



Coolalinga and Fred's Pass

RURAL ACTIVITY CENTRE

Land Capability and Needs Assessment



Document Version Control		
Version Number	Date Issued	Details of changes
4	July 2020	First public issue with statutory exhibition of the draft Area Plan for Coolalinga / Freds Pass Rural Activity Centre
2	October 2020	Alterations after statutory exhibition of the Coolalinga / Freds Pass Area Plan: <ul style="list-style-type: none"> o document structured into parts for consistency with other similar documents o edits to land capability in response to the Department of Environment and Natural Resources
3	January 2023	Inclusion of a reference to document drafted in 2020 for inclusion within the NTPS in January 2023

Reference documents

Department of Lands, Planning and the Environment. (2015). *Northern Territory Compact Urban Growth Policy*. Darwin: NTG.

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Litchfield Subregional Land Use Plan. (2016). Northern Territory Government

Litchfield Social Infrastructure Assessment. (2016). Fyfe Consultants

Litchfield Priority Environment Mapping. Northern Territory Government

Litchfield Land Units. Northern Territory Government.

Area Plan for the Howard Springs Rural Activity Centre. (2018). Northern Territory Government

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PART ONE Introduction

The Northern Territory Planning Commission is responsible for preparing land use plans and policy as part of the strategic framework that guides land development.

The Area Plan for the Coolalinga / Freds Pass Rural Activity centre is such a strategic policy document. It provides a framework for future land use to give certainty and confidence to residents, property owners and the broader community. The Area Plan is prepared to guide decision-making on future rezoning and development proposals.

Purpose of this Document

This document presents information that underpinned the preparation of the Area Plan.

This document brings together:

- previous planning work;
- land capability investigations;
- studies regarding social infrastructure, transport and essential services; and
- outputs from community engagement.

The document provides a contemporary context to the content of the Area Plan and will hopefully assist with questions regarding the Plan's intent.

The Study Area

The Litchfield suburbs of Coolalinga and Freds Pass are located along the Stuart Highway approximately 5 kilometres southeast of Palmerston. The extent of the study area is consistent with the land use concept in the Litchfield Subregional Land Use Plan and encompasses the boundaries of Coolalinga and Freds Pass. This is illustrated at Figure 1.

Adopting this study area as the boundary of the rural activity centre has the benefit of allowing 'transition' areas to be provided as buffers to protect the amenity of the established rural living areas.

The Coolalinga / Freds Pass Rural Activity Centre plays a major role in the Litchfield Subregion by providing commercial services and community facilities of a higher order than the other rural activity centres.

Coolalinga, with the potential to connect to mains sewerage in the future, is expected to offer a growing range of retail premises and commercial facilities. Further provision of full reticulated services will also enable some new areas of urban housing to be developed.

Freds Pass does not have a cost effective option for the delivery of reticulated sewerage, but will remain highly suitable for the continued expansion of community facilities, especially for education, sport and recreation.

The Growth Context of the Study Area

The Darwin Regional Land Use Plan 2015 identifies threshold populations of 150 000 and 250 000 people to guide the identification of land required to accommodate growth in the short and longer term. In 2016, the subregional plan was premised on the need for Litchfield to accommodate 500 new dwellings to meet demand over the following 5 to 10 years.

In the longer term, approximately 20 000 dwellings will be required in Litchfield. This will be met by greenfield development and growth within the rural activity centres of Howard Springs, Coolalinga / Freds Pass, Humpty Doo and Berry Springs.

In the shorter term, the activity centres of Howard Springs, Coolalinga / Freds Pass and Humpty Doo will have an important role in accommodating some of this population growth.

How this document works

This report presents information collated from technical investigations and feedback relating to land use and development of the activity centre.

Issues which informed the preparation of a draft Area Plan for the Coolalinga / Freds Pass are overviewed.

The report structure is chronological with the preliminary information and investigations addressed first, followed by the outcomes of community consultation leading into the land use themes incorporated into the area plan.

Both the Area Plan and this report were drafted in 2020 and should be understood in that context. Finalisation of the area plan for inclusion within the NT Planning Scheme progressed in early 2023.

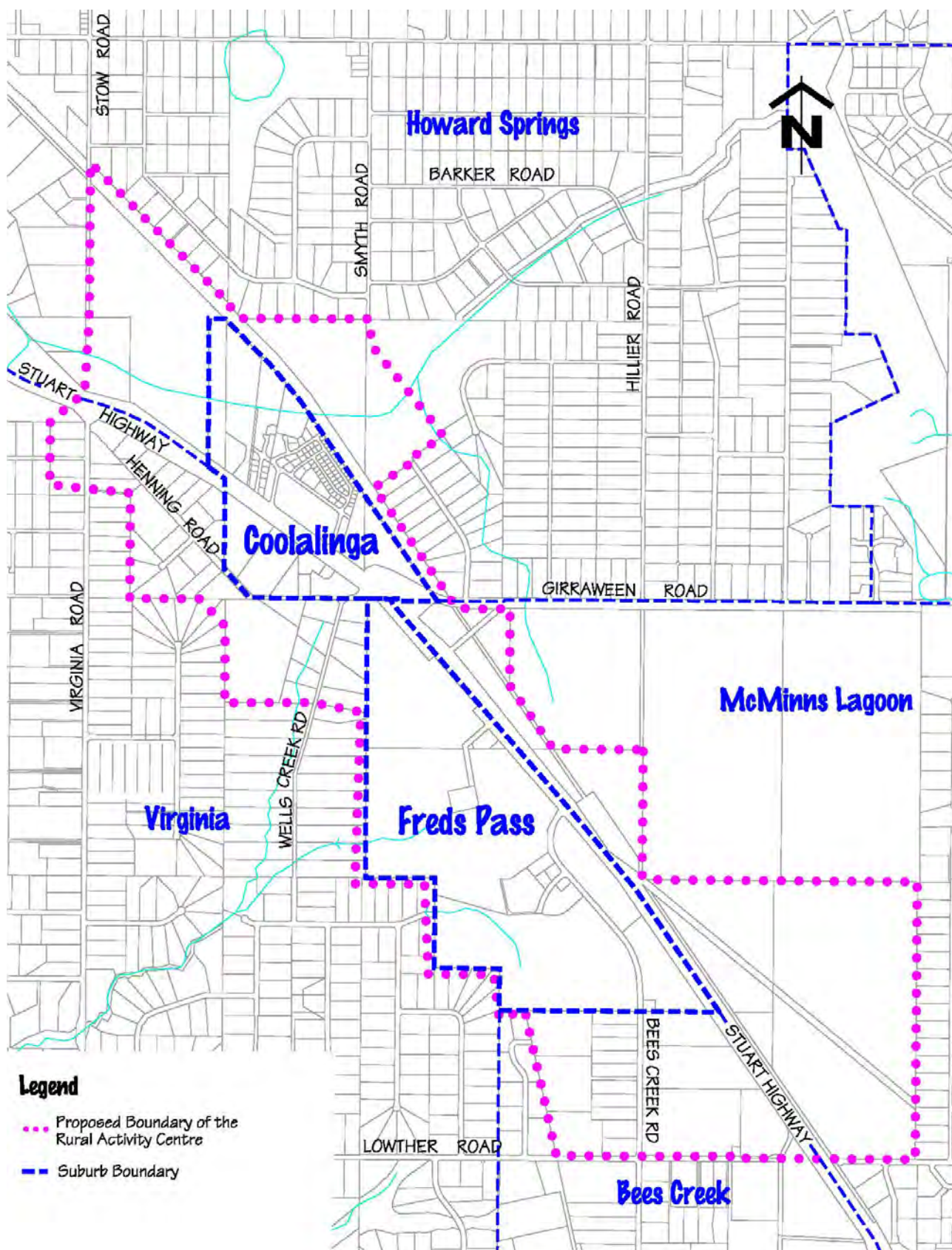


Figure 1 – The Study Area (the Rural Activity Centre boundary) and Locality Boundaries

Regulatory and Policy Context

The use and development of land in Coolalinga and Freds Pass is regulated and guided by the following policy documents.

Northern Territory Planning Act 1999

The objects of the *Planning Act 1999* (the Act) are to plan for, and provide a framework of controls for the orderly use and development of land. These objects are to be achieved by:

- the strategic and sustainable use of land and resources;
- protection of the natural environment; and
- maximising the amenity of development.

The Act also establishes the NT Planning Commission as an independent body with various functions, including to prepare and consult with the community regarding integrated strategic plans, guidelines, and assessment criteria for inclusion in the NT Planning Scheme.

The Planning Commission does not have decision-making powers under the Act. The inclusion of an area plan into the Planning Scheme remains a responsibility of the Minister.

Northern Territory Planning Scheme

The *Planning Act 1999* enables the NT Planning Scheme and allows it to contain:

- statements about land use policy;
- development controls, instructions, guidelines, and development assessment criteria to guide decision making of the consent authority;
- zoning maps; and
- plans, designs and diagrams.

Policy statements within the Planning Scheme establish the expected nature of future development and guide the interpretation of the zones and associated development provisions.

A zoning map of the study area is at Figure 2.

The Planning Scheme includes area plans to assist with the interpretation of the Scheme and the determinations of the consent authority.

The Area Plan for the Coolalinga / Freds Pass Rural Activity Centre has been prepared to provide detailed guidance on future land uses with the rural activity centre.

This Land Capability and Needs Assessment document is intended to be referenced by the Planning Scheme as a background document to the Coolalinga / Freds Pass Rural Activity Centre Area Plan.

Litchfield Subregional Land Use Plan 2016

The Litchfield Subregional Land Use Plan (LSLUP) is a policy document in the Planning Scheme that establishes a strategic policy framework to guide the future growth and development of the municipality of Litchfield, including Coolalinga and Freds Pass.

The LSLUP guides land use, transport and infrastructure planning to deliver growth and infrastructure outcomes for the community while safeguarding the valued rural lifestyle.

The LSLUP also guides more detailed planning, including the preparation of area plans for the rural activity centres. The statements of policy and land use concept in the LSLUP informed the Planning Commission's work to prepare the draft Coolalinga / Freds Pass Area Plan.

The final Area Plan superseded the role of the land use concept in the LSLUP and the latter was removed. The land use concept, as it appeared in the LSLUP, is copied at Figure 3.

The Compact Urban Growth Policy 2015

The Compact Urban Growth Policy 2015 is a policy document in the NT Planning Scheme that provides a framework to guide the development of area plans and to inform decisions on rezoning applications.

Compact urban growth allows the efficient use of land, services and infrastructure to create compact and mixed-use activity centres that play a role in improving people's lifestyle and convenient access to services.

The commercial area of Coolalinga will accord with the Compact Urban Growth Policy as it continues to develop into a compact mixed-use centre within the broader rural area.

The Area Plan for the Coolalinga / Freds Pass Rural Activity Centre will provide for a range of opportunities for people to work, rest and play, supported by physical and social infrastructure.

