural living and primary production concurrently with the required infrastructure and open space to establish the foundation for an authentic and liveable community.

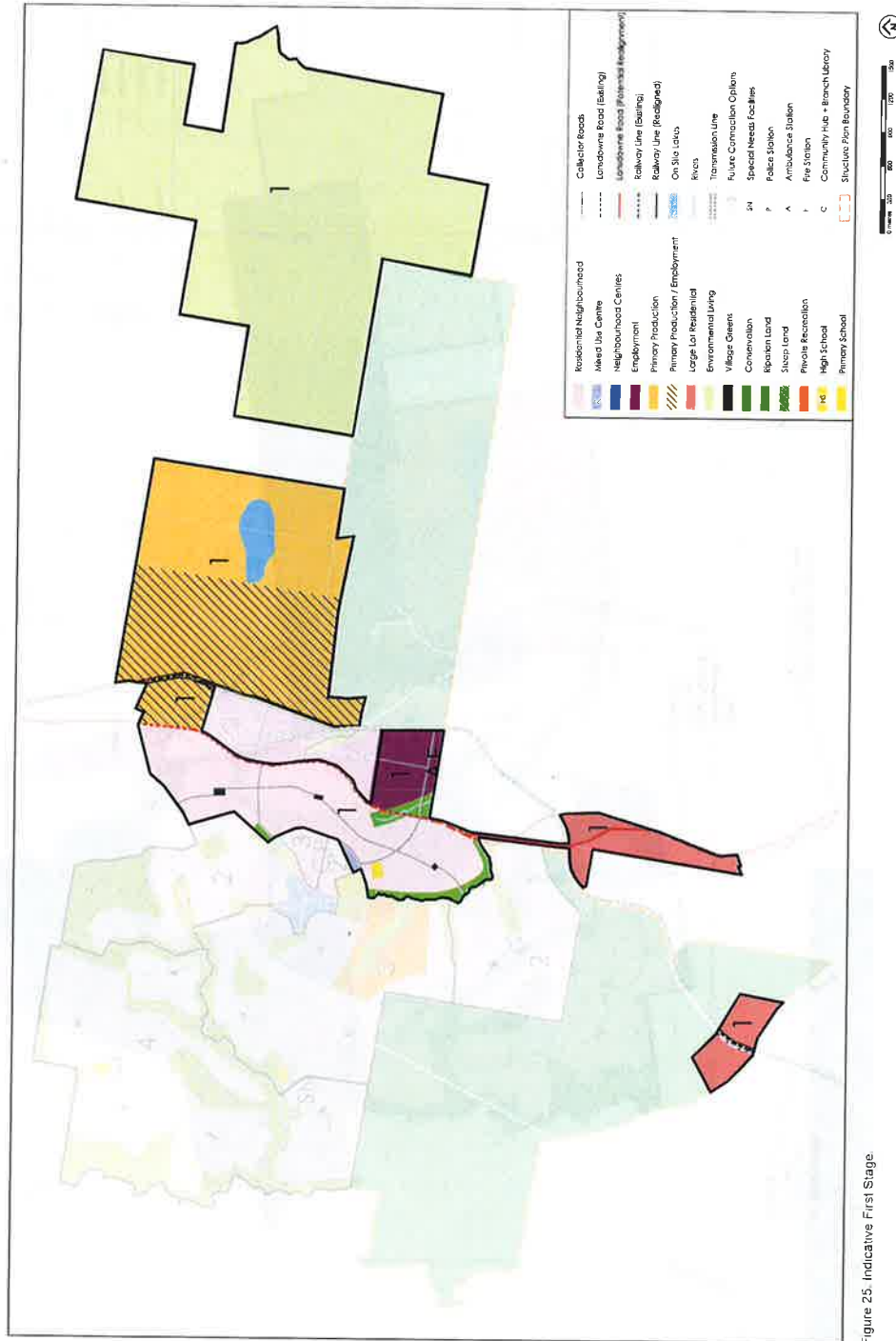


Figure 25. Indicative First Stage





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