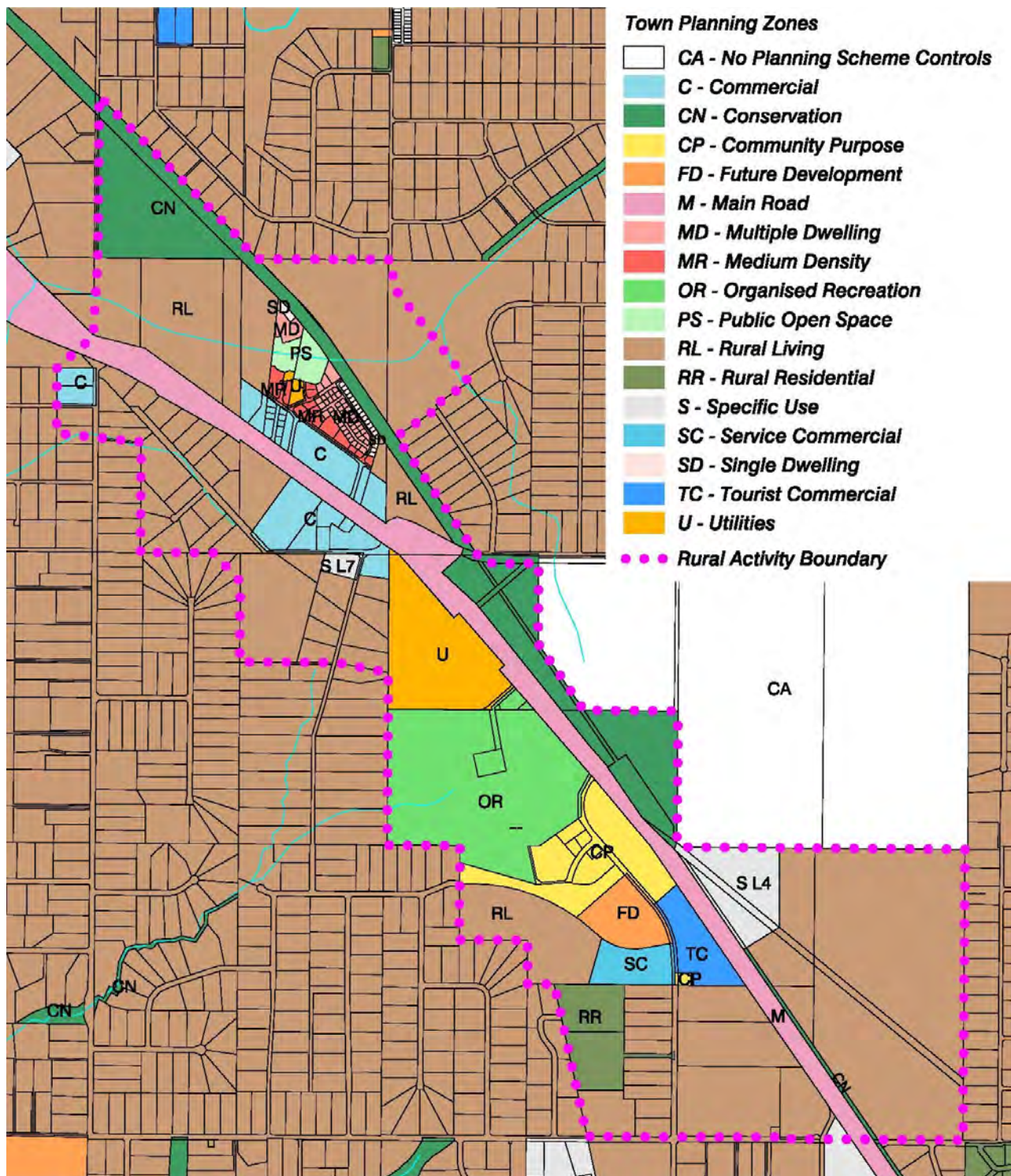
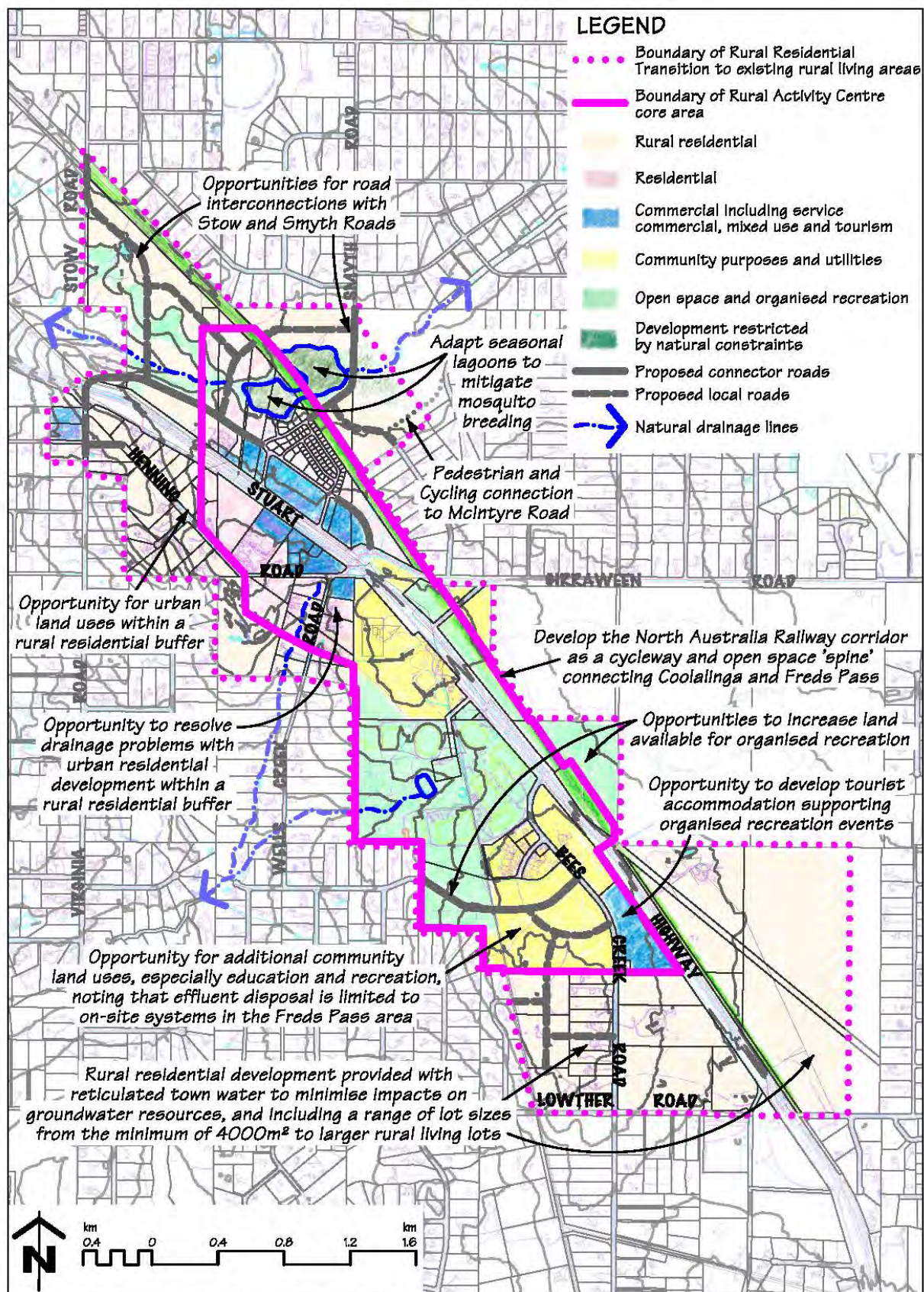


Figure 2 – Land use zones within the Coolalinga / Freds Pass Rural Activity Centre



Land Use Concept for Coolalinga and Freds Pass Rural Activity Centre

Litchfield Subregional Land Use Plan 2015.dgn

Figure 3 – Land Use Concept for Coolalinga / Freds Pass as it appeared in the LSLUP

The Area Planning Process

The Area Plan for the Coolalinga / Freds Pass Rural Activity Centre was prepared following the process outlined in Figure 4 below.

Stage 1 included the Social Infrastructure Assessment completed in 2016 for the Litchfield Subregional Plan and the engineering assessment completed by Tonkin Consultants in 2017 for the rural activity centres of both Howard Springs and Coolalinga / Freds Pass.

From the information outlined in this section, the Planning Commission prepared “*Towards an Area Plan for the Coolalinga / Freds Pass Rural Activity Centre*”, a discussion paper for Stage 1 community consultation.

A Community Advisory Group was established with the assistance of Litchfield Council.

Expected Outcomes of the Area Plan for Coolalinga and Freds Pass

The Area Plan for Coolalinga / Freds Pass Rural Activity Centre provides a detailed land use framework within the context of the strategic planning directions established by the Litchfield Subregional Land Use Plan.

The Area Plan responds to the development constraints and opportunities identified in stage one of the Planning Commission’s process, and to the feedback received through two stages of community engagement. These inputs and subsequent discussion with the Community Advisory Group, has shaped the activity centre plan, and informed land use policy that will guide future development.

As a framework for future land use, the Area Plan will also inform the further investigations and concept design required to ensure that infrastructure and services are provided commensurate with growth.

In summary the Area Plan for Coolalinga and Freds Pass:

1. responds to the natural and built environment to facilitate growth within the rural activity centre;
2. identifies the constraints and opportunities of the locality and provides a framework for the coordinated provision of servicing infrastructure apace with growth;
3. provides a land use framework and associated policy to guide both public and private sector investment; and
4. provides residents, businesses and the wider community with confidence on future outcomes.

STAGE 1	STAGE 2	STAGE 3
Initial investigation includes information gathering, analysis and definition of the character of the study area. Importantly, the capacities of engineering and social infrastructure to support growth are assessed. This informs the preparation of documentation for initial community engagement.	In response to initial investigations, any further studies and community feedback, options for a draft Area Plan are prepared in consultation with a community advisory group. Further engagement with the community provides a review of the options and a draft Area Plan is prepared.	The NT Planning Commission finalises the draft Area Plan and forwards to the Minister, for consideration as a draft Planning Scheme Amendment. The Minister decides whether to place the Plan on exhibition. Submissions are considered. The Minister decides whether to amend the Area Plan into the Planning Scheme.

Figure 4 – Stages of the Planning Commission’s Area Planning Process

PART TWO Land Capability Assessment

The Natural Environment

The study area is approximately 945ha with a range of landscape types and capabilities.

The landscape can be broadly characterised as gently sloping land that drains into minor drainage lines and seasonally waterlogged areas. Some areas with steeper side slopes exist within the western and south-western boundaries of the study area.

The developable land within the study area is generally located along the Stuart Highway and includes flat to gently undulating eucalyptus woodland or open forest with slopes less than 2%, and eucalypt open woodland with side slopes of 2 to 5%.

Areas of more constrained land are associated with the drainage catchments of the study area. These areas are generally narrow upland alluvial plain grasslands with scattered trees and gradients of <1%, and swamp depressions of open or closed Melaleuca forests with <0.5% gradients. These areas make up approximately 12% of the study area.

Figure 5 shows the topography and natural constraints of the surrounding landscape.

Seasonal Soil Waterlogging

The following areas within the rural activity centre are affected by seasonal waterlogging:

- an area in Coolalinga north associated with a perched seasonal lagoon that drains north-east into the Howard River catchment and potentially west into Brooking Creek;
- an area due south of Coolalinga associated with Wells Creek; and
- an area connecting Wells Creek across Freds Pass reserve to Girraween Lagoon.

Mosquito breeding areas

Preliminary studies carried out by the Department of Health identify seasonally high levels of mosquitos within the Coolalinga / Freds Pass Rural Activity Centre area.

The lagoon in the north of Coolalinga, and connected areas of seasonal waterlogging, are of particular interest due to their proximity to existing and potential new urban areas. Both these sites breed mosquitoes that could potentially carry viruses such as Kunjin, Ross River Fever and Murray Valley Encephalitis.

The potentially higher risk of mosquito borne disease to urban residents near these breeding sites is an issue that must be addressed. One challenge is that mosquito mitigation works should not undermine the drainage function and natural amenity of the wetland areas.

Other areas that experience seasonal waterlogging are in less populated rural settings away from urban residential development.

Groundwater Availability

Groundwater use in Coolalinga / Freds Pass currently exceeds sustainable yield. The stock and domestic 'right' under section 14 of the *Water Act 1992* allows access to groundwater which the resource is unable to support. The Department of Environment and Natural Resources (DENR) continues to assess groundwater for the rural area and will continue to implement management strategies.

Any future development in the Coolalinga / Freds Pass area must have a water supply that does not increase draw from the underlying aquifer. It follows that future development within the activity centre will be contingent on the availability of reticulated town water.

DENR has commented that more lots in Zone RR will increase on-site effluent disposal at the top of the catchments and increase the risk of groundwater contamination. Water Resources Division recommend that environmentally sensitive on-site effluent disposal systems be considered rather than traditional septic tanks. Objective 5.1iv was included in the Area Plan to address this concern.

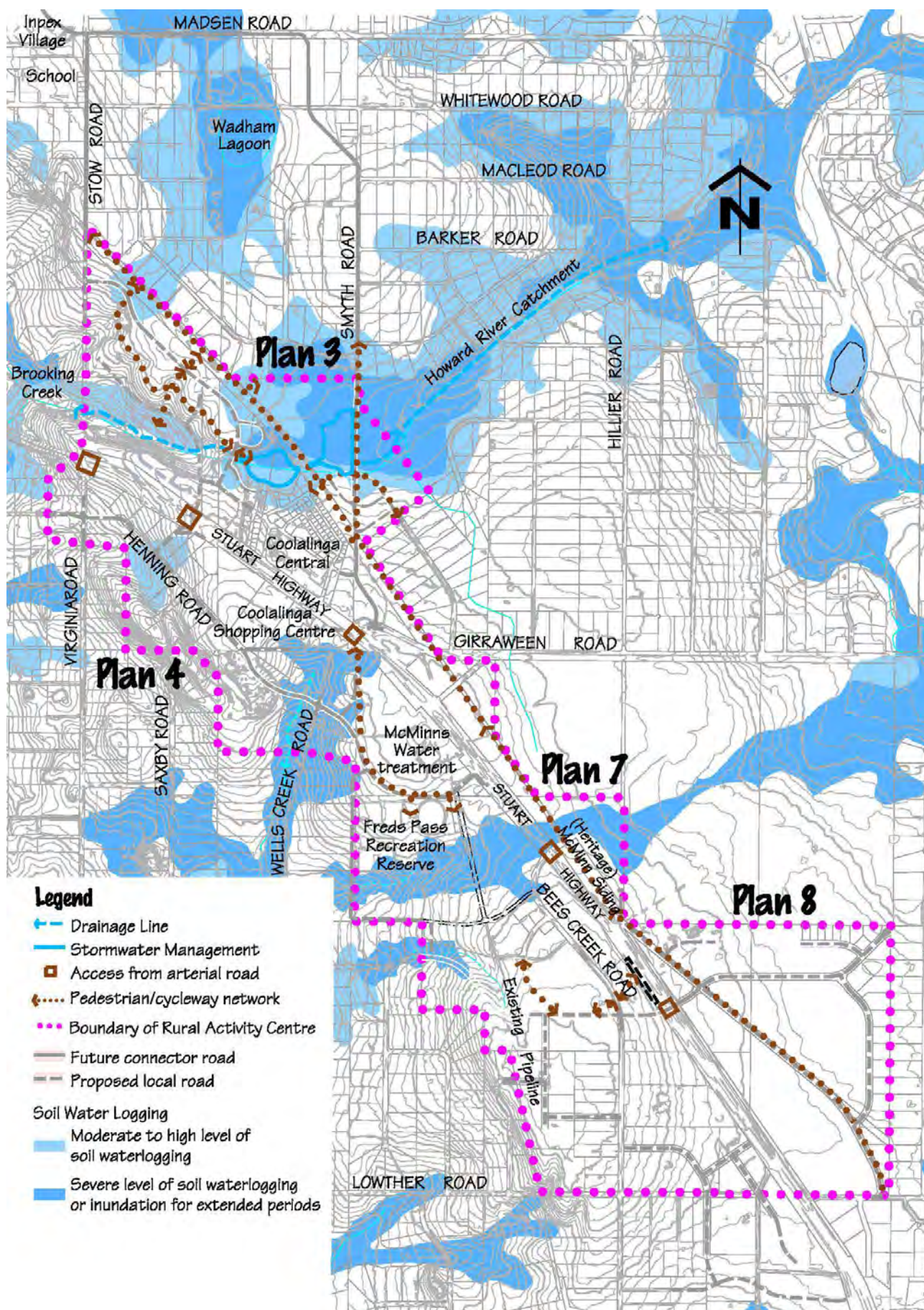


Figure 5 – Landscape and Land Capability

Areas of Environmental Significance

The natural environment is an asset of the rural activity centre, providing natural amenity and wildlife habitat. Some parts of these natural areas are potentially significant and may present constraints to development.

Litchfield. Generally the identified areas of environmental significance are within the seasonally waterlogged areas shown at Figure 5 and unsuitable land for development. The uncoloured areas of Figure 6 are not identified for priority environmental management

Figure 6 below is an extract from the Priority Environmental Management (PEM) mapping for

Any proposal to develop in PEM areas will need to address the identified environmental value.

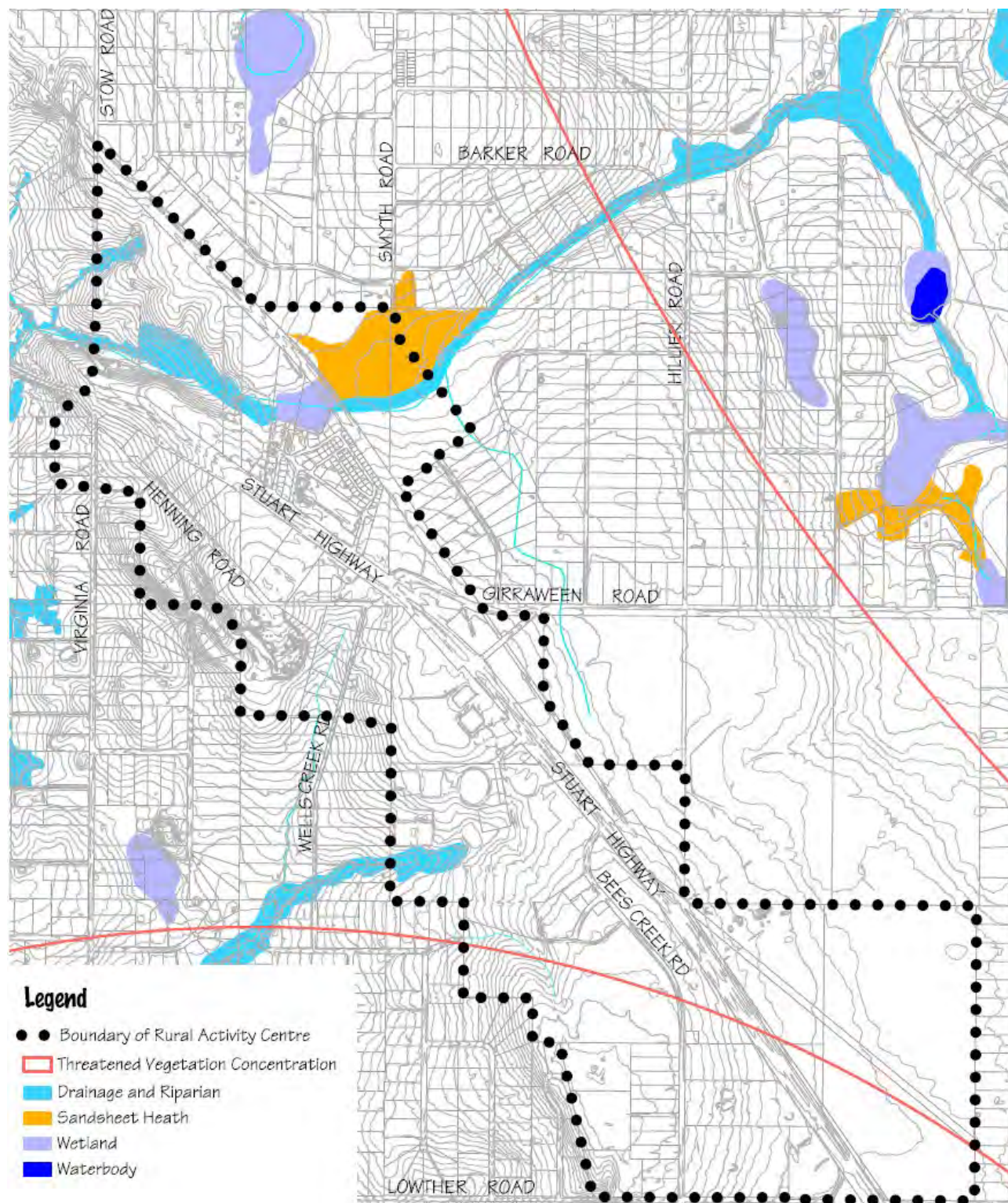


Figure 6 – Areas identified for Priority Environmental Management

Stormwater Drainage and Flood Management

The study area encompasses five natural drainage catchments. To the north, two catchments drain into Brooking Creek and the Howard River tributary. To the south, three catchments drain via Wells and Burdens Creeks into the Elizabeth River.

Stormwater drainage in the central area of Coolalinga is underground and contained within the road reserves. Discharge is to the natural system. It may be necessary to upgrade sections of the network with new development, including reviewing existing outlet levels against the identified 1% AEP flood level.

The potential impact of stormwater from development on natural drainage and waterways is an issue identified by both the community and the Department of Health.

The natural drainage lines receive overland surface flow and concentrated runoff from the arterial and local road networks. This runoff may carry pollutants and nutrients to the

receiving environment, and in addition, urban stormwater drainage tends to increase discharge volumes into the natural catchments.

This may cause downstream impacts, such as localised flooding, on rural landholders in places like Wells Creek Road. Peak stormwater flows in these areas could be reduced by mitigation measures implemented with stormwater management systems to enable future urban development.

It follows that the design of urban stormwater systems should mitigate potential down-stream impacts to ensure that future development does not cause or increase localised flooding issues.

Mitigation measures could include the construction of detention basins to reduce peak flows in identified troublesome areas. Stormwater drainage design will also need to mitigate breeding of biting insects in the stormwater system.

Figure 7 shows the natural drainage pattern of the surrounding landscape.

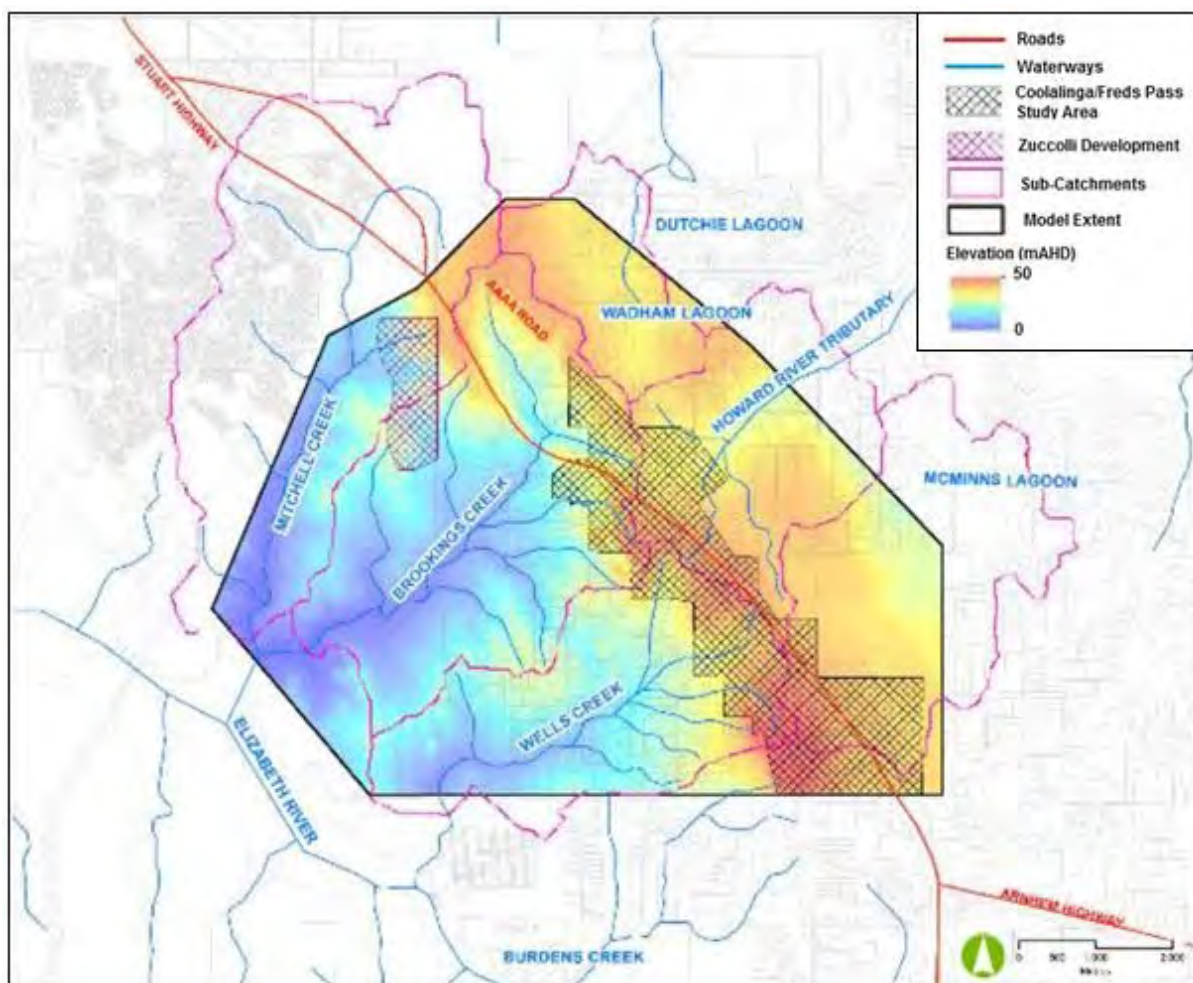


Figure 7 – The natural drainage pattern around the rural activity centre

The Built Environment

Service Infrastructure

Service infrastructure includes power, water supply, sewerage, stormwater drainage, and telecommunication networks.

Land use planning plays a key role in the planning and provision of service infrastructure. Consideration of projected population growth and dwelling yields informs the demand for services, which in turn guides the design and construction of commensurate infrastructure.

In 2020, only the urban residential and retail area of Coolalinga 'north' has full reticulated services and these are all underground.

Engineering Assessment

In 2016, Tonkin Consultants was employed to assess the engineering services available in the study area, including Howard Springs, and provide a preliminary strategy for the staged expansion of reticulated services.

In 2020, the provision of trunk infrastructure to Coolalinga is not programmed. Government's near term priority is 'greenfield' development close to the established urban centres. The Department of Infrastructure, Planning and Logistics will review the servicing needs for the rural activity centres. This will likely include the preparation of infrastructure plans and associated developer contribution schemes.

The following is a brief summary of the existing services and provisional actions to upgrade.

Power

The power supply to the activity centre will need upgrading to support new development. An additional two electrical feeders will be required for the envisaged level of development.

A new zone substation may be required and/or the upgrade of the Strangways Zone substation. New power supply within urban environments will be required to be installed underground. New power supply within rural residential areas may be located above ground.

Changes in customer behaviour, such as the installation of roof top solar power panels and efficiency measures could help to reduce the peak demand for electricity.

Water Supply

Reticulated water supply is supplied through both the Palmerston Water Supply Tank and the McMinns Pump Station (19 Mile Facility).

This supply is reticulated to the urban areas of Coolalinga, and to the Reserve and community land uses in Freds Pass (e.g. schools and civic centre). Some rural areas, such as Wells Creek and London Roads, have town water via 'banjo' connections and informal 'spaghetti' lines.

All new development within urban and rural residential areas will require reticulated water supply. This will allow growth in Coolalinga / Freds Pass without increasing the demand and pressure on ground water resources.

As the demand for town water increases, new trunk infrastructure for water supply will be required, and the areas of urban density will make the infrastructure upgrades more viable.

Sewerage

The reticulated sewerage systems at Coolalinga north and the Woolworths site rely on self-contained package treatment plants. The remainder of the study area relies on onsite wastewater disposal systems.

Future urban growth will rely on extension of the Power and Water Corporation's reticulated sewerage network. Up to three new sewer pump stations will be required to connect Coolalinga 'south' to a new network comprised of gravity and sewer rising mains.

Expansion of Coolalinga 'north' will require a fourth sewer pump station and connection of the two package treatment plants to Power and Water's reticulated network.

The Department of Health has also advised that the capacity of existing reticulated infrastructure is limited to servicing existing urban and commercial development; and that future urban development will rely upon the extension of reticulated services. The Department of Health recommends that the Area Plan considers reticulated sewerage to commercial lots on the northern and southern sides of the Stuart Highway, noting that development within Zone RR (Rural Residential) is not required to connect to reticulated sewerage.

Transport

Safe and efficient multi-user transport networks are necessary to support economic and social activity. Development over time of an inter-connected road network for walking, cycling and public transport will contribute to a sustainable and liveable rural activity centre that meets the needs of the growing population.

The Existing Road Network

The national arterial Stuart Highway forms the eastern boundary of Freds Pass and divides Coolalinga into two commercial and retail areas. The Stuart Highway is a Territory controlled, multi-lane divided road and the primary inter-regional road transport connection.

The local road network is vested with Litchfield Council. The network is poorly interconnected. In particular, local road corridors connecting across the arterial corridor are too few. Within the study area the only local road connection across the Stuart Highway is the signalised intersection at Girraween / Henning Roads.

In 2020 the Department of Infrastructure Planning and Logistics is finalising a draft arterial traffic strategy for Coolalinga.

Public Transport

Bus services support the morning and afternoon peak periods but are otherwise infrequent. No service is offered on Sundays or public holidays. Low patronage is a key issue. Close to 80% of Coolalinga residents commute by car compared to the Litchfield figure of 70%. This implies that local usage of the Coolalinga bus interchange is not high.

Cycling and Pedestrians

Cycling and walking are popular in the rural area. Annual bicycle counts consistently show high levels of cycling in Litchfield compared with other regional areas around Australia.

The old NAR corridor presents a unique opportunity for active transport into the future. This 'active' spine will continue to support expansion of the active transport network. In 2020, the sealed bicycle path from Darwin was extended into Coolalinga, completing an all-weather active transport link to Howard Springs, Palmerston Regional Hospital, Yarrawonga, with Robertson Barracks nearby, and Berrimah; thus connecting to all regional urban areas. The engineering design included the next stage to the bus interchange, subject to funding. The fruition of this active transport spine through Coolalinga will increase the need for cycling lanes within the activity centre, safe road crossings and the need for end of trip facilities.

PART THREE Needs Assessment

Demography and Growth

The 2016 census data for Litchfield is summarised below to highlight the demographic differences between Coolalinga, Freds Pass and the broader subregion.

In 2016 the population of Litchfield had grown from 18 994 in 2011 to 23 855 people, which amounts to an average yearly growth of just over 4.65% for that census period. The median age was 37 and approximately 60% of residents were male. Aboriginal people made up nearly 10% of the population.

At 2.9 persons, the household size was consistent with the Territory average of 2.9 and above the Australian average of 2.6.

Population Growth

Population rise and fall is relatively volatile in the Territory and particularly sensitive to interstate and overseas migration. Employment availability is a commonly the driving factor.

In 2020, the population growth had slowed largely in response to completion of the Inpex LNG plant, but it is expected to remain stable at an average of 1.69% growth through to 2026.

Coolalinga

In 2017, the population of Coolalinga was estimated at 9256 people.

Employment and Occupation

Coolalinga residents have a high rate of employment with only 2% unemployed in 2016. Similar to the Litchfield region, the biggest occupation groups are technicians and trades, and there is also a high proportion of labourers.

Defence is the highest employer of Coolalinga residents at 8%, compared to 6% in Litchfield and 4.7% Territory wide.

Population and Housing

Strategic projects that are expected to come on stream in the Territory will probably benefit the southern region as much as the Top End, and population growth in the Darwin region is expected to remain modest through the 2020s.

The correspondingly slow housing market does provide the opportunity to plan for growth and develop area plans for the rural activity centres before housing demand increases again.

The Area Plan for Coolalinga / Freds Pass supports an increase in residential capacity by identifying new urban residential areas adjacent to the commercial area of Coolalinga and rural residential lots in the transition areas.

The result will be a range of residential lot sizes supporting housing choice and availability.

Commercial and Community Land Uses

The Litchfield Subregional Land Use Plan recognises the role of Coolalinga as a key subregional commercial centre. Coolalinga serves the subregional catchment with higher order shopping, commerce, entertainment, health, education and community facilities.

Population and employment growth will drive demand for additional commercial office space.

Steady growth will help to underpin economic activity in the commercial centre and drive the demand for social infrastructure, both of which will benefit the broader community.

Retail

There is currently an oversupply of retail floor space which will remain for the short term. Over time the availability of space will increase the range of goods and services for the community.

Commercial growth in the rural activity centre should build on the existing commercial area of Coolalinga. Retail development in particular should be located to contribute to the diversity and viability of Coolalinga and its role in providing a mix of consumer services.

Freds Pass

In 2017, the population of Freds Pass was estimated at approximately 3 000 people. The population of Freds Pass is anticipated to grow in the near to medium term at a slow rate.

A large proportion of Freds Pass is utilised for open space recreation, especially the Freds Pass Recreation Reserve, and some parts of the community purpose land to the south.

Regional Context

The recreation and community land uses of Freds Pass provide a balance to the urban and commercial land uses in Coolalinga. Freds Pass is where the community goes to play, learn, recreate and socialise.

Social Infrastructure

Social infrastructure is community, health, education and cultural facilities, and includes community centres, public libraries, parks, organised recreation and sporting facilities.

In 2016, Fyfe Consulting completed a Social Infrastructure Assessment (SIA) to inform the Litchfield Subregional Land Use Plan. The rural activity centres were a focus of this study. Figures 7 and 8 identify social infrastructure land uses within the study area.

The need for social infrastructure to support population growth in the rural activity centres is a key element of future planning for Litchfield.

Components of social infrastructure considered as part of the SIA include:

- health and aged care services;
- child care establishments;
- educational establishments;
- places of worship
- civic and community facilities;
- community meeting and activity spaces;
- libraries, art and culture facilities;
- open space; and
- sport and recreation facilities.

The SIA found that the subregion only had two aspects of social infrastructure in undersupply:

- aged care establishments; and
- sport and recreational facilities.

It is important to recognise that Litchfield residents utilise the social infrastructure of the Greater Darwin region especially facilities provided in Palmerston and Darwin.

For example, the new Palmerston Regional Hospital at is a facility that provides overnight stay health services and some critical care and hospital services for Litchfield residents.

Looking more closely at an activity centre level, the Coolalinga / Freds Pass area was identified as having an undersupply of social infrastructure facilities for:

- health care;
- aged care; and
- community groups, events and meetings.

Health Services

The SIA identified the Coolalinga / Freds Pass area as meeting suggested standards for the number of General Practitioners.

A gap of one dentist was identified, however there are currently sufficient vacant tenancies to allow the establishment of a dental surgery.

Aged Care and Retirement in Place

In 2016, there were 991 people over the age of 70 in the Litchfield Subregion, which is less the average across the remainder of the Northern Territory and Australia.

There are national benchmark figures for the provision of aged care through home care packages and residential care. By 2021-2022, the targeted figure for residential care is 78 beds per 1000 people aged 70 years and over.

Based on the steady population growth forecast of 1.69%, 87 beds will be required in Litchfield by 2021-2022.

The SIA identified that there are currently no aged care services in Litchfield and that Coolalinga / Freds Pass, along with Humpty Doo are the most appropriate locations for aged care facilities. Both rural activity centres are in central rural locations and have access to public transport and social infrastructure.

The SIA recommends one aged care residential facility of approximately 40 places for Coolalinga / Freds Pass located close to health services, retail and community uses to cover existing and near term aged care facility gaps.

Consistent with the SIA, a need for more 'retirement in place' options was separately raised during community consultation.

In response to the need for aged care, the Area Plan shows a retirement village site on Crown land west of Coolalinga and promotes aged care as a potential use of Crown land in Freds Pass (refer to Planning principle 12).

Child Care

In Litchfield there are four long-term childcare centres offering a total of 328 places. Two of these are in the locality (*Good Start Early Learning Centre* in Bees Creek Road and *Creative Kids Childcare* in Virginia Road), and in 2020 a new childcare is opening on Patsalou Road in Coolalinga.

At the recommended ratio of 120 places per 8000 to 10 000 people, these childcare centres should be more than sufficient to cater for existing and near term needs.

Education

In Freds Pass there are currently two schools that accommodate the needs of the area. These are the NTG Bees Creek Primary School and the private Sattler Christian College, both of which provide pre-school / early learning centres and primary school education facilities. The Sattler College also provides a middle school facility that caters for Years 7 – 10.

Bees Creek Primary School has a total capacity of 46 places in the pre-school facility and 453 places in the primary school facility. The school is operating at about 75% capacity.

Sattler Christian College has 44 places in the early learning centre facility; and the primary and middle school facilities have a combined capacity of 300 places.

Secondary education is provided at Taminmin College in Humpty Doo, which caters for Years 7 to 12 and in 2015 had a total enrolment of 1023 students. Construction of the STEAM (Science, Technology, Engineering, Arts and Mathematics) facility has expanded the school's overall capacity to 1500 places. This will meet subregional demand for the near to mid term.

Regional Culture and Heritage

Places of cultural and historical significance contribute to a sense of belonging, and represent the region's colourful past. They connect people with others, with history and with landscapes.

The *Heritage Act (NT) 2011* gives provision to protect and manage regional culture and heritage significance. There are no listed heritage sites in the Coolalinga / Freds Pass area, but features such as the North Australian Railway (NAR) corridor, WWII artefacts and sacred sites are all connections to the past.

Adaptive reuse of the NAR corridor is a key attribute of the Rural Activity Centre. Re-purposing for active transport (walkers, cyclists, horse riders) provides for ongoing use and maintenance while respecting important associations with the activities of the past.

Aboriginal Areas Protection Authority (AAPA) has advised that the area has sacred sites, and under the *NT Aboriginal Sacred Sites Act 1989* the AAPA seeks to balance their protection with developments needs. Developers should apply to the AAPA for an Authority certificate as part of good risk management.

Community Facilities

Libraries

No public library facilities are currently provided within the Coolalinga / Freds Pass Rural Activity Centre. The closest public library is at Taminmin College in Humpty Doo.

The 'Smile-A-Mile' toy library at Freds Pass provides a toy and play equipment borrowing service to the community. This service includes a mobile toy library which is an important asset to the broader Litchfield community.

Community Meeting and Activity Spaces

Space for community groups to meet, undertake activities and hold events is an important element of social infrastructure. These spaces assist in building community networks, support the health and wellbeing of residents, assist in addressing social issues, and promote community identity.

The only meeting hall in the study area is in Freds Pass Recreation Reserve, and this is not air-conditioned. There is a clear need for a community meeting venue in the activity centre.

Places of Worship

There is no standard or broadly agreed ratio of providing places of worship per head of population. Currently, Humpty Doo has a stronger role in providing places of worship, however there is some Crown land available in Freds Pass for community purposes such as a church and/or community hall in the future.

Coolalinga

The ongoing development in Coolalinga of low to medium density urban housing is new to the study area. A growing range of urban housing will create a greater range of housing options, but will also increase the need for broader social infrastructure facilities in the future.

Freds Pass

The Freds Pass area is a unique element of the Rural Activity Centre. The Freds Pass Recreation Reserve provides active open space and social infrastructure facilities on a district and subregional level rather than just meeting local open space and sporting needs.

The Recreation Reserve provides sports fields and facilities for informal and organised recreation for several sporting bodies. The Reserve is an important venue for sporting and recreation events for the broader region that support interregional and interstate competition.

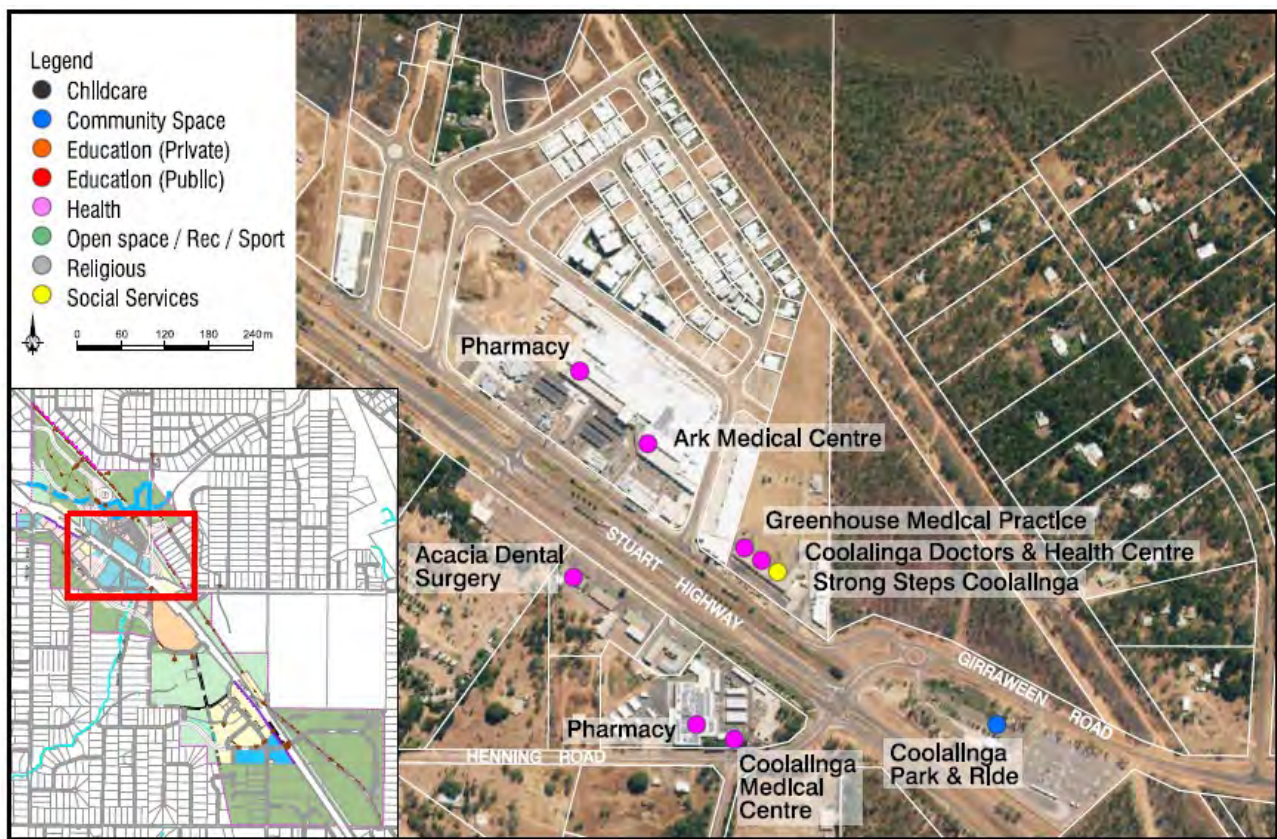


Figure 8 - Social infrastructure Land Uses in Coolalinga

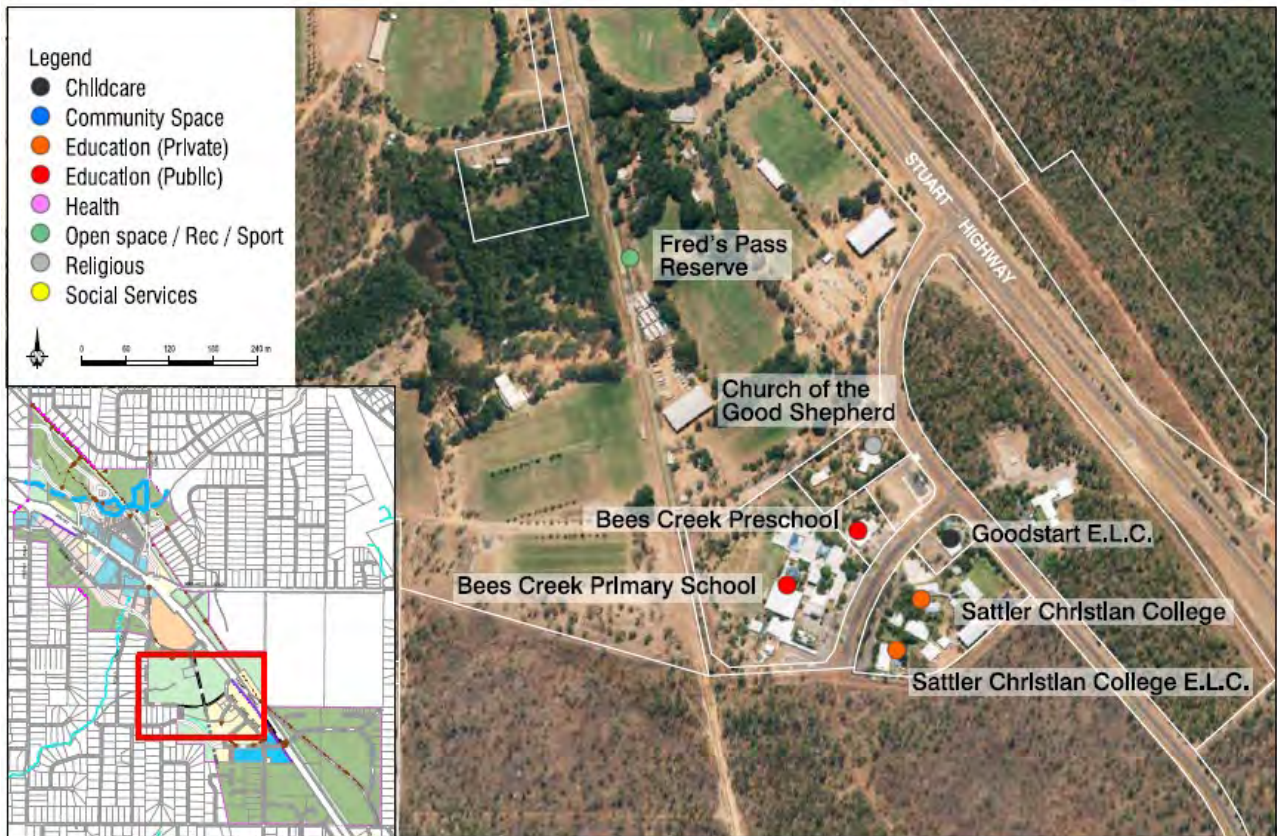


Figure 9 - Social Infrastructure Land Uses in Freds Pass

PART FOUR Consultation Summary and Area Plan Themes

Community Engagement

In 2017, the Planning Commission engaged the community to help develop an Area Plan for Coolalinga / Freds Pass in two stages.

Stage 1, from 8 May to 9 June, presented a discussion paper, *Towards an Area Plan for the Coolalinga / Freds Pass Rural Activity Centre*, to the community. Over 300 residents visited 'pop up' stalls and workshops in the locality. 38 people attended the three information sessions, and 22 written submissions were received.

Stage 2, from 25 September to 1 November, presented a draft Area Plan, as four contiguous concept plans responding to Stage One technical findings and community comments.

The two stages provided for effective dialogue between the Planning Commission, and the community and stakeholders on the future of the Coolalinga / Freds Pass activity centre.

Following community engagement, over 120 comments were distilled into the key themes raised, guided by the detailed investigation.

Themes that attracted the most comment were:

- protection of environmental and heritage values, including 'buffers' and retention of wet areas and native vegetation;
- general support for better local road networks connected to the Stuart Highway, and strong support for Henning to Virginia Road connection, but less support for local roads in and around Freds Pass reserve;
- general support for preservation of heritage sites and aspiration for increased and improved community facilities;
- strong desire for increased pedestrian and cycle networks;
- support for the proposed land use mix and distribution, including 800m² urban and 4 000m² rural residential lots; and
- various comments on activity centre boundary and transition areas.

Community Advisory Group

The Community Advisory Group (CAG) discussed the key themes of the Area Plan.

The CAG supported land suitability assessment of natural areas prior to development.

The CAG supported the proposed local road network. In particular, the Henning to Virginia Road connection, which is an element of the Coolalinga arterial road strategy, was favoured. The risk of morning 'rat running' along Henning Road was raised but deemed low, given access delays back onto the Highway at Virginia Road. The local road connection to Freds Pass and the Eugene road extension are supported.

The CAG supported development of the NAR corridor as a 'spine' of the active transport network; noting that the connections shown on local roads are a matter for Litchfield Council.

The CAG supported the concept that servicing Coolalinga with reticulated town water will avoid impact on groundwater resources.

The CAG discussed the outer boundary and resolved to keep the land holdings north of the NAR corridor in Howard Springs and east of the Highway in McMinns Lagoon within the Plan.

Regarding Zone RR outside the boundary, the measure for close proximity to community facilities, as required by the LSLUP, was discussed. The Howard Springs Area Plan requires "...1 km, measured as travelled, from the commercial area...", but for Coolalinga / Freds Pass this would not provide the transition of lot sizes intended at planning principle 4.

The CAG agreed to the measure of "...250m, measured directly, or 500m, measured as travelled, from the boundary of the activity centre", however concerns raised during statutory exhibition caused the measure to be simplified to "500m, measured as travelled, from the boundary of the activity centre".

Applying the above rule, Figure 10 shows the maximum possible extent of 1 ha lots, but in practice this potential would be far less. In order to rezone, proposals must have access to town water and provide for interconnected local roads; noting that the proponent bears the cost of constructing any required local roads.

The development of 1ha lots adjacent to the boundary of the rural activity centre will likely be a gradual process, with each application being assessed on a case by case basis.

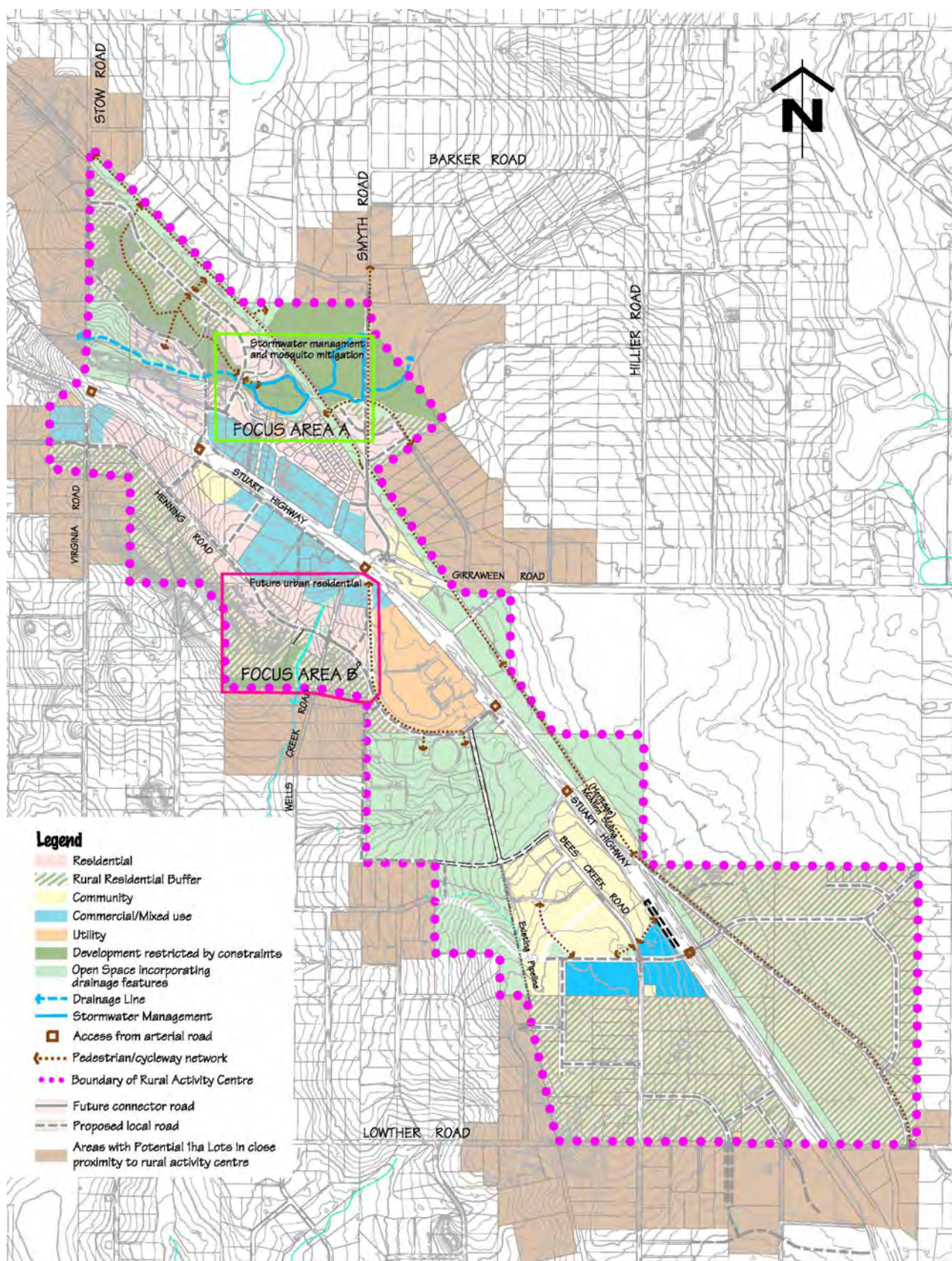


Figure 10 – The maximum potential area of 1 ha lots in Zone RR outside the rural activity centre

Area Plan Themes

The Area Plan responds to the key themes raised by the community and also addresses specific issues relevant to two discrete localities through specific Focus Area plans.

The Area Plan includes planning principles to address the following five general themes:

- the natural environment;
- movement and transport;
- lot choice and land use;
- essential infrastructure; and
- the activity centre - community facilities, heritage and active transport.

The Focus Areas within the Coolalinga / Freds Pass Rural Activity Centre Area Plan are:

- Focus Area A – Stormwater Management and Mosquito Mitigation Area
- Focus Area B – Framework for future urban residential area

The Natural Environment

An attribute of the study area is the natural bushland close to the central urban areas. Community comment recognised the value of the environment and the need to retain open space, native vegetation and wildlife corridors.

In tension with this, some natural areas are suitable for commercial, urban or rural residential development. Concerns were raised that ongoing development of the activity centre might have a negative impact on the environment and the natural watercourses.

Area Plan Response

The Area Plan maps the environmentally sensitive areas and includes policy regarding native vegetation and the natural drainage system.

Also, the Planning Scheme requires land capability assessment for subdivision.

Movement and Transport

Strong community support was expressed for for safe pedestrian and cycling across the Stuart Highway and within the Activity Centre.

Also, better connection to Howard Springs and the broader rural locality by extending Smyth and Stow Roads was supported, noting that potential environmental impacts on constrained land will need to be addressed.

The DIPL arterial traffic strategy includes:

- a second signalised intersection at the north-western end of Coolalinga providing a local road connection across the Highway; and
- a Highway pedestrian crossing between the two Coolalinga commercial areas.

The constructed cycleway along the old NAR corridor provides an active transport 'spine' from the regional urban centres via Berrimah through Palmerston and the Regional Hospital to Coolalinga. The cycleway is designed through to the bus interchange. Its continued development will increase the need for ancillary cycle paths within the activity centre, safe road crossings and end of trip facilities.

Area Plan Response

The Area Plan responds to these initiatives by:

- proposing new local roads to complement an interconnected local road network, and to increase options for viable active and public transport routes - Figure 11 below shows the existing and proposed local roads;
- indicating on the Coolalinga concept plans the pedestrian crossing and local road access points on the Stuart Highway; and
- proposing a cycle / pedestrian network that complements the active transport spine along the NAR corridor – refer Figure 12.

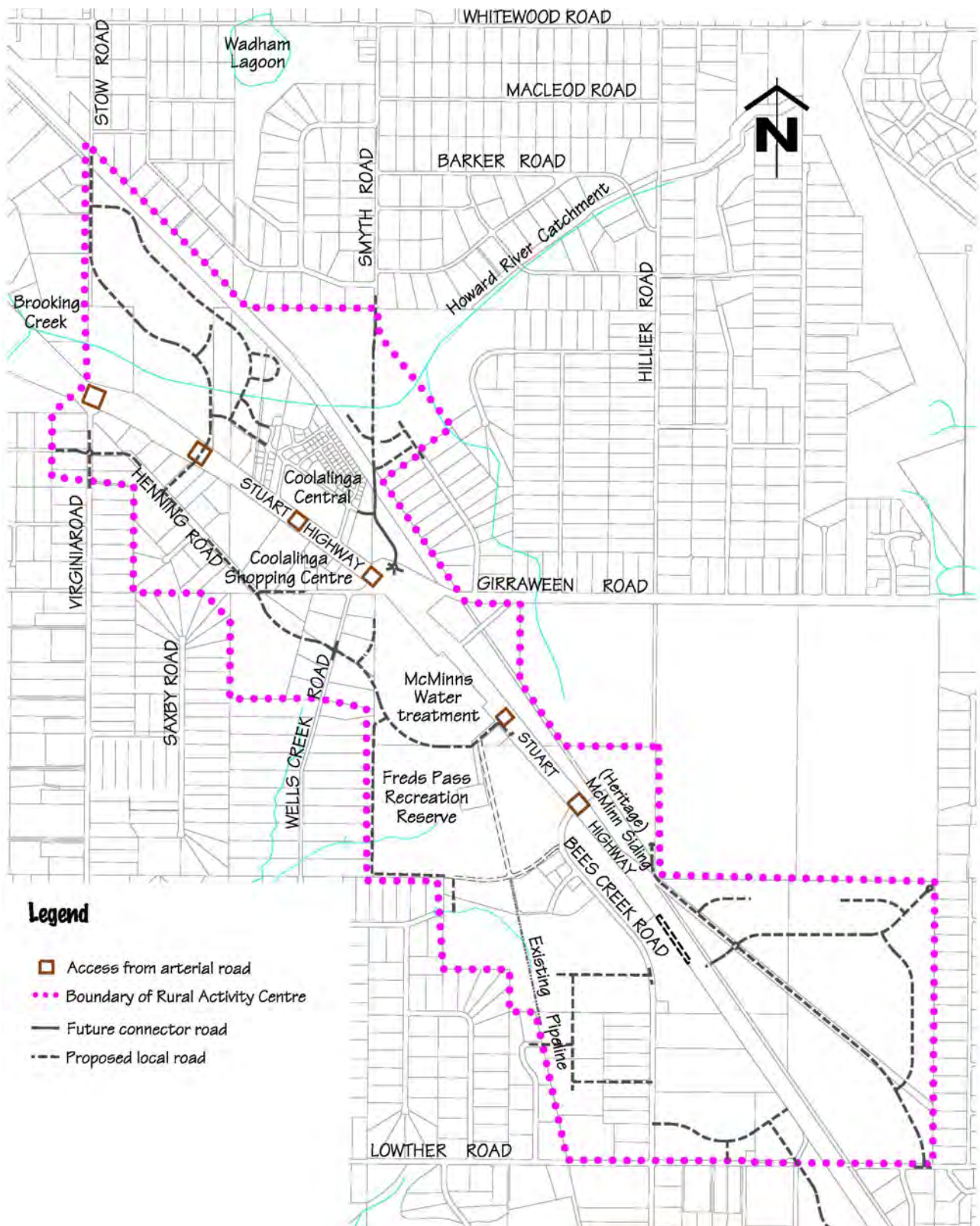


Figure 11 – Existing and Proposed Road Network

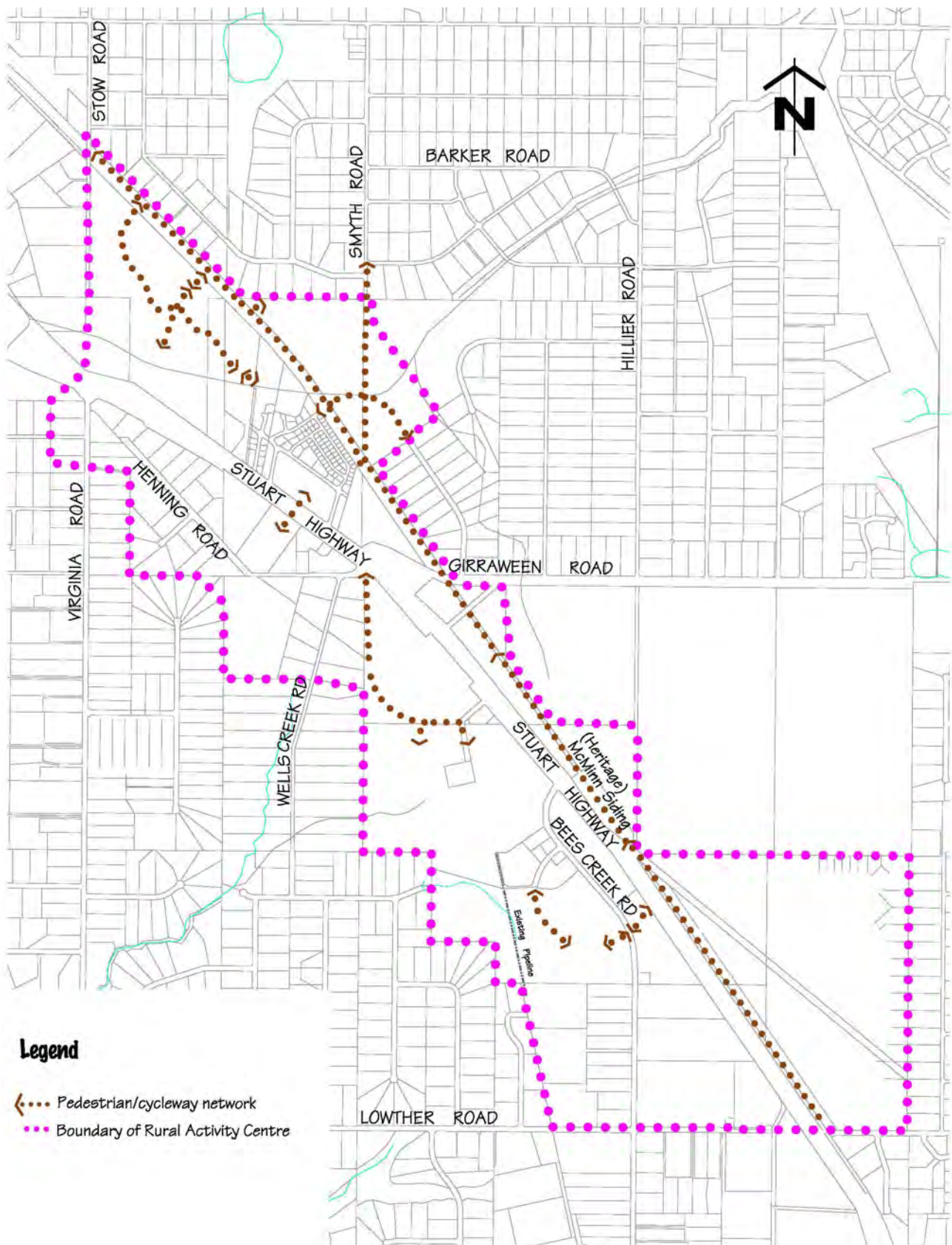


Figure 12 – Draft Cycle and Pedestrian Network

Residential Growth / Housing Choice

Community opinion was towards a balance of urban and rural residential choices. The Zone RR lots of 4 000 m² are widely supported within the rural activity centre, but some concern was expressed with the urban residential outcomes, especially in the medium density zones. The preferred minimum Zone SD lot is 800 m².

Area Plan Response

The Area Plan promotes urban residential in areas with convenient access to the commercial centres of Coolalinga. The Plan identifies rural residential areas to provide an effective buffer to the established rural living areas. The Plan includes a transition model for this purpose

Essential Infrastructure

In 2020, full reticulated services in the study area are limited to urban areas of Coolalinga. Service authorities have advised that significant infrastructure upgrades will be required for any future development in the rural activity centre. DIPL continues to investigate and plan for the delivery of trunk infrastructure to the locality.

Area Plan Response

The Area Plan guides infrastructure delivery to support growth in the activity centre. The Plan identifies urban growth areas which will help provide the economy of scale needed to upgrade and extend the existing infrastructure.

Planning Principle 5 of the Area Plan calls for urban utilities and developer contributions. The Plan also highlights some infrastructure issues, for example, Focus Area A calls for appropriate stormwater infrastructure to manage mosquito breeding and downstream impacts.

An Activity Centre for the Community

The community would like to see additional social infrastructure in the activity centre. Top of the list are swimming pool; community gardens and parks; education / craft centre; and facilities for the elderly.

Consistent with this theme, the community expressed strong support for Freds Pass Recreation Reserve and its possible expansion for future sporting needs.

Many residents identified that the Recreation Reserve plays an important role in providing sports and recreation facilities at a subregional and regional level and that this role should be supported and strengthened as the Activity Centre grows.

The community also commented on 'place making' and aesthetic aspects of Coolalinga. While the convenience and amenity of the of Coolalinga commercial area is appreciated, the community commented on its 'highway commercial' character and poor visual amenity.

The desire for WWII heritage to be recognised was also raised, but it should be noted that, although the McMinns Siding on the NAR corridor and the nearby Sattler Airstrip in Freds Pass have recognised value they are not heritage listed sites. Similarly, the WWII artifacts on private land between Henning Road and the Highway had not, at the time of writing, undergone heritage assessment.

Area Plan Response

The Area Plan identifies significant areas of open space and community purpose land within the study area to support growth and respond to feedback received during consultation

The Area Plan proposes community land next to the bus interchange and on private land south of the new access intersection. Also, Crown land north of the new intersection is identified for a future retirement village.

In Freds Pass, the Area Plan identifies the opportunity to expand the Recreation Reserve onto Crown land immediately to the south.

Also in Freds Pass, Crown land is identified to support future education establishments.

The Area Plan encourages continued provision of retail and commercial services to the rural community; and promotes improvements to the commercial interface with the public domain.

Planning principle 6 provides objectives relating to the visual amenity and 'place making' opportunities for the Coolalinga commercial centre. The NAR corridor and WWII heritage are recognised as part of the identity of the rural activity centre

Focus Areas A and B

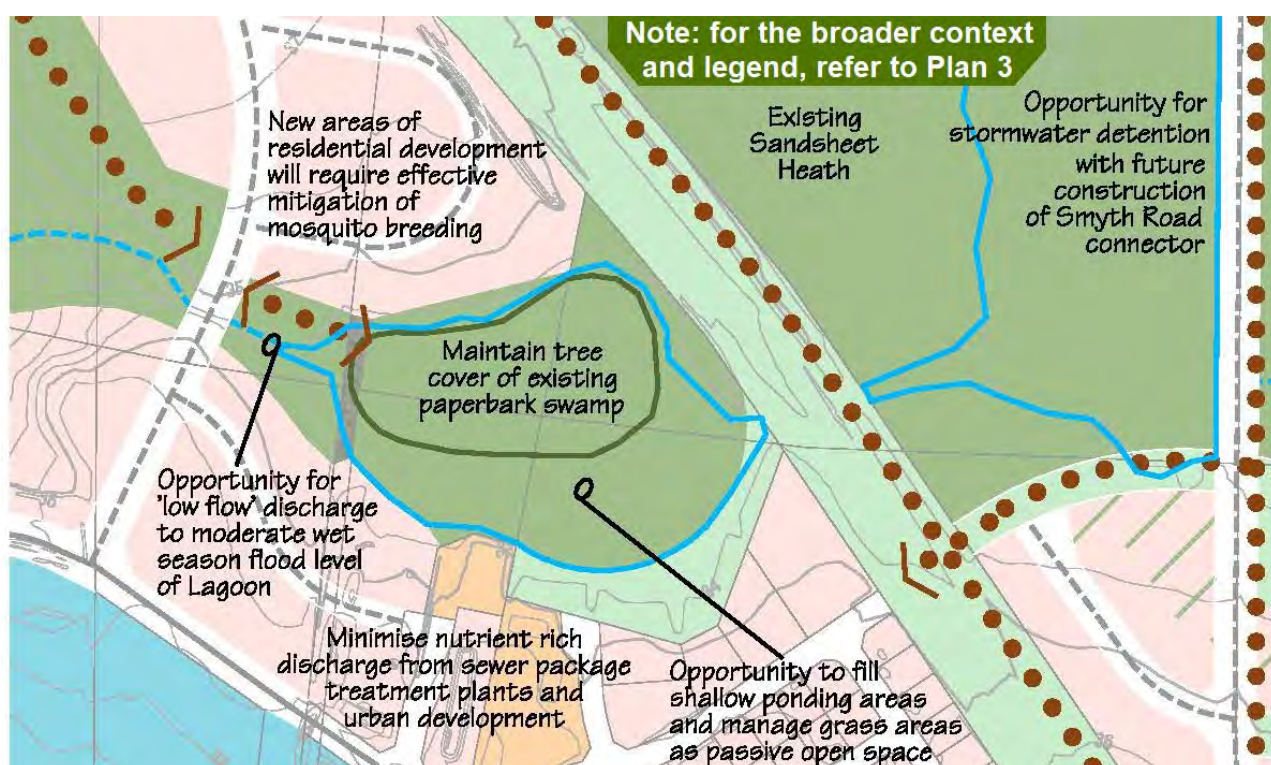


Figure 13 – Focus Area A – Stormwater Management and Mosquito Mitigation

The seasonal lagoon in the north-western corner of Coolalinga is a paperbark swamp. It is part of the natural drainage system and a habitat for native wildlife, including mosquitoes.

The Area Plan seeks to retain the lagoon for its amenity as a natural area for active and passive recreation. This objective does not preclude modifications to the lagoon in order to minimise mosquito breeding.

For example, edge treatment to maintain minimum side slopes and depth will counter weed growth and provide access for predatory native fish. The retention of native vegetation will have an important role in shading the lagoon and minimising weed growth.

Urban development in this Focus Area must have regard to how it interacts with, and impacts on, this natural feature and associated drainage paths.

Prior to further development of land in this Focus Area, a strategy to manage mosquito breeding will have to be implemented.

A stormwater management plan will need to consider stormwater flows, nutrients and pollutants resulting from development and include measures to mitigate down-stream impacts on the receiving environment.

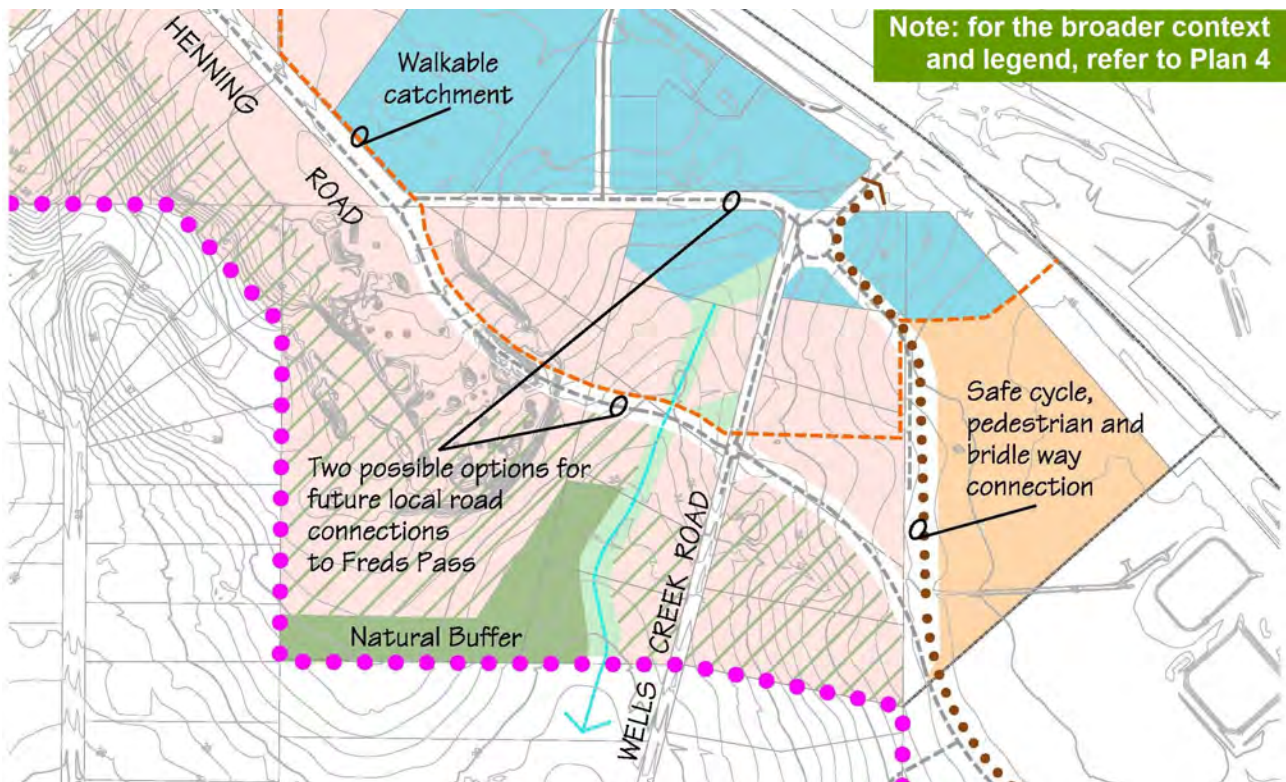


Figure 14 – Focus Area B – Framework for future urban residential area

The commercially zoned land along the north side of Henning Road supports a full-line supermarket and a range of convenience stores and businesses, including the local Post Office.

The Zone RL (Rural Living) properties along the north end of Wells Creek Road and south side of Henning Road are well located for urban residential development within the walkable catchment of the existing shopping centre.

However, during community consultation, comment from property owners was mixed, with some owners in opposition to land use change. In response, the Area Plan includes Focus Area B to protect the future opportunity for change.

Focus Area B provides a policy framework to guide orderly planning for a future urban residential development, including a detailed framework for the co-ordinated development of this focus area. The detailed plan is to include an implementation strategy for local roads and supporting services. A local road connecting Henning Road to Freds Pass was considered important by the community to provide a safe corridor off the Highway, especially for pedestrians, cyclists and horse riders.

Within this focus area, large properties such as 75 Henning Road will be instrumental in ‘unlocking’ the urban development potential. With 8 ha indicated for urban residential and 10 ha for rural residential, this site could support in the order of 120 new homes. Also, 75 Henning Road holds the key opportunity for a local road connection to Wells Creek Road.

As advised under *Engineering Assessment* on page 14, a programme for the delivery of trunk infrastructure plan is unlikely in the short term.

Meanwhile, guidance is needed for interim development such that the future opportunities identified by the Area Plan are not diminished.

For this reason, objective 5.5 of the Area Plan addresses interim land uses that preserve the identified future land use opportunity.

Acceptable responses to objective 5.5 are to develop in accordance with Zone FD (Future Development) if the site is so zoned; or to develop so as not to diminish the future opportunity identified by the Area Plan.



